



Bloom Economic Research Division

The Student Debt Crisis

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Abstract

Consensus among economists and policy makers is a rarity, an elusive trait in a hyper-polarized political climate. However, there exists a point of exception on which there is near unanimous consensus, higher education provides the surest pathway to upward socioeconomic mobility and long-term wealth generation for individuals across all socioeconomic lines. Historically, investment in postsecondary education has carried outsized returns over the course of one's lifetime in terms of both income growth and wealth accumulation.

Over the course of the past ten years, this fundamental pathway, and the market that enables it, has become fraught with risk and its future is far from certain. Since the beginning of the 2007-08 financial crisis, a confluence of events, from the explosion in the cost of college tuition to the stagnation of real median income, has led to a looming sense that the precipitous rise in student debt is reaching an inflection point, on the verge of a macroeconomic crisis with wide-ranging repercussions.

From 2006 to 2016, according to the Consumer Price Index maintained by the Bureau of Labor Statistics, the cost of attending college increased dramatically by 62.7 percent for higher education tuition, 88 percent for college textbooks, and 51 percent for school housing. Over roughly the same period of time, from the beginning of 2007 through the end of 2017, overall outstanding student loan debt in the United States grew from \$545 billion to \$1.47 trillion. As a result, we have seen a range of significant adverse effects on economic outcomes for college graduates and second-order effects on consumer credit markets. These effects range from longer periods of time spent in parental co-residence and decreased rates of homeownership to additional constraints on young borrowers looking to obtain credit cards, auto loans, and mortgages.

Introduction

According to data from the Federal Reserve's Consumer Credit Report, outstanding student debt burgeoned from 545 billion dollars at the beginning of 2007 to 1.49 trillion dollars at the end of 2017, a staggering 176 percent increase in the overall balance of student loan debt ¹. Relative to growth of the United States economy on the whole, taken as a percentage of nominal GDP, student loan debt grew to account for 7.5 percent of national income in 2017, up from 3.8 percent in 2007 ².

This unrelenting pace of growth has made student loans the second largest category of debt in the consumer credit market, second only to mortgages, a historic switch that took place in the direct aftermath of the 2008 financial crisis. This almost three-fold increase in student loan debt has occurred despite total postsecondary enrollment falling by over a million students within the past few years, according to the National Center for Education Statistics ³. As student loan debt has continued to rise unabated, credit card and auto loan debt have failed to keep pace, dipping significantly in 2009 and only beginning to rise again in the past few years.

While the overall student debt balance is indicative of a worrisome trend, it doesn't articulate the whole story. Between 2007 and 2016, real median household income grew a mere 1.5 percent from \$58,149 to \$59,039 in 2016 dollars. This uptick back above 2007 income levels didn't occur until just recently, with real median income reaching as low as \$53,331 in 2012 as it languished post-recession until finally seeing pre-2008 levels again in 2016 ⁴. Over this same period of time, the real median value of household education debt ballooned from \$13,900 to \$19,000 ⁵. By the end of 2016, 22.4 percent of American households, or approximately 44.2 million individuals, held education debt of some kind ⁶.

¹ [Student Loans Outstanding, Board of Governors of the Federal Reserve System, G.19 Consumer Credit](#)

² [Gross Domestic Product, U.S. Bureau of Economic Analysis, National Economic Accounts](#)

³ [303.20 Total Fall Enrollment, National Center for Education Statistics, Digest of Education Statistics](#)

⁴ [Real Median Household Income, U.S. Census Bureau, Income and Poverty in the United States](#)

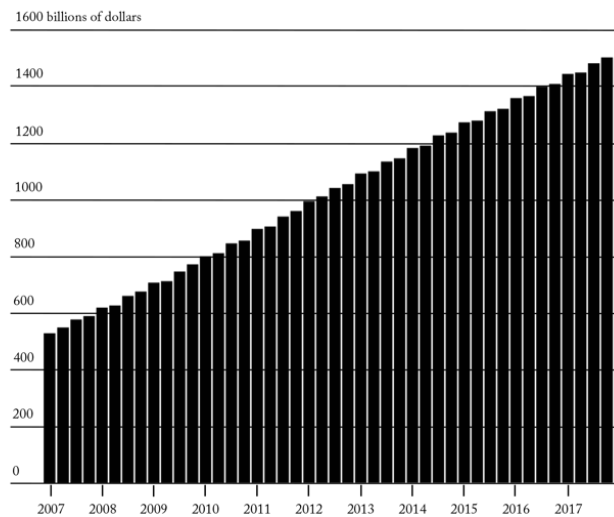
⁵ [Education Debt, Board of Governors of the Federal Reserve System, Survey of Consumer Finances](#)

⁶ [2016 Student Loan Update, Federal Reserve Bank of New York, Consumer Credit Panel](#)

Rise of Student Loan Debt in the United States

Student loan debt in the United States has grown **176%** since the beginning of 2007. Rising from **\$545 billion** to **\$1.49 trillion** at the end of 2017.

Student Loans Outstanding (SLOAS)



Source: Board of Governors of the Federal Reserve System
Release: G.19 Consumer Credit
Frequency: Quarterly, End of Period

The Millennial Cohort

This new post-recession economic reality has taken an especially significant financial toll on Millennials, those aged 18 to 34 as of 2016. While real income grew in terms of all households, households headed by 18 to 34-year-olds have seen a decrease of 6.5 percent in real median income since 2007. This 18 to 34-year-old cohort is making less than their same age cohort did in 1994. While 22.4 percent of all American households hold education debt, a startling 44.8 percent of households headed by those aged 18 to 34 were in student loan debt in 2016, up from only 26.1 percent in 2001.

For college graduates who faced the daunting task of entering the work-force in the immediate aftermath of the financial crisis, this meant entering a job market where the unemployment rate briefly touched a high of 10 percent in October of 2009 while being saddled with an average student loan debt of \$28,600 ⁷. The average education debt burden for 18 to 34-year-olds has continued to steadily rise since, reaching a historical high of \$33,000 in 2016. For many, this has led to disastrous economic outcomes ranging from

⁷ [Unemployment Rate, U.S. Bureau of Labor Statistics, Current Population Survey](#)

adversely affected credit scores which have hampered many Millennials access to credit to a flight back home upon graduation at a rate that has not been seen in any previous generation ⁸.

Research conducted by Lisa J. Detting and Joanne W. Hsu estimates that the median time Millennials spend living back with their parents to be three years ⁹. In their aptly titled paper “Returning to the Nest: Debt and Parental Co-residence Among Young Adults”, published in *Labour Economics*, Detting and Hsu found that low credit scores, debt delinquency, and increased debt balances can predict young adults co-residency with parents as it serves as a mechanism to smooth consumption in the wake of lack of access to traditional credit resources. These findings plot a direct link between increasing debt burdens and parental co-residence. As of 2015, 21 percent of those aged 25 to 34 were living in their parents’ home, the age range when many young adults are typically starting households and becoming new homeowners.

This link is beginning to show up in the housing market. Underwhelming job prospects, stagnant income growth, and burdensome student debt have all been pointed to as the main culprits of slower than expected homeownership growth. Recent research by the Federal Reserve Bank of Boston, looking at the link between student loan debt and related long-term economic outcomes, found that households with student debt were less likely to own a home and, in many cases, increased student loan debt delayed household formation. These researchers also found a strong negative correlation between student loan debt and wealth for households with some level of college attendance ¹⁰.

Economists at the Consumer Financial Protection Bureau have also singled out homeownership rates as one of the main points of drag being placed on the economy by student loan debt. Rohit Chopra, writing in the 2013 Annual Report of the CFPB Student Loan Ombudsman, stated that ‘three-fourths of

⁸ [The Changing Economics and Demographics of Young Adulthood: 1975 – 2016, U.S. Census Bureau, American Community Survey and Current Population Survey](#)

⁹ [Returning to the Nest: Debt and Parental Co-residence Among Young Adults, Lisa J. Detting & Joanne W. Hsu, Labour Economics, In Press, 20 December 2017](#)

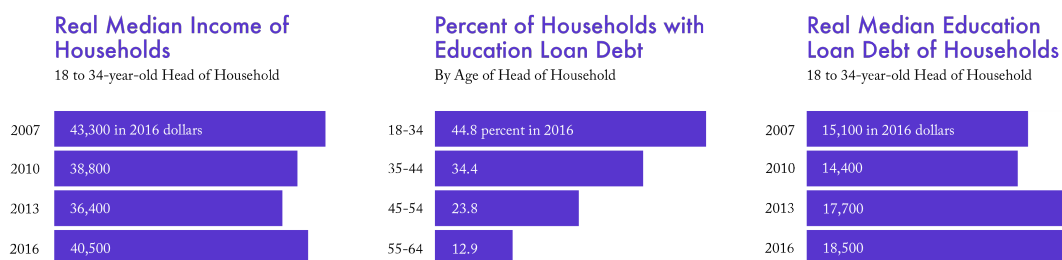
¹⁰ [Student Loan Debt and Economic Outcomes, Federal Reserve Bank of Boston, Current Policy Perspectives](#)

the fall in household formation can be directly correlated to student debt”¹¹. Data seems to support this conclusion. The percentage of households headed by 18 to 34-year-olds with mortgages dropped from 32.2 percent in 2007 to 28.1 percent in 2016, while homeownership for all households dropped from 68.4 percent in 2007 to 63.5 percent in 2017.

Lisa B. Kahn, labor economist at Yale School of Management, has also looked at long-term economic outcomes for postsecondary students graduating in times of economic downturn. In her 2009 paper, “The Long Term Labor Market Consequences of Graduating from College in a Bad Economy”, Kahn found significant negative income effects for the first two decades following graduation and a large number of college graduates who found themselves in lower-level occupations compared to their cohorts who graduated in times of stronger economic conditions¹². These effects are especially acute when taking into account large student loan debt burdens, as negative reporting to credit agencies becomes more likely as college graduates fail to meet their repayment obligations. In the long-term, this places additional constraints on young borrowers and erects significant barriers to obtaining auto loans, credit cards, and mortgages later in life.

The Millennial Cohort

While real income grew in terms of all households, households headed by 18 to 34-year-olds have seen a decrease of 6.5 percent in real median income since 2007, and while 22.4 percent of all American households hold education debt, a startling 44.8 percent of households headed by those aged 18 to 34 were in student loan debt in 2016, up from only 26.1 percent in 2001.



Source: Board of Governors of the Federal Reserve System
Release: 2016 Survey of Consumer Finances
Frequency: Every Three Years

¹¹ [Annual Report of the CFPB Student Loan Ombudsman \(2013\)](#), Consumer Financial Protection Bureau

¹² [The Long Term Labor Market Consequences of Graduating from College in a Bad Economy](#), Lisa B. Kahn, *Labour Economics*, Volume 17, Issue 2, April 2010, Pages 303-316

The Student Loan Market

The extent of the student debt crisis has begun to have knock-on effects on other aspects of the economy and government officials are beginning to take notice. Freshly anointed Chair of the Federal Reserve, Jerome Powell, alluded to this new economic reality during his recent testimony in front of the Senate Banking Committee. When asked to comment on the ever-rising student debt balance, Powell said, "You do start to see longer-term negative effects on people who can't pay off their student loans and it hurts their credit rating, it impacts the entire path of their economic life" ¹³.

In fact, many individuals are having a tough time meeting their student loan repayment obligations. As of the fourth quarter of 2017, 10.96 percent of student loans are 90+ days delinquent ¹⁴. A delinquency rate that is most likely greatly understated, as it includes individuals whose loans are currently in deferral or forbearance periods. Some estimates, when adjusting for these factors, place the delinquency rate as high as 22 percent ¹⁵, a delinquency rate that far exceeds that of mortgages (1.27 percent), auto loans (4.05 percent), or credit cards (7.55 percent). This run-up in delinquent debt closely mirrors the precipitous increase in the delinquency rate for mortgages and credit cards leading up to and following in the wake of the 2008 financial crisis.

Given the nature of upward mobility that higher education affords, ability to repay is also strongly correlated with amount of schooling completed. Those who have obtained a degree of some kind also enjoy the benefits of a higher real median income, with income increasing at each level of postsecondary education completed. Here the outlook is not much better. As of 2016, there are more households with education loan debt where the head of household attended some college but did not receive a degree than those who received a college degree, 29 percent to 28.6 percent respectively.

¹³ [Jerome Powell Testimony Before the Senate Banking Committee, C-SPAN](#)

¹⁴ [Quarterly Report on Household Debt and Credit, Federal Reserve Bank of New York, Consumer Credit Panel](#)

¹⁵ [Grading Student Loans, Federal Reserve Bank of New York, Liberty Street Economics](#)

“You do start to see longer-term negative effects on people who can’t pay off their student loans and it hurts their credit rating, it impacts the entire path of their economic life.”

Jerome Powell

Chief of the Federal Reserve

At the same time, many individuals have foregone traditional federal direct loans and opted for private education loans. Many private student loan lenders employ lending practices that are eerily similar to those employed by home lenders leading up to the 2008 financial crisis. Private student loans typically carry much higher-interest rates, lack deferment periods, include variable interest rate provisions, and offer less flexible repayment options ¹⁶.

Many private student loans carry variable interest rates that are based on the London Interbank Offered Rate (LIBOR), which tends to move in unison with the federal funds rate, making these loans privy to Federal Reserve interest rate hikes. As the Federal Open Market Committee moves to raise interest rates three to four times over the next two years, additional burden will be placed on a large number of individuals carrying private student loan debt ¹⁷.

As for private student loan lenders, the Consumer Financial Protection Bureau offered up scathing commentary in their 2013 Annual Report, "Many of the private student loan complaints mirror the problems heard from consumers in the mortgage market following the wake of the financial crisis...The similarity between private student loan complaints and problems uncovered in the mortgage servicing industry suggests that many student loan servicers are not taking proactive steps to avoid a similar breakdown.”

¹⁶ [Annual Report of the CFPB Student Loan Ombudsman \(2017\), Consumer Financial Protection Bureau](#)

¹⁷ [Powell, Williams See More Gradual Fed Hikes Despite Trade Uproar, Bloomberg Markets](#)

Following up on the issue of private student loan lenders in their 2017 Annual Report, the CFPB reported that the situation has not improved by any significant degree, stating “The Bureau continues to hear from private student loan borrowers who struggle to access promised loan benefits, cannot obtain an affordable repayment plan during periods of financial distress, and cannot effectively direct their payments across multiple loans.”

Although private student loans merit serious consideration in gauging the overall health of the student loan market, much of the onus of student debt has been placed on the U.S. federal government over the past several decades. With the Omnibus Budget Reconciliation Act of 1993 and Student Loan Reform Act of 1993, President Bill Clinton began a multi-year phased shift to full government-guaranteed direct lending. This was followed by the Health Care and Education Reconciliation Act of 2010, put into place by President Barack Obama, which cemented the complete shift to direct lending by the U.S. Department of Education.

Under this system, the Federal Direct Student Loan Program, which includes Perkins, Stafford, and PLUS loans, is the sole program for government-backed student loans. The U.S. federal government student aid loan portfolio, as of 2017, now accounts for \$1.37 trillion of the \$1.49 trillion in total student loan debt outstanding¹⁸. In an attempt to mitigate potential risk on the part of the federal government, legislators have begun offering policy proposals that could potentially place student borrowers in even more of a financial quandary.

One such proposal is the Promoting Real Opportunity, Success and Prosperity through Education Reform Act. The PROSPER Act would have serious and wide-ranging ramifications for the student loan market. Under the legislation, most deferment programs would be phased out, including cutting federal loan subsidies for students while they are still in school. These programs are some of the primary benefits that federal direct loans currently offer to current college students and recent graduates.

¹⁸ [FY 2017 Annual Report, Federal Student Aid Office, U.S. Department of Education](#)

More importantly though, PROSPER seeks to roll all federal loan programs, Stafford, Perkins, and PLUS, into a single Federal ONE option, while grandfathering current loan recipients until 2024, which would drastically reduce options available for students in different financial and educational circumstances. To make matters worse, Congress is currently considering legislation that would end many federal student loan forgiveness programs. This change would have many second-order effects on graduate student enrollment that are hard to quantify and could effectively act as a disincentive that pushes away students who may otherwise have been seeking postgraduate degrees. The PROSPER Act will be considered by the House later this year and analysts are unsure of the probability of the act passing in its current form. If it does come to pass, many graduate students would be forced to turn to the private student loan market in order to finance their education.

Closing Comments

It is yet to be seen whether or not the student debt crisis will create a cascading effect that seeps into other aspects of the economy in ways similar to the sub-prime mortgage crisis of 2008. It is clear however that the rapid increase in higher education tuition costs will continue to lead to ever greater student loan debt. According to the Consumer Price Index maintained by the Bureau of Labor Statistics, the price of college tuition and related fees increased by 62.7 percent from the beginning of 2006 to 2016 ¹⁹. This rise in the CPI for college tuition stands in stark contrast to the 21 percent increase of the index overall during that same period of time. It is not just tuition that is leading to greater debt burdens for students. Along with the 62.7 percent increase in the cost of tuition, prices for college textbooks increased by 88 percent and the cost of school housing increased by 51 percent.

While it is unclear whether burgeoning student loan debt and rapid increases in the cost of seeking higher education are sustainable in the long-run, available data indicates that these trends will continue for the foreseeable future with no abatement in sight. Economic outcomes, both for individual borrowers and consumer credit markets, will be dependent on the decisions of policy makers as they look to legislation to address the serious concerns that currently exist in the student loan market.

¹⁹ [Consumer Price Index Bureau of Labor Statistics](#)