

Student Loans

“Massive and growing bigger by the day” is a phrase that aptly describes the current total of outstanding student loan debt in the United States. At around \$1.3 trillion, this amount easily exceeds the total auto loan debt for all Americans. Indeed, student loan debt is the second-highest consumer debt in the nation (the only debt larger is from mortgage loans). As of 2017, more than 40 million Americans had an outstanding college loan debt. You might even be one of them. If so, did you make a good choice in taking out a student loan? Or, if you made a poor choice and cannot pay back your student loan, who will pay for it? We will attempt to answer these questions here.

WHY GO TO COLLEGE IN THE FIRST PLACE?

Every student has her or his reasons for pursuing a college education. For some, it is a path to a better economic future or an avenue to simply continue learning. Others are following a family tradition or want to enter a profession that has specific educational requirements. To be sure, venturing away from home and finding new friends is part of the allure of the college experience. But for most students, the main goal in obtaining a college degree involves a positive expected **rate of return** in terms of higher **lifetime earnings**. That expectation is often realized, because obtaining a college degree does have a positive expected rate of return. In fact, among people twenty-five to thirty-two years old, those with a college education earn an average of \$18,000 per year more than those with only a high school degree. Moreover, based on past trends, this gap in earnings will likely grow in the future for this **cohort**, or age group.

Over their lifetime, those with a bachelor's degree will earn roughly 80 percent more than those with a high school diploma. Notably, however, these figures are undiscounted—they do not take into account the fact that **interest** rates are positive, and so discounting income is less valuable than income available immediately. Going to college means delaying employment income for four or five years, which cuts into the advantage of college over high school: That \$25,000 per year you might make straight out of high school is the **opportunity cost** of spending your time in the college classroom. Moreover, college is expensive—with average tuition about \$33,500 at private universities and \$9,600 (in-state) at public institutions. Such costs are avoided by going to work right out of high school. Yet even with the delays and added costs, the extra education still pays off handsomely for most graduates.

IT'S NOT FOR EVERYONE

Note that we say that “most” college graduates profit in the job market as a result of their education. The major a student pursues is a critical factor when determining the lifetime income available with a bachelor's degree. This is because, on average, jobs in the humanities, such as literature and art, pay much less than those in engineering, computer science, and economics. And then there is the differing ability and study habits of students, which help to determine the ultimate quality (and thus rate of return) of a college education. For some students, many of whom are in the humanities, especially those who go to third-tier colleges or spend their time playing rather than studying, obtaining a bachelor's degree may turn out to be a poor financial decision.

DOES THE HIGH COST OF COLLEGE LEAD TO MORE STUDENT LOANS, OR IS IT THE OTHER WAY AROUND?

Everyone knows that the **nominal price** of going to college has gone up over time. After all, we have had inflation for decades. Consider the following fact: If tuition at Harvard University had increased only at the **rate of inflation** over the last few decades, students would be paying about \$15,500 today. Instead, tuition there is more than \$45,000. And it's not just at Harvard: **Real, or inflation-adjusted**, tuition has also tripled over the last thirty-five years at other private colleges and universities. But if you pay in-state tuition at a public institution, don't pat yourself on the back too soon: Over the same period, inflation-adjusted tuition at these schools has risen by a factor of almost *four*.

Some argue that the rising **real price** of getting a degree has forced many students to take out ever-larger loans. In fact, careful research indicates that the increased *availability* (or **supply**) of student loans over this period has made it easier for students to finance their own higher education. Consequently, there has been an **increase in demand** for a college education, which in turn has caused the price (tuition) to rise. Indeed, professors Grey Gordon and Aaron Hedlund have found that the increased availability of cheap student loans accounts for fully *100 percent* of the increase in the cost of tuition over the last thirty-five years.

As a result, over this period we have seen in the United States a so-called “academic arms race.” Specifically, universities have bid up the salaries of superstar professors, hoping to enhance school reputations and thus increase demand for their product. Moreover, the competition to enroll more students has caused university administrators to build bigger indoor swimming pools, more luxurious dorm rooms, and, of course, some of the finest athletic facilities money can buy. As long as college administrators know that they can pass on the greater cost of providing a higher education to students with access to cheap credit, they will do so. In turn, students oblige them by taking out larger and larger loans. The average college student who borrows funds will owe approximately \$37,000 in loan debt when he or she graduates.

THE RELATIONSHIP BETWEEN TAKING ON STUDENT LOANS AND YOUR GPA

At first blush, one would think that incurring student loan debt would create an incentive to work harder, to obtain a higher grade point average (GPA), and therefore land a higher paying job. But recent research by professors Peter Cappelli and Shinjae Won tells us otherwise.

In their study, Cappelli and Won compared the GPAs of college students who had received need-based grants (which have no required repayments) with students who took out student loans. The students who received grants achieved higher GPAs than those who took out loans. The researchers interpreted their research results using **behavioral economics**. In essence, because a grant is a type of financial gift, it creates a “sense of obligation to the giver that may make one feel uncomfortable, at least until the obligation has been discharged.” In this case, say the authors, “discharging the obligation” comes about when the recipients of such grants do well in college—as demonstrated by earning a higher GPA.

STUDENT DEBT CAUSES OTHER DEMANDS FOR CREDIT TO FALL

Today, the percentage of Americans under the age of thirty-five who hold credit card debt is lower than it was in 1989. In a society in which credit card debt is common and widely accepted, this trend reveals an **inverse correlation** between rising student loan debts in the under-thirty-five population and their willingness to incur credit card debt. Because of their high student loans, Millennials—those individuals reaching young adulthood around the year 2000—do not want to incur even more debt. Oddly, their creditworthiness is suffering as a result.

Everyone has a credit score—a numerical expression of a person's credit files and history. To build a healthy credit score, you need to prove you can pay your debts. This is done best by purchasing "on credit." A person's credit card history makes up 15 percent of his or her creditworthiness score. By avoiding credit card debt, Millennials are not building strong credit scores. Weak credit scores limit loan amounts and mandate higher interest rates, all of which will make it more difficult for Millennials to borrow funds in the future for larger purchases, such as cars or homes.

This has already shown up in the housing market, where there is a negative relationship between student debt and home ownership. In the past, owning a home has represented a proverbial part of the American Dream. In the past ten years, however, home ownership for Americans under the age of thirty-five has decreased by almost 9 percent. When the National Association of Realtors did a survey on this decline, they found that outstanding student loan debt was listed as a principal reason why Millennials were not purchasing a house or condominium.

WHEN STUDENT LOANS AREN'T REPAYED, WHO PAYS?

Another way Millennials and current students can hurt their credit scores is by not paying their student loan debts. Many people who owe on student loans are making their payments, and on time. But almost half of all borrowers have either (i) defaulted (stopped making payments altogether), or (ii) are delinquent on their loans (are behind on the payments, or (iii) have renegotiated with lenders to make smaller payment than originally agreed. Moreover, the number of borrowers who are paying what they agreed to is a dwindling percentage of the total each year: Delinquencies, defaults, and renegotiated repayments are all rising. For many years, most students borrowed heavily from private lenders, with the federal government overseeing things and subsidizing some

of the loans. The situation today is another story entirely. In 2010, the federal government forced commercial banks out of the federal loan market. Consequently, the federal government now backs most student loans: The U.S. Department of Education has a student loan portfolio of hundreds of billions of dollars. So, when student loans are not repaid today, who bears the burden? Increasingly, the answer is the U.S. taxpayer. The cost to taxpayer over the next decade is estimated to be more than \$100 billion.

STUDENT LOAN FORGIVENESS—WHO BENEFITS?

Seeing that many individuals were struggling or failing to pay off their large student loan debts, the federal government instituted a student loan forgiveness program that became fully effective in 2017. This program forgives *federal* student loan debt once a borrower has made a full decade of consistent payments. These payments are income-based. Thus, if a borrower works in a low-paying job, her or his repayment schedule will be adjusted to create a more modest monthly payment. Eventually, what remains of the debt can be forgiven.

There is a catch, though. This program is only for those graduates who work for government or nonprofit entities. Supposedly, the loan forgiveness program was designed to encourage young people to pursue traditionally lower paying jobs, such as social work and teaching. As a practical matter, the program covers about 25 percent of U.S. jobs, all either government or nonprofit, few of which look much like teaching or social work. Interestingly, most of the people taking advantage of this program are those who—based on the quality of the college they attended, or their socioeconomic characteristics—would be least likely to default on their loans.

Perhaps the biggest winners from this program are physicians. A typical medical student owes \$180,000 when he or she graduates. Such graduates must undertake an additional three to ten years of training at hospitals, almost all of which are government or nonprofit. During this added training period, the physicians are hospital employees, getting paid salaries low enough to qualify for the forgiveness program. The doctors pay only 15 percent of their income on their student loans while in training. Ultimately, most of them will end up having 80 percent of their original loan balances forgiven. Then they go on to make annual six-figure salaries the rest of their lives. A recent survey of medical school graduates found that 40 percent planned to seek loan forgiveness. And of course, who wouldn't want to take advantage of such a good deal?

ARE STUDENT LOANS DIFFERENT?

The simple fact is that students differ in their abilities, some majors offer little preparation for top jobs, and not all colleges are the same quality. Low-ability students who have borrowed money to enroll in low-paying majors at weak colleges are most likely to have trouble repaying their debts, and they are the least likely to get any help in doing so. High-performing students in engineering, economics, and, of course, medicine at top schools—well, they are doing just fine. Few of them have trouble paying their bills, and whether they do or not, they are also most likely to get a hand from the government. So, all in all, student loans don't sound much different from the rest of life: Those that start with advantages usually figure out how to get more; everybody else, well, too bad for them.

DISCUSSION QUESTIONS

1. If graduating humanities majors can expect to earn lower lifetime incomes, why don't they major in something else?
2. Assume that Angela incurs \$25,000 of student debt to obtain a bachelor's degree in business. Assume that Brian incurs no student debt to obtain the same bachelor's degree in business, but he incurs \$25,000 in student loans to obtain an MBA. Which student has the *lower* probability of defaulting on student loans, and why?
3. Go to YouTube and find videos in which students are asked to discuss how big their student loans are. If you find that many do not know the actual size of their student loans or underestimate them, are you surprised? Why or why not? Under what circumstances would it be rational for student loan recipients to *not* know or care about the size of their financial obligations?
4. Jodi incurs \$25,000 in student loans to obtain a bachelor's of science degree in engineering. Owen undertakes the same course of study, also incurring \$25,000 in student loans, but he fails to graduate. Which student will have a higher probability of nonpayment of student loans, and why?
5. Critics of ever-expanding college enrollments argue that many students should not be going to college. Rather, they should be going to trade or vocational schools. That way, they could become electricians, plumbers, carpenters, or stonemasons. The reasoning is that skilled tradespeople often earn higher lifetime incomes than those who go to college and major in the humanities. The conclusion is,

therefore, that we should have fewer college graduates and more skilled tradespeople. Do you agree or disagree with this argument? What is your reasoning?

6. The inflation-corrected price of cars has gone up over time. But cars purchased today are quite different than those purchased thirty years ago. In particular, today's cars are much safer to drive because they have multiple airbags and more crash-resistant engineering. Additionally, they have sophisticated GPS systems. Consequently, if we correct our price statistics relating to automobiles to include the value of improvements in quality, the implied inflation-corrected price has not gone up as much as we think. Can the same argument apply to the inflation-corrected increase in the price of a college education? Why or why not?