

# Appendix

## Estimation Equation

Figure 2 shows the point estimates,  $\beta^{k,j}$ , and the associated standard errors from the following estimation equation, which captures the effect of having a student loan on credit scores  $k$  years after the start of the COVID-19 pandemic<sup>1</sup> for an individual with an initial credit score in group  $j$ :

$$y_{it}^j = \alpha_i + \theta_t + \sum_{k=-K}^T \beta^{k,j} \cdot \mathbf{1}\{t = k \ \& \ SLH_i^j = 1\} + X_{it}\gamma + \epsilon_{it},$$

where  $y_{it}^j$  is the outcome of interest (in this case an individual's credit score),  $\alpha_i$  captures individual level effects,  $\theta_t$  captures time effects,  $\beta^{k,j}$  captures the effect of having a federal student loans  $k$  years after the start of the pandemic for an individual in credit score group  $j$ , and  $X_{it}$  is a vector of time-varying household characteristics. To reduce noise, we average credit scores (and other outcomes of interest) over each year in the sample.

We use this same approach in Figure 4 to estimate the credit score effects, but instead of comparing student loan holders (SLHs) with non-SLHs, our estimates compare SLHs who had a derogatory mark (DM) on their credit record before the pandemic with SLHs who did not have a DM. Therefore,  $\beta^{k,j}$  captures the effect of having a past student loan default on credit scores. In Figure 5, we use the same equation to estimate outcomes,  $y_{it}^j$ , for credit card limits (left panel) and balances (right panel).

## Additional Summary Statistics

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1. Given potential reporting lags in the credit bureau data, we date the start of the pandemic (year 0) as 2020:Q2, and thus 1 year after the start is 2021:Q2 and so on. As noted in the main text, the effects are measured relative to average values for 2019.

**Table 1.** Credit Score Statistics

	Mean	Median	25th Pctle.	75th Pctle.	Std. Dev.
Federal Student Loan	648	672	565	740	112
No Student Loan	679	701	609	768	109

**Table 2.** Age Statistics

	Mean	Median	25th Pctle.	75th Pctle.	Std. Dev.
Federal Student Loan	32	31	28	35	5
No Student Loan	33	33	29	37	5