

Student Loan and Early Employment Outcome

Ming Xu*

University of Minnesota

Abstract

Both the returns to a college degree and the cost of college attendance have risen substantially since the early 90s, leading to sizable increases in the demand for student loans. These loans offer opportunities for education to many students who otherwise wouldn't have had the resources to pursue a degree. However, the looming need to make loan payments after graduation complicates the labor market decisions that students make.

Do student loans affect post-graduation labor market decisions for young workers? A recent survey conducted by the National Center of Education Statistics (NCES) reports 51% of student loan borrowers state that loans altered employment decisions. Specifically, among those people who say that student loans altered their decision, 41% believe that they took a less desired job due to loans, and 36% claim that they took job outside of their field of study due to their debt burden. The survey suggests that student loans do have a negative effect on young workers' labor market decisions, but in what way? How big is the effect, if any? Can the government help students to alleviate their loan burden through different loan policies? These are the questions that I am investigating in this paper.

Many papers have studied the effects of student loans and evaluated the effectiveness of various student loan policies. Most of the research focuses on the effect on students' earlier schooling decision and educational attainment. For example, [Garriga and Keightley \(2007\)](#) studies the effect of different government student loan policies on enrollment rates and completion rates. [Navarro \(2011\)](#) also investigates how borrowing constraints influence student's college attendance decisions. [Chatterjee and Ionescu \(2012\)](#) proposes insuring

*Correspondence: xuxx0262@umn.edu

student loans against the risk of failing college. There are some also studies on how student loans affect post-graduate outcomes. [Cooper, Wang et al. \(2014\)](#) examines the impact of student loan liabilities on individuals' homeownership states and wealth accumulation and finds that student loans lower the likelihood of homeownership. They also conclude that there is a fairly strong negative correlation between student loan debt and wealth (excluding the student loan debt). [Ambrose, Cordell and Ma \(2015\)](#) investigates the impact of student loan debt on small business formation and finds a significant and economically meaningful negative correlation between changes in student loan debt and net business formation. There are also a few papers which study the correlation between the student loan and post-graduate financial stability ([Gicheva and Thompson \(2013\)](#)), or labor market outcomes ([Minicozzi \(2005\)](#)).

In this paper I investigate the relationship between student loan balance at graduation and early career outcomes among students who newly graduate with a bachelor degree. Young workers are facing low income and high unemployment and underemployment rates¹. [Abel, Deitz and Su \(2014\)](#) uses various data sources such as the census data, CPS and O*NET to show that many recent college graduates struggle to find jobs especially after the recession. Many workers are underemployed or working part-time. The unemployment rate for recent college graduates is about 2% higher on average from 1990 to 2013 than the unemployment rate for all college graduates. As a result, many prefer to borrow to finance current consumption. However, young workers typically face tight borrowing constraints especially when having high student loan balances. If they are unable to borrow or can only borrow at a very high price, student debt will have first-order effects on early-career consumption, and recent graduates may attempt to minimize these effects through their job choices [Rothstein and Rouse \(2011\)](#).

Using a combination of survey and administrative data on graduates in two cohorts, I show that there is a significant negative correlation between the amount of debt upon graduation and the probability of finding a job which matches your education. I use evidence from Equifax to motivate a partial equilibrium model featuring job search and long-term debt where the cost of consumer credit depends on your student loan balance. I successfully calibrate the model to the data and show that this debt constraint mainly binds for high and medium human capital graduates, as it affects the amount of time they are able to spend searching for a good job. I then show that alternative repayment and interest rate policies would have improved labor market outcomes for graduates in 07/08 by allowing extended

¹this is defined as workers working in a job that typically does not require the degree the worker possesses.

search times, increasing match quality and possibly lifetime productivity.

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