

# Credit Access and the College-persistence Decision of Working Students: Policy Implications for New England

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## EXECUTIVE SUMMARY

Every year, 2 million first-time, full-time undergraduate students enter a degree-granting post-secondary institution in the United States, but more than one-third leave college before obtaining a college degree. While some students drop out of college for personal reasons or to pursue a different career goal, during this report's sample period, nearly 40 percent of young adults left college because they could no longer afford to stay. The objective of this study is to gain better insight into the relationship among employment, credit constraint, and the college persistence of US 18- to 24-year-old working college students, who represent more than 50 percent of the undergraduate population. To do so, we investigate two interrelated research questions: (1) Does involuntary job loss affect the college-dropout decision of working students, and (2) does access to credit through credit card loans buffer against the liquidity effect of job loss?

This report's analysis shows that job loss has an adverse effect on college persistence for 18- to 24-year-old US working students, that is, whether those students remain in college. Although the effect was minimal during the 2000–08 period, it became significantly magnified after 2008. It is estimated that from the 2009–10 through 2019–20 academic years, involuntary job loss led to a 17 percentage point increase in a working student's probability of dropping out of college in the next academic year. We find supporting evidence that the stronger effect in the later period reflects college students' more restricted access to credit card loans after the passage of the Credit Card Accountability Responsibility and Disclosure (CARD) Act of 2009, which imposed tight restrictions on credit extension to individuals who are younger than 21 or older but enrolled in college. For many working students who have difficulty acquiring alternative forms of credit, credit card loans serve as a crucial means of smoothing consumption when income fluctuates. Tightening of the credit card market has a direct impact on these students.

This report's findings suggest that employment stability plays a pivotal role in the retention of young working students, and a small contingency fund goes a long way in preventing college drop-out due to temporary employment disruptions. While the underlying analysis was conducted using national data, the findings are relevant to New England, where higher education employs 4 percent<sup>1</sup> of the region's workforce, more than twice the national average. Student retention therefore carries implications not only for the individual students seeking a college education, but also for the vitality of the region's labor market. An important caveat is that the report's findings do not imply that credit card loans improve college students' net welfare. While access to credit card loans improves persistence in the short run for unemployed college students, a large credit card debt leads to other adverse consequences and is unlikely the optimal solution to liquidity issues. Instead, the significance of credit card loans in the personal finance of working students reflects a dearth of alternative income assistance to compensate for short-term earnings loss. Extending timely unemployment assistance to college students through either unemployment insurance or student financial aid programs could potentially insure these students against unforeseen job-loss risks and yield retention benefits. Policymakers concerned with the retention of working college students should consider these options and explore them to a greater degree.

1 US Census Bureau, County Business Patterns, 2019; employment share by industry.

## I. Introduction

A college education is a proven pathway to upward mobility in the United States. However, not all who start down the path reach the end. According to the US Department of Education, in 2020, only 64 percent of first-time, full-time undergraduate students at four-year institutions graduated within six years, and only 48 percent of students who began at two-year institutions graduated or transferred to another institution within three years.<sup>2</sup> While some students dropped out of college for personal reasons or to pursue a different career goal, nearly 40 percent of young adults left college when they could no longer afford to stay.<sup>3</sup> For many students who have limited financial resources, pursuing a college degree requires them to attend school while holding a job so that they can pay their day-to-day expenses. Maintaining the balance can be academically and psychologically costly (Johnson et al. 2009). On top of that, unexpected income loss or expenses can disturb the balance, forcing a student to leave college. Timely access to credit is therefore critical for the college persistence of financially constrained students, but it is not always available.

The objective of this study is to gain better insight into the relationship among employment, credit constraint, and the college persistence of US 18- to 24-year-old working college students by investigating two interrelated research questions: (1) Does involuntary job loss affect whether working students decide to drop out of college, and (2) does access to credit through credit card

Timely access to credit is critical for the college persistence of financially constrained students, but it is not always available.

loans buffer against the liquidity effect of job loss?<sup>4</sup> These working college students represented 57 percent of the 18- to 24-year-old US undergraduate population in 2016. On average, compared with their nonworking peers, working students have lower family income, receive more limited parental support, and are more likely to be first-generation college students. In addition, nearly one-half of working students depend on their own earned income to pay for their college education. Furthermore, most working students have no access to

commercial loans but hold one or more credit cards, and in many cases, they carry a credit card balance over months.<sup>5</sup> These characteristics suggest that working students often face multilayered barriers to degree completion and depend on credit card loans for short-term credit when an unexpected liquidity need arises.

Our analysis leverages the Current Population Survey (CPS)<sup>6</sup> and its short panel design to obtain information on a student's enrollment status and labor market activities over the 16-month CPS survey window across two academic years. We examine whether working students who experienced involuntary job loss in the first academic year showed a different likelihood of re-enrolling in college in the second academic year, conditional on no degree conferral before the second academic year. Because job loss is correlated with other individual qualities that independently affect a student's likelihood of dropping out of college, we exploit the different timing of job-loss events relative to the timing of a student's re-enrollment decision to tease out the treatment effect of job loss from the selection effect. Next, we test whether student leverage of credit card loans,

2 US Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Winter 2020–21, Graduation Rates component.

3 Authors' calculations based on the Panel Study of Income Dynamics (PSID) Transition into Adulthood Supplement, 2005–2019. Affordability-related dropout is defined as college discontinuation because school was too expensive and the student could not obtain financial aid, or because the student needed to have a job and could not work and go to school at the same time.

4 In this report, the liquidity effect of job loss is defined as a student losing the financial means to afford college as a result of temporary employment disruptions.

5 National Post-secondary Student Aid Study, Undergraduate, 2000 and 2016.

6 The CPS is a nationally representative household survey conducted by the US Census Bureau.

estimated using the Federal Reserve Bank of New York/Equifax Consumer Credit Panel (CCP) data,<sup>7</sup> buffers the liquidity effect of job loss on college re-enrollment. All analyses in the report are based on US national data to increase the size of the samples and the statistical power.

This report's first analysis shows that job loss had minimal effect on working students' college-enrollment decision in the period from 2000 through 2008, but it was associated with an 18 percentage point increase in the college dropout rate in the period from 2009 through 2019. The change suggests that the liquidity effect of job loss on college enrollment was magnified over the last decade. Coincidentally, during the same period, credit supply to college students through credit cards plummeted following the passage of the Credit Card Accountability Responsibility and Disclosure (CARD) Act of 2009, which imposed tight restrictions on credit extension to individuals who are younger than 21 or older but enrolled in college. Connecting the two trends, the second analysis finds evidence that the liquidity effect of job loss on college enrollment declines with student leverage of credit card loans. Based on this study's estimates, the decline in credit card use since 2009 accounts for as much as 96 percent of the increase in the liquidity effect of job loss from the first period (2000–01 through 2008–09 academic years) to the second (2009–10 through 2019–20 academic years), suggesting that many working students rely on credit card loans to make ends meet and remain in college when their earnings fall.

This study's estimates suggest that many working students rely on credit card loans to remain in college when their earnings fall.

An important caveat about our findings is that they do not imply credit card loans improve the overall welfare or degree-completion rates among college students. Such an outcome is not observed in the data. Furthermore, we do not rule out the possibility that excess credit card debt poses a threat to college persistence for an average college student. Instead, this study's findings highlight that employment stability is pivotal in the retention of liquidity-constrained working students and suggest that a small contingency fund could be instrumental in preventing these students from dropping out of college due to temporary employment disruptions. While there are policies and programs in place aimed at supporting unemployed workers or students with emergency needs, student job loss often falls into a gray area that neither emergency student aid nor unemployment assistance effectively reaches. Institution-level emergency financial aid rarely covers personal financial needs resulting from employment changes, and, on average, college-age workers' access to unemployment insurance (UI) benefits is more restricted due to their limited job tenure and earnings records. Expanding unemployment assistance for college students is therefore a policy option to bridge the temporary earnings gaps and improve the retention of liquidity-constrained working students. A more detailed discussion of relevant policies in the New England states is provided later in this report.

## II. The Finances of US College Working Students

This section describes the costs of college and financial sources for working undergraduate students to highlight the significance of employment and credit card loans with respect to the college finances of working students in the United States and the New England region. According to the US National Post-secondary Student Aid Study (NPSAS), a nationally representative study of students attending Title IV post-secondary institutions, in 2016, 57 percent and 52 percent of 18- to 24-year-old undergraduate students in the United States and New England, respectively, worked

<sup>7</sup> The CCP is a nationally representative 5 percent anonymous random sample of all US consumers who have a valid Social Security number and a credit file with Equifax.

Table 1

### Finances of US and New England Working College Students US 18- to 24-year-old Working Undergraduate Students, 2016

|                                      | United States | New England |
|--------------------------------------|---------------|-------------|
| <b>A. Cost of Schooling</b>          |               |             |
| Mean Value of Tuition and Fees       | \$9,171       | \$18,442    |
| Mean Value of Non-tuition Expenses   | \$10,162      | \$10,871    |
| <b>B. Earnings</b>                   |               |             |
| Average Hours per Week               | 24.7          | 22.1        |
| Average Hourly Rate                  | \$11.2        | \$11.5      |
| Average Weekly Earnings x 30 Weeks*  | \$8,299       | \$7,625     |
| <b>C. Financial Aid</b>              |               |             |
| Received Any Grants                  | 63.2%         | 70.5%       |
| Mean Value of Grants $\geq$ 0        | \$5,004       | \$8,842     |
| Received Any Federal Loans           | 36.1%         | 45.5%       |
| Mean Value of Federal Loans $\geq$ 0 | \$2,248       | \$2,866     |
| <b>D. Parental Support</b>           |               |             |
| None                                 | 32.3%         | 28.3%       |
| \$1–\$1,999                          | 25.2%         | 21.1%       |
| \$2,000–\$5,000                      | 11.8%         | 9.0%        |
| \$5,001–\$9,999                      | 12.0%         | 13.2%       |
| \$10,000 or More                     | 18.6%         | 28.5%       |
| <b>E. Private Loans</b>              |               |             |
| Received Any Private Loans           | 6.6%          | 12.3%       |
| Mean Value of Private Loans $>$ 0    | \$8,828       | \$12,154    |
| <b>F. Credit Card Loans</b>          |               |             |
| Had Credit Cards under Own Name      | 54.6%         | 52.6%       |
| Carried a Balance over Each Month    | 23.5%         | 21.0%       |
| Mean Value of Balance Carried $>$ 0  | \$2,100       | \$2,621     |

Note(s): The sample consists of undergraduate college students aged 18 to 24 who were enrolled in a Title IV post-secondary institution in the 2015–16 school year and worked while enrolled (excluding work-study). All dollar values are expressed in 2016 dollars. \* According to the 2008 NPSAS, for which the question about weeks worked while enrolled was last available, more than 70 percent of the 18- to 24-year-old working undergraduate students worked all or most weeks during a semester while enrolled.

Source(s): 2016 National Center for Education Statistics' National Post-secondary Student Aid Study (NPSAS) and authors' calculations.

while enrolled in college.<sup>8</sup> On average, a New England working student spent 22.1 hours per week on their job at an hourly earnings rate of \$11.50, implying an earned income of \$7,625 for working 30 weeks during the school year; additional summer earnings are not included (Table 1, Part B). The value amounts to 26 percent of the total cost of schooling in 2016 (Table 1, Part A) and 65 percent of the combined value of grants and federal loans through financial aid (Table 1, Part C). Most working students received limited, if any, parental support toward their college education (Table 1,

8 The NPSAS determines student employment status by whether a student worked while enrolled during a school year. The number does not include students on the Federal Work-Study Program.

Part D).<sup>9</sup> In the 2015–16 academic year, 28 percent of New England working students reported no parental support, and 21 percent received less than \$2,000. These statistics indicate that, for the median working student in New England, wages and salaries serve as their second-largest funding source toward a college education. Job loss, therefore, has a direct implication for college affordability because for most working college students, there is little buffer to fall back on.

In theory, when a student loses their job and becomes temporarily liquidity constrained, they can borrow to compensate for the lost income and smooth their consumption. In practice, given their low income and short credit history, the supply of commercial credit to college students is limited and largely in the form of credit card loans. In the 2015–16 school year, only 12 percent of 18- to 24-year-old New England working students received a private loan through commercial lenders. Those who did obtain loans often received large sums, suggesting that access to commercial loans was restricted to a small subset of college students who had the financial means to acquire large loans (Table 1, Part E). By contrast, 53 percent of New England working students reported having at least one credit card in their own name (Table 1, Part F). While some students acquired credit cards as a payment tool, more than one-fifth of working students carried a credit card balance each month, leveraging their credit cards essentially as short-term loans. The high balance-carrying rate indicates that credit card loans functioned as an accessible form of credit for many working students who lacked alternative credit sources.

Job loss has a direct implication for college affordability because most working college students have little buffer to fall back on.

### III. The Decline in Credit Card Loan Use after 2008

While credit card loans have remained popular among college students, their use declined sharply after 2008, when credit supply fell under the combined influence of the 2008 financial crisis and the subsequent regulation change. In the decades preceding the crisis, credit card ownership among college students grew steadily due to aggressive marketing campaigns targeting this population. By 1998, 67 percent of college students owned at least one credit card, and the share remained high over the next decade (Sallie Mae 2009). The prevalence of credit cards and, consequentially, credit card debt on college campuses caused considerable worry among educators and scholars.<sup>10</sup> Many were concerned about the detrimental impact of debt on the academic, psychological, and financial well-being of college students (Andrews 2021, 2017; Joo, Grable, and Bagwell 2005; Joo, Durband, and Grable 2008; Norvilitis, Szablicki, and Wilson 2003; Norvilitis et al. 2006; Robb, Moody, and Abdel-Ghany 2012; Manning 2000; Karger 2005; Manning 1999).

Partly due to the efforts of these advocates, the Credit Card Accountability Responsibility and Disclosure (CARD) Act was signed into law on May 22, 2009.<sup>11</sup> The CARD Act, as a direct response to the 2007–08 financial crisis, was intended “to amend the Truth in Lending Act to establish fair and transparent practices relating to the extension of credit under an open end consumer

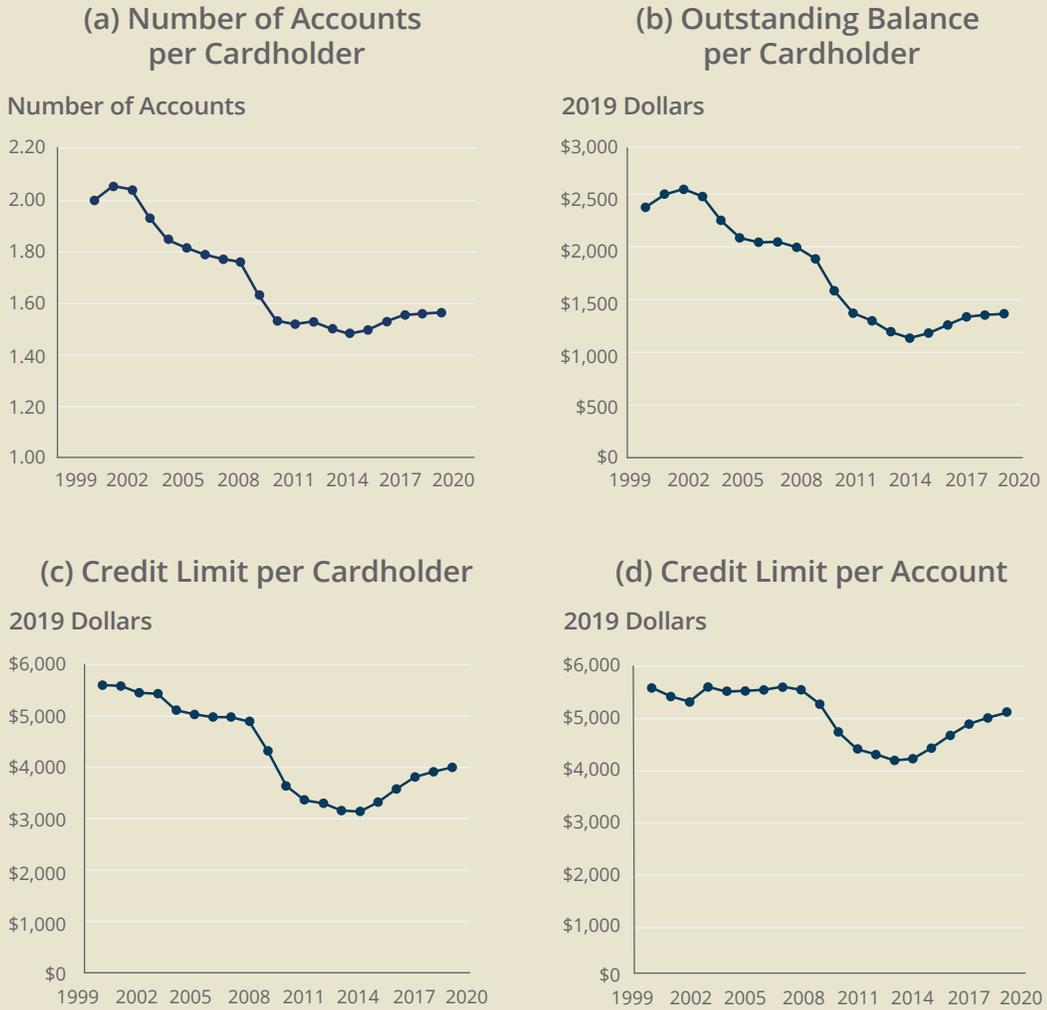
9 There is also limited evidence that working students received funds through other personal contacts. Based on the 2016 NPSAS, only 14 percent of US working students received any financial support from family members and/or friends aside from their parents and spouse, and that support was often of a small value.

10 See, for example, Bonnie Miller Rubin, “College Students Charge Right into Valley of Debt,” *Chicago Tribune*, August 16, 1998, and Manning (1999).

11 As noted by Jambulapati and Stavins (2014), additional regulation in the credit card marketplace was imminent before the CARD Act; in December 2008, the Federal Reserve Board of Governors announced its approval of new consumer protection rules, but the rules were not slated to go into effect until July 1, 2010, and were thus superseded by the CARD Act.

Figure 1

Credit Card Use among Cardholders  
US 18- to 24-year-old Consumers, 2000–2019



Note(s): The sample consists of 18- to 24-year-old US consumers with at least one open credit card account and a valid Social Security number. All dollar values are inflation-adjusted to 2019 dollars using the Consumer Price Index for All Urban Consumers (CPI-U).

Source(s): 2000–2019 FRBNY/Equifax Consumer Credit Panel and author’s calculations.

credit plan, and for other purposes.”<sup>12</sup> Title III of the act specifically addresses extending credit to individuals under 21 years old and/or college students, imposing strong restrictions on marketing or issuing credit cards to young adults who have not demonstrated the ability to repay credit

12 CARD Act of 2009, H.R. 627.

## Box 1

## Data Source and Methodology

**Data Source**

We retrieved the analysis sample from the US Census Bureau’s Current Population Survey (CPS) through the Integrated Public Use Microdata Series (IPUMS) (Flood et al. 2022). The CPS is a nationally representative household survey that gathers information on labor market activities from members of about 70,000 housing units each month. Individual respondents who reside in the same household during the survey period are interviewed monthly for four months (survey months one through four, or S1 through S4), followed by an eight-month break, and interviewed again for four months (S5 through S8). The short panel design allows us to observe a respondent’s short-term labor market transitions as well as changes in their school enrollment status over the 16-month survey period.

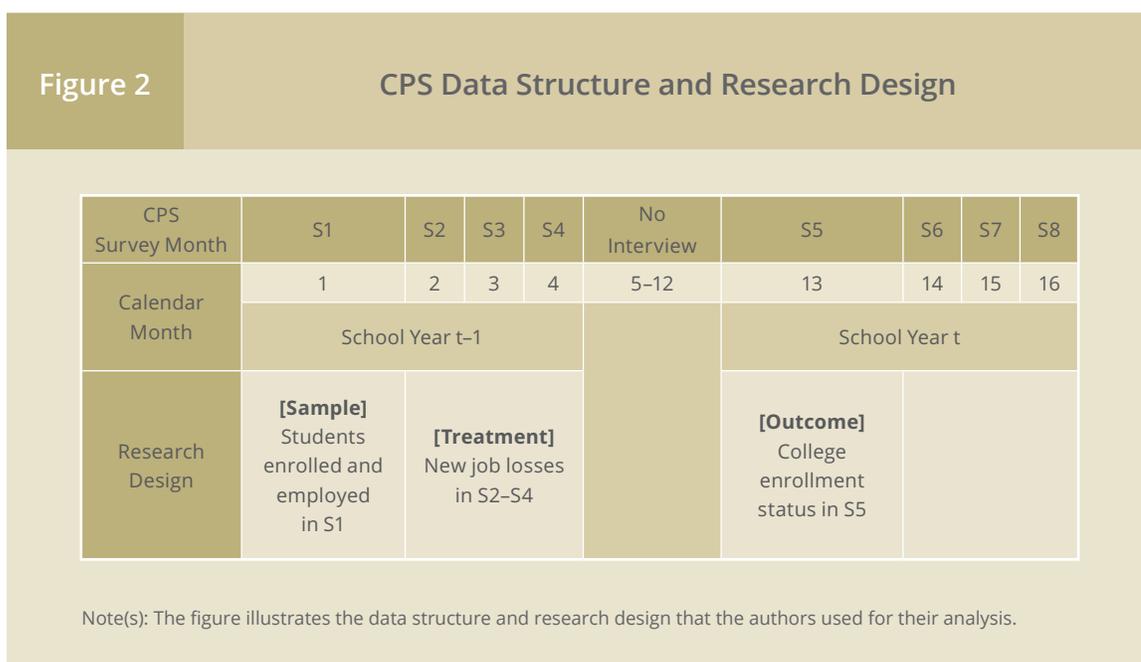
**Methodology**

In the first analysis, we leverage the CPS data structure to test whether having experienced involuntary job loss in an academic year increases a working student’s probability of dropping out of college in the next academic year. Specifically, this study’s sample consists of 18- to 24-year-old college students who were enrolled and employed in the first CPS survey month (S1), the outcome variable is a student’s college dropout status in the fifth CPS survey month (S5), and the treatment is a spell of unemployment due to job loss in the second to fourth CPS survey months (S2 through S4) prior to the re-enrollment decision. Figure 2 shows our research design and its relationship with the CPS data structure.<sup>a</sup>

After we have established the impact of job loss on college re-enrollment, our second analysis assesses whether credit supply to college students through credit card loans moderates this effect by augmenting the baseline model with an interaction term between job loss and an indicator of credit card loan leverage. The indicator is one of the four summary measures of credit card loan leverage among the 18- to 24-year-old population in a state between academic year  $t-1$  and  $t$ . Those measures are (1) the average number of credit card accounts per cardholder, (2) the average credit limit of each credit card account, (3) the average total credit limit per cardholder, and (4) the average total outstanding credit card balance per cardholder. All four measures are estimated using individual credit card use records from the CCP.

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a See Wu and McMillan (2023) for a detailed description of sample restrictions and identification strategies.



card debt.<sup>13</sup> Following the series of regulation changes, the number of credit card accounts and transactions declined across all consumers (Consumer Financial Protection Bureau 2013; Lux and Greene 2016; Jambulapati and Stavins 2014; Jiang and Sánchez 2016). The decline was particularly pronounced among young adults (Debbaut, Ghent, and Kudlyak 2016; Consumer Financial Protection Bureau 2013; Cooper, Gorbachev, and Luengo-Prado 2022). Based on data from the Consumer Financial Protection Bureau's (CFPB) Credit Card Practices Inquiry (CCPI), a survey of issuers that represents about 80 percent of credit card balances in the United States, the share of new accounts issued to cardholders under the age of 21 fell from 5.7 percent in 2007 to 1.7 percent in 2009 (Consumer Financial Protection Bureau 2013). Relatedly, the share of 18- to 24-year-old US undergraduate students with at least one credit card fell from 66 percent in 2000 to 50 percent in 2016.<sup>14</sup> The leverage of credit card loans among college-age cardholders also fell during this period. Using data from the CCP, Figure 1 plots the average number of credit card accounts (Panel 1a), outstanding balances (Figure 1, Panel 1b), total credit limit (Figure 1, Panel 1c), and credit limit per credit card account (Figure 1, Panel 1d) for 18- to 24-year-old US consumers who had one or more credit card accounts. Substantial declines are observed across the four indicators in 2009, the year the CARD Act was signed into law.<sup>15</sup>

## IV. Research Findings

### Job Loss and College Dropout Rates

Figure 3 reports this study's estimates of the effect of job loss on college dropout rates. In the sample period spanning the 2000-01 through 2008-09 academic years, job loss is not estimated

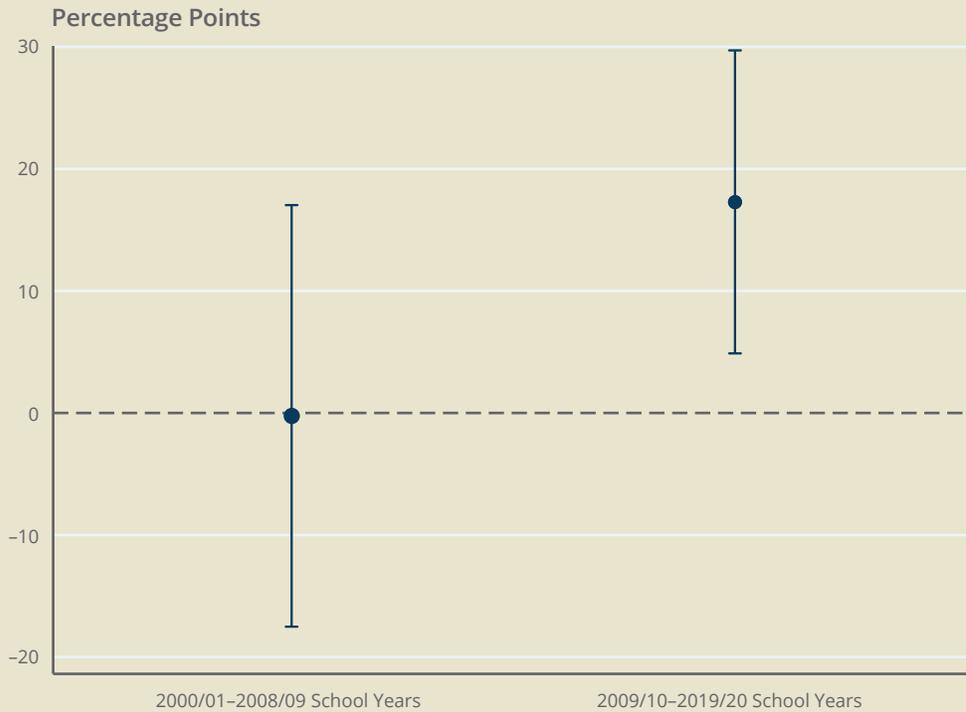
13 Under Title III, credit card issuers cannot accept applications from a consumer under the age of 21 years old unless that individual can demonstrate proof of their ability to repay obligations or can provide a cosigner who is older than 21. In addition, individuals under the age of 21 cannot be sent pre-screened credit card offers or have the amount of credit authorized under their account increased without approval from their cosigner. In terms of protections for college students, Title III requires institutions of higher education to publicly disclose any contracts or agreements made with card issuers or creditors for the purpose of marketing a credit card, and students cannot be offered inducements to apply for credit plans on or near campus or at an event sponsored or related to the school. Title III also encourages schools to set their own guidelines for managing credit card marketing on campus and to provide financial education opportunities for students.

14 National Post-secondary Student Aid Study, Undergraduate, 2000 and 2016.

15 After the peak use rates in 2002, credit card use fell modestly from 2003 to 2005, reflecting the recovery of the economy from the 2001 recession.

Figure 3

### Predicted Effect of Job Loss on College Dropout Rates (in Percentage Points)



Source(s): 1999–2020 IPUMS-CPS and authors' calculations.

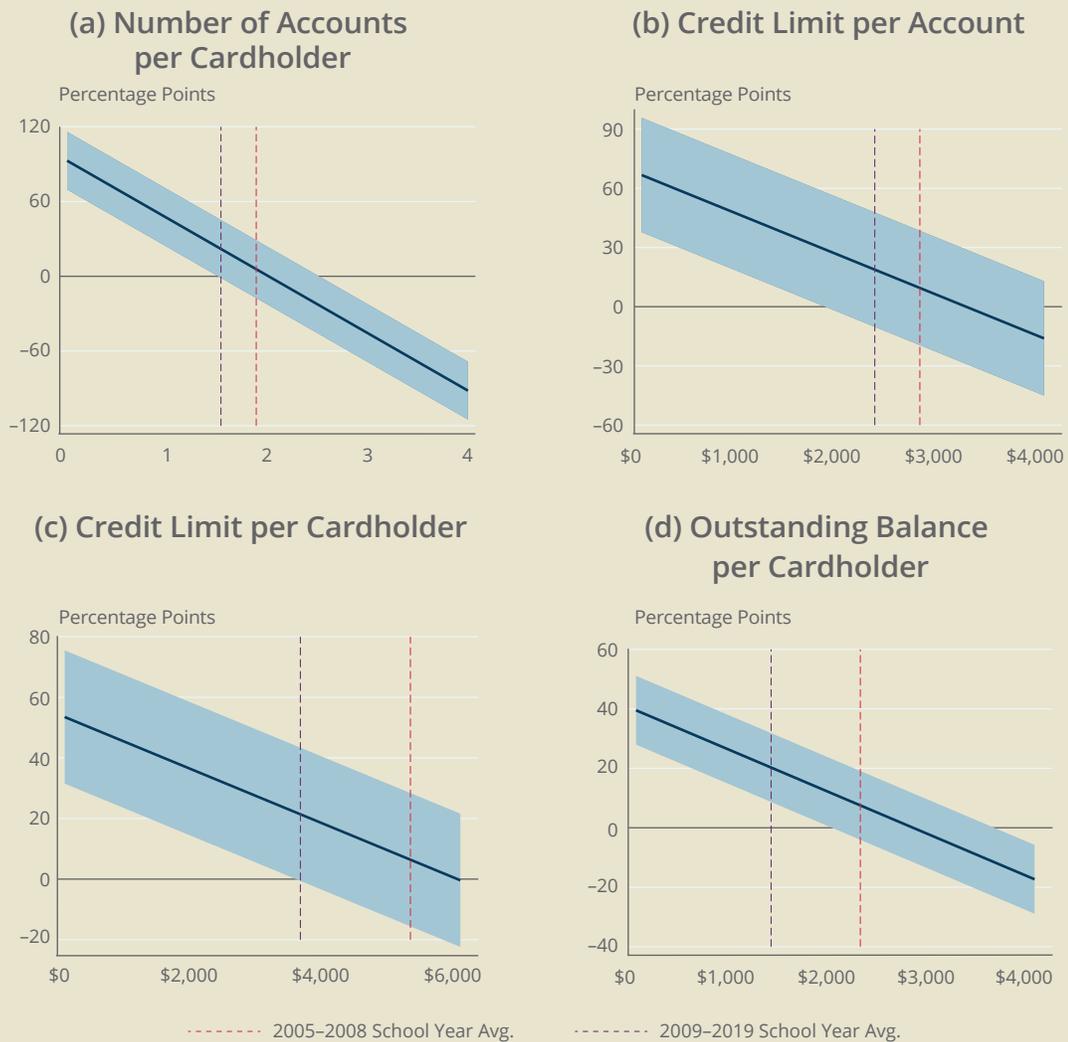
Note(s): The analysis samples consist of working college students aged 18 to 24 over the study periods of the 2000–01 through 2008–09 and 2009–10 through 2019–20 academic years. See Wu and McMillan (2023) for a detailed description of the regression model, control variables, and sample construction.

to have increased the dropout rates of working students, as indicated by the small and statistically insignificant association between job loss and college dropout rates. By contrast, job loss exhibits a strong positive correlation with dropping out of college over the academic years from 2009–10 through 2019–20. After the analysis accounts for selection, job loss is estimated to have increased the dropout rate by 17 percentage points. In other words, nearly one in five students who experienced job loss discontinued college due to employment disruption. The difference between the two periods suggests that US working students' ability to withstand the impact of job loss significantly deteriorated after 2008.

In theory, two scenarios can magnify the liquidity effect of job loss: when borrowing becomes more difficult or when job loss leads to more substantial earnings loss. Both scenarios could hypothetically contribute to the heightened liquidity effect in the aftermath of the 2008 financial crisis, when working students faced longer unemployment spells, lower earnings, and more restricted access to credit. We find limited evidence that changes in labor market conditions after the Great Recession significantly increased the liquidity effect of job loss on college enrollment (see Wu and McMillan 2023). This finding leads to this study's second analysis, which investigates whether access to credit card loans acts as a financial buffer for unemployed working students.

Figure 4

### Predicted Effect of Job Loss on College Dropout Rates by Access to Credit Card Loans (in Percentage Points)



Note(s): The sample consists of working college students aged 18 to 24 over the 2000-01 through 2019-20 academic years. See Wu and McMillan (2023) for a detailed description of the regression model, control variables, and sample construction.

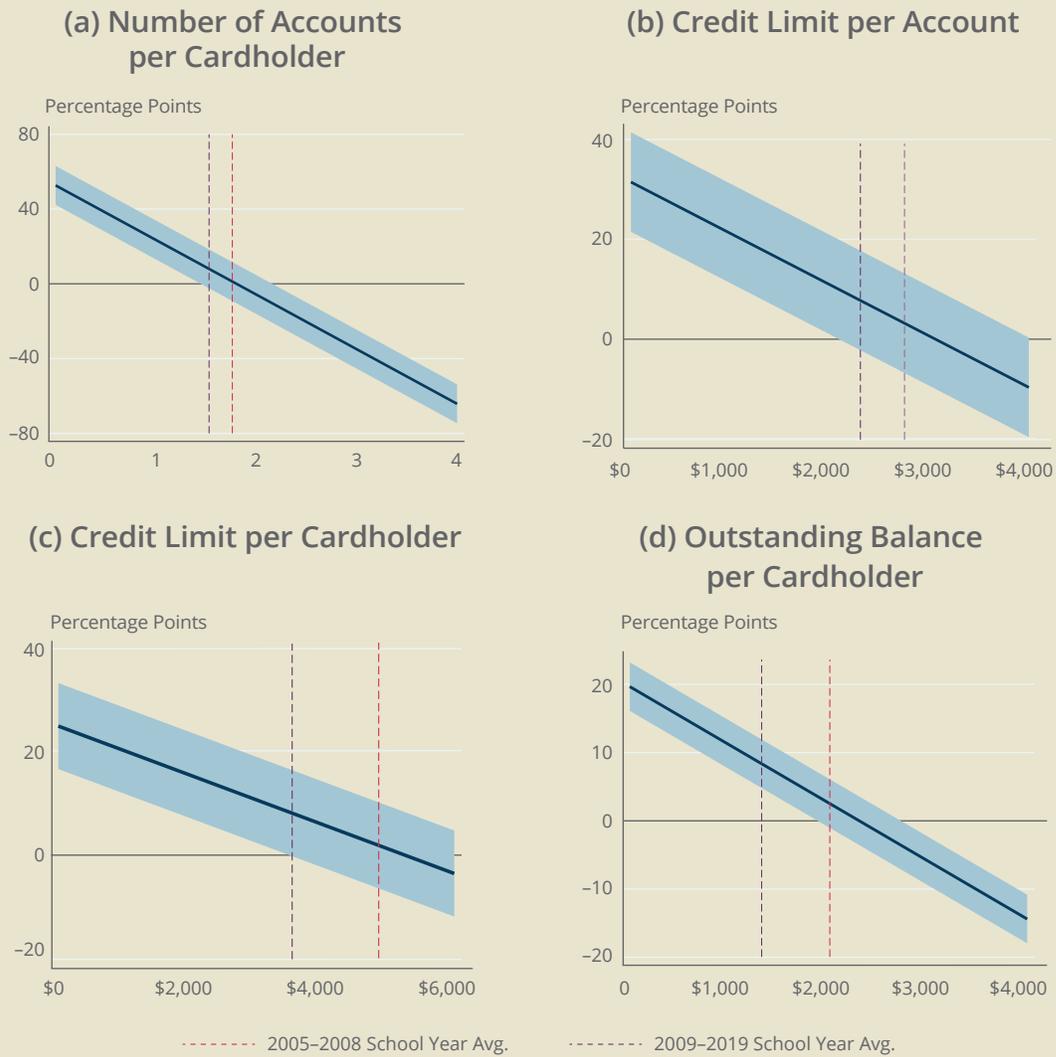
Source(s): 1999-2020 IPUMS-CPS and CCP. All calculations, findings, and assertions are the authors'.

### The Buffering Effect of Credit Card Loans

As expected, we find supporting evidence across the four indicators that working college students were less inclined to drop out of school after an involuntary job loss if they had more access to credit card loans (Figure 4). Specifically, among students who experienced job loss, an additional credit card account per cardholder is associated with a 46 percentage point decline in the dropout rate (Figure 4, Panel a), an additional \$1,000 in the average credit limit per account is associated with a 21 percentage point decline in the dropout rate (Figure 4, Panel b), an additional \$1,000 in the average total credit card limit of each cardholder is associated with a 9 percentage point decline in the dropout rate (Figure 4, Panel c), and an additional \$1,000 in the average total outstanding balance is associated with a 14 percentage point decline in the dropout rate (Figure 4, Panel d). Applying the estimates to the observed differences in credit card use between the earlier

Figure 5

Predicted Effect of Job Loss on Food Insecurity Rates by Access to Credit Card Loans (in Percentage Points)



Note(s): Note(s): The sample consists of members of the civilian population aged 18 to 24 over the 2005-06 through 2019-20 academic years to accommodate the availability of the CPS 30-day food insecurity data. The results are weighted by the CPS food security supplement person weight for each sample observation. Standard errors are clustered at the state level.

Source(s): 2005-2019 IPUMS-CPS.

(2000-01 through 2008-09 academic years) and later (2009-10 through 2019-20 academic years) study periods, we calculate that the deleveraging of credit card loans after 2008 is associated with a 9 to 16 percentage point increase in the college dropout rate among unemployed working students, accounting for 55 to 96 percent of the increase in the liquidity effect of job loss from the earlier period to the later period. These findings suggest that credit card loans are a critical liquidity source for working college students to smooth their consumption and remain in college following unanticipated earnings losses.

## Box 2

## Methodology of the Supplementary Analysis

Following the same research design as the primary analysis, the supplementary analysis tests whether access to credit card loans diminishes the positive relationship between job loss and food insecurity. The analysis sample consists of 18- to 24-year-old CPS respondents who had complete, four-month interview records (from September through December) and was retrieved from the CPS Basic Monthly and December Food Security Supplement. Each December, in addition to the basic monthly survey questions, CPS respondents receive questions about the food security situation in their households over the preceding 30 days. The questions cover subjects including the ability to afford balanced meals, worries about running out of food, and the frequency with which meals were skipped or respondents were hungry due to food affordability. The CPS then assigns a household's food security status based jointly on the number of affirmative answers to the food security screening questions, the household income-to-poverty ratio, and the presence of children in the household. This analysis has a shorter study period (the 2005–06 through 2019–20 school years) to accommodate the availability of the 30-day food security questions in the CPS.

### Additional Supporting Evidence

To strengthen the argument that credit card loans are an essential liquidity source for working college students who lose their jobs, we test whether credit card loans moderate the impact of job loss on consumption outcomes beyond college enrollment. We find supporting evidence that credit card use mitigates the liquidity effect of job loss on basic food consumption among the college-age population and that food consumption was similarly affected by the reduction in credit supply after 2008 (Figure 5). Among individuals who experienced a recent spell of unemployment from job loss, the probability of lacking consistent access to food fell 29 percentage points for each additional credit card account per cardholder (Figure 5, Panel a), 10 percentage points for each additional \$1,000 increase in the average credit card account limit (Figure 5, Panel b), 5 percentage points for each additional \$1,000 increase in the average total credit limit (Figure 5, Panel c), and 9 percentage points for each additional \$1,000 increase in the average total outstanding balance (Figure 5, Panel d). The consistency between the primary and supplementary results adds to the evidence that credit card loans enable financially constrained young adults to smooth their consumption and education investment over temporary income losses.

### Discussion

Our findings show that job loss hinders successive college enrollment for 18- to 24-year-old US working students. While the effect was minimal in the beginning of the study period, it was significantly magnified after 2008. Based on our estimates, from the 2009–10 through 2019–20 academic years, an involuntary job loss led to a 17 percentage point decline in a working student's probability of remaining in college in the next academic year. We find supporting evidence that the stronger effect in this period relative to the pre-2009 sample period reflects college students' more

restricted access to credit card loans after the passage of the CARD Act in 2009, when credit card use plummeted among the 18- to 24-year-old population and remained substantially lower than its pre-recession level.

For students who have difficulty acquiring alternative forms of credit, credit card loans serve as an emergency fund and offer the means to smooth consumption when income fluctuates. The tightening of the credit card market therefore has a direct implication for these students. An important caveat is that this report's results do not imply that access to credit card loans improves college students' overall college completion rates or welfare. Such outcomes are not observed in our data. This study's findings apply only to the short-term college-persistence decision of the unemployed working students. Without further research, we cannot rule out that high credit card debt could pose risks to the long-term academic, economic, and/or psychological well-being of college students.

## V. Policy Implications

This report's findings indicate that access to credit card loans improves college persistence in the short run for unemployed college students. Large credit card debt, however, leads to other adverse consequences and is unlikely the optimal solution to the liquidity issue of working students. The significance of credit card loans in unemployed students' personal finances reflects a dearth of alternative temporary income assistance for their short-term liquidity needs. Most of the existing student aid and unemployment assistance programs are not designed to address the financial impact of job loss on working students. Below, we review existing policies and discuss policy options that could reduce the financial impact of job loss on working students.

Aside from wages and salaries, financial aid through grants or loans constitutes working students' largest funding sources (see Table 1). However, most student aid programs have limited capacity to respond to students' emergency financial needs because of the timing of the application process. Each year, before the start of the academic year, students submit the Free Application for Federal Student Aid (FAFSA) form to their institutions. Colleges use the information from FAFSA to determine a student's federal aid eligibility and, often, to award their own financial aid packages. The amount of aid a student receives is based on their financial records from the previous year and will not reflect changes in their current financial circumstances.<sup>16</sup> Some colleges offer emergency aid programs to support students who encounter unanticipated financial hardships during a semester due to an accident, illness, or other circumstances beyond their control that put them at risk of dropping out of school (see Table 2 for a summary of emergency aid programs in major New England public colleges and universities). These programs offer short-term liquidity but are intended as a last-resort option and require students to have exhausted all other financial resources, including student loans. In addition, most schools' funds are distributed on a first-come, first-served basis; thus, eligibility does not guarantee funding. Also, these programs rarely stipulate student job loss as a qualifying event for emergency aid, likely because unemployment risk is partially anticipated and addressed through other government policies, most notably unemployment insurance (UI).

UI is a joint state-federal program that provides temporary income assistance to eligible unemployed workers based on a worker's earnings and the reason for leaving a job (see Table 3 for a summary of UI criteria in New England states). For example, in Massachusetts, to be eligible for UI, a worker has to have earned at least \$6,000 during the previous four calendar quarters and

<sup>16</sup> While there are ways to update the FAFSA information if a significant financial need arises after a student submits their form, the extent to which an update can affect the distribution of aid after the academic year starts is unclear.

Table 2

Emergency Student Funding Eligibility for Major Public New England Universities and Colleges

| State         | School or System                      | Name of Fund  | Type of Aid                        | Target Situation  | Eligibility  |
|---------------|---------------------------------------|---|------------------------------------|---|--|
| Connecticut   | University of Connecticut             | Students First Fund                                       | Grant                              | Unanticipated financial needs   | Demonstrated financial need with risk to schooling and exhausted all financial resources   |
| Maine         | Southern Maine Community College      | Emergency Housing Assistance Fund                         | Grant                              | Emergency housing costs and meal plans                                      | At risk of homelessness and actively working with housing office to attain long-term housing   |
|               | Eastern Maine Community College       | Emergency Fund  | Grant (less than \$1,000 per year) | Unanticipated financial needs   | Demonstrated financial need with risk to schooling and in good standing  |
|               | University of Southern Maine          | Student Emergency Fund                                    | Grant                              | Unanticipated financial needs   | Demonstrated risk of dropping out of school  |
| Massachusetts | University of Massachusetts Boston    | Student Emergency Aid Fund                                | Grant                              | Temporary emergency financial needs   | Demonstrated financial needs resulting from natural disaster, homelessness, food insecurity, student rights, educational access, or immigration policies |
|               | University of Massachusetts Dartmouth | MacLean Bridging the Gap Fund                             | Grant (less than \$2,500)          | Unexpected financial hardship   | Undergraduate and exhausted all financial resources  |
|               |                                       | Student Emergency Fund                                    | Grant (less than \$1,000)          | Address unanticipated emergency financial need                              | As determined by Student Affairs   |
|               |                                       | Emergency Loan Fund                                       | Short-term Loan (\$10 to \$200)    | Time-sensitive expense for parking pass, medication, or other critical need | As determined by Student Affairs   |
|               | Bunker Hill Community College         | Mary L. Fifield Endowed Student Emergency Assistance Fund | Grant (less than \$1,000)          | Emergency financial needs   | Demonstrated risk of dropping out of school  |

**Table 2  
Continued**

**Emergency Student Funding Eligibility for Major Public  
New England Universities and Colleges**

| State         | School or System            | Name of Fund                                | Type of Aid             | Target Situation                                     | Eligibility  |
|---------------|-----------------------------|---|-------------------------|--|--|
| New Hampshire | University of New Hampshire | Inn-Between Fund                            | Grant                   | Emergency housing costs                              | Experienced emergency housing loss during school break   |
|               |                             | Student Emergency Financial Assistance Fund | Grant                   | Emergency one-time financial needs                   | Demonstrated financial need and first time receiving assistance in the academic year   |
| Rhode Island  | Rhode Island College        | Student Emergency Funds                     | Grant                   | Unexpected financial needs                           | Demonstrated financial need with risk to schooling, exhausted all financial resources, in good academic standing (2.0 GPA minimum), and first time receiving emergency funds |
|               | University of Rhode Island  | Students First Fund                         | Grant                   | Emergency support to students with demonstrated need | In good academic standing (2.0 GPA minimum), applied for financial aid, exhausted all financial resources, and sought employment   |
| Vermont       | University of Vermont       | UVM Emergency Grant Program                 | Grant (less than \$500) | Emergency, one-time financial need                   | In a degree program, experienced temporary hardship or emergency, have current FAFSA (unless international), and exhausted all financial resources                           |

Note(s): The information from this table was compiled from individual college and university websites, which are listed in Table A-1 in the Appendix. Although it is comprehensive, this is not a complete list of all the existing short-term aid programs in New England.

be unemployed through no fault of their own. To continue receiving weekly UI benefits, a worker has to actively search for work and be available to work. Due to the work-availability requirement, UI recipients who wish to attend school or job training full-time while on UI need to first obtain approval from state UI agencies. In some states, including Massachusetts and Maine, additional regulations preclude some seasonal positions from being used to establish an unemployment claim. These criteria unintentionally make access to UI more restricted for college-age workers, who often have a short earnings history, more limited work availability, and a higher likelihood of working for seasonal employers. From 2000 through 2019, the probability that an unemployed

**Table 3 Unemployment Insurance Eligibility for Each New England State**

Each state requires the following:

- Authorization to work requirement: Must be authorized to work in the United States
- Unemployment requirement: Must be partially or totally unemployed
- Separation from employment requirement: Did not quit voluntarily without good work-related reason and was not terminated for misconduct
- Able and available to work requirement: Must be physically and mentally able to work; must be actively able to accept full-time position in any suitable job, actively searching for work

| State         | Earnings Requirement  | Base Period Definition                         | Eligibility for Full-time Students?   | Eligibility for Seasonal Workers?*   |
|---------------|---|--|---|--|
| Connecticut   | At least 40 times the weekly benefit rate in base period with a minimum of \$600 (\$1,600 starting from 1/1/2024) | First four of last five completed quarters     | Exempt from work search requirement if currently in a training or education program approved by CT DOL  | Same as regular workers but exempt from work search for verified short seasonal unemployment |
| Maine         | At least \$5,904 in base period and \$1,968 per quarter in two different quarters                                 | First four of the last five completed quarters | Exempt from work search requirement if currently in a training or education program approved by MDOL  | Can receive UI based on seasonal work wages but only during regular season of work           |
| Massachusetts | At least \$6,000 in base period and 30 times weekly benefit amount  | Last four completed quarters                   | Either eligible by being exempt from work search requirement if in an approved DUA training program or student can demonstrate that they are available for work hours typical for that occupation or are willing to rearrange school schedule to accept employment; must apply for Training Opportunities Program (TOP) to collect UI while in training full-time | Seasonal workers cannot collect UI based on wages earned for employment of 20 weeks or less  |

\* If only work search requirement exemption is stated, then no information dealing specifically with seasonal unemployment was found.

Table 3  
Continued

## Unemployment Insurance Eligibility for Each New England State

| State         | Earnings Requirement  | Base Period Definition                         | Eligibility for Full-time Students?  | Eligibility for Seasonal Workers?   |
|---------------|---|--|--|---|
| New Hampshire | At least \$2,800 in base period and \$1,400 in two different quarters   | First four of the last five completed quarters | Unclear  | Same as regular workers but may be exempt from work search for verified short seasonal unemployment |
| Rhode Island  | At least \$15,600 in base period (or alternate period) or \$2,600 in first quarter of base period and paid total base period taxable wages of at least 1.5 times highest earning quarter and paid total base period taxable wages of at least \$5,200 | First four of the last five completed quarters | Exempt from work search requirement if currently in a training or education program approved by RI DOL | Same as regular workers but exempt from work search for verified short seasonal unemployment        |
| Vermont       | At least \$2,386 in highest paid quarter of base period and in other three quarters, at least 40% of what was earned in highest paid quarter  | First four of the last five completed quarters | Exempt from work search requirement if currently in a training or education program approved by VT DOL | Same as regular workers but exempt from work search for verified short seasonal unemployment        |

Note(s): The information in this table was compiled from individual states' department of labor websites and other sources, which are listed in Table A-1.

worker received UI benefits was 8.5 percent for workers aged 18 to 24 compared with 32.7 percent for workers aged 25 to 54 and 41.8 percent for workers aged 55 to 64.<sup>17</sup> The lower UI-receipt rate among the college-age population suggests that most unemployed college students receive limited, if any, UI benefits.

17 Authors' calculations based on IPUMS-CPS Annual Social and Economic Supplement (ASEC), 2000–2019. UI receipt rate is defined as the number of workers who received unemployment assistance that was more than or equal to \$50 as a share of all workers, unconditional on their college enrollment status, who reported a spell of unemployment in the previous calendar year.

Nevertheless, UI offers a platform for extending temporary income assistance to unemployed students because it was designed to address the liquidity impact of job loss in a timely manner. Expanding UI eligibility for actively enrolled college students could be a policy option for systematically supporting working students through temporary employment disruptions and earnings gaps. Specifically, the expansion should consider the shorter job tenure, lower earnings, and seasonality of student employment when determining students' eligibility for UI benefits. Past research shows that UI benefits increase college attendance rates among unemployed workers aged 20 to 30 (Barr and Turner 2015). While a more careful analysis is needed to draw a conclusion, it is reasonable to assume that UI benefits would yield similar results for the retention of liquidity-constrained unemployed college students who have demonstrated their preference for—and capability of attaining—a college education. Considering the small fraction of college students affected by involuntary job loss, such policy is unlikely to impose substantial fiscal burden on the UI system, but it might provide long-term benefits from the human capital gains. Thus, UI expansion could prove more cost effective than student financial aid programs in addressing working students' unforeseen earnings-loss risks.

## VI. Conclusion

This study presents the first evidence that involuntary job loss increases the probability that an 18- to 24-year-old working student will drop out of college before attaining a degree but that student access to short-term credit through credit card loans buffers this liquidity effect. By restricting credit supply to college students, the CARD Act of 2009 inadvertently inhibits the ability of liquidity-constrained students to remain in school when earnings fall. While involuntary job loss affected less than 3 percent of the college students in our sample, the findings highlight the precarious financial situation of US working students and reveal a lack of unemployment assistance for this population that would buffer temporary employment disruptions. Extending timely unemployment assistance to actively enrolled college students through either UI or student financial aid programs could potentially insure these students against unforeseen job-loss risks and yield retention benefits. Policymakers concerned about the retention of working college students should consider these policy options and explore them to a greater degree.

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Appendix

| Table A-1     | Unemployment Insurance Eligibility and Emergency Student Aid Sources   |  |
|---------------|--|--|
| State         | Unemployment Insurance Eligibility Table Sources   | Emergency Student Funding Eligibility Table Sources  |
| Connecticut   | <ul style="list-style-type: none"> <li>• CT Department of Labor</li> <li>• CT Unemployment Insurance Call Center</li> </ul>  | <ul style="list-style-type: none"> <li>• UConn Students First Fund</li> </ul>  |
| Maine         | <ul style="list-style-type: none"> <li>• ME Department of Labor</li> <li>• Maine Equal Justice: Basics of Unemployment Insurance in Maine</li> <li>• Maine UI Guide</li> </ul> | <ul style="list-style-type: none"> <li>• SMCC Emergency Housing Fund News</li> <li>• SMCC Emergency Housing Fund Fundraiser</li> <li>• EMCC Emergency Fund</li> <li>• USM Student Emergency Fund</li> </ul>  |
| Massachusetts | <ul style="list-style-type: none"> <li>• MA Department of Unemployment Assistance</li> <li>• Mass Legal Services</li> </ul>  | <ul style="list-style-type: none"> <li>• UMass Boston Student Emergency Aid Fund</li> <li>• UMass Dartmouth Student Emergency Funds</li> <li>• Bunker Hill Community College Student Emergency Fund</li> <li>• Bunker Hill Community College Student Emergency Fund Started</li> </ul> |
| New Hampshire | <ul style="list-style-type: none"> <li>• NOLO Collecting Unemployment Benefits in NH</li> <li>• NH Department of Labor</li> <li>• NH Employment Security</li> </ul>            | <ul style="list-style-type: none"> <li>• UNH Emergency Funds</li> <li>• Inn-Between Fund</li> <li>• Student Emergency Financial Assistance Fund</li> </ul>   |
| Rhode Island  | <ul style="list-style-type: none"> <li>• RI Department of Labor</li> </ul>   | <ul style="list-style-type: none"> <li>• RIC Student Emergency Funds</li> <li>• URI Students First Fund</li> </ul>   |
| Vermont       | <ul style="list-style-type: none"> <li>• NOLO Collecting Unemployment Benefits in Vermont</li> <li>• VT Department of Labor</li> </ul>   | <ul style="list-style-type: none"> <li>• UVM Emergency Grant Program</li> </ul>  |

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