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Economics Group

Special Commentary

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Student Debt: Does a Rising Economic Tide Lift All Boats?

Executive Summary

Consumers have substantially repaired their balance sheets since the financial crisis, but student loans has been one area where debt continues to climb. Nearly 45 percent of households under the age of 35 have student loan debt, with the typical debt burden reaching $18,500 in 2016. Such heavy debt loads so early on in the financial lives of Millennials have generated concerns about this generation's ability to contribute to the housing market's recovery and consumer spending more generally. Now, with the benefit of the hottest labor market in nearly two decades, are student loan burdens becoming more manageable?

Today's college graduates are joining the tightest labor market since the early 2000s. Although earnings growth remains modest for workers ages 20-34 compared to prior expansions or that of older generations this cycle, wage growth has picked up of late. Average hourly earnings are now outpacing college costs for the first time in 40 years. As a result, educational debt relative to income has declined for the median household under 35 since 2013. Debt service, or the share of income Millennial households are devoting to paying down loans each month, has also edged lower as borrowers have shifted toward income-based repayment plans and interest rates remain historically low.

Nevertheless, the share of borrowers defaulting on student loans remains elevated. Given wide variation in the cost of college and the future incomes of students, many borrowers are still struggling to back student loans. Therefore, while debt burdens for the typical Millennial are beginning to look a little less troublesome, student loans continue to challenge this generation's ability to spend, save and accumulate assets.

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Income Growth for Millennials Has Strengthened

Unprecedented levels of student debt have been one of the defining characteristics of the Millennial generation.[1] The typical household under age 35 with student loans carried $18,500 in student debt in 2016, a 4.5 percent increase in inflation-adjusted terms from 2013 (Figure 1). What's more, the prevalence of educational debt has continued to grow. Such lofty levels of debt early on is not undertaken lightly, but reflect the higher earnings potential of college graduates in the labor market. Students borrow with the assumption that the higher earnings of college graduates commanded in the labor market will be sufficient to pay back loans and ultimately provide a better standard of living.

The payoff has been hindered over the past decade by a historically weak labor market. Research shows that graduating in a recession can weigh on earnings for more than a decade.[2,3] The labor

1 We use the Pew Research Center definition of Millennials: those born from 1981-1997. In 2016, Millennials would fall under households ages 19-35.

2 Oreopoulos, Philip, Till von Wachter, and Andrew Heisz (2012) "Short and Long-Term Career Effects of Graduating in a Recession." American Economic Journal: Applied Economics, Volume 4, No. 1. 1-29.

3 Altonji, Joseph G., Lisa B. Khan and Jamin D. Speer. (2014). "Cashier or Consultant? Entry Labor Market Conditions, Field of Study and Career Success." NBER Working Paper No. 20531.

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market, however, has come a long way since the Great Recession. The unemployment rate is at an 18-year low, job openings are at record highs and wage growth has been strengthening.

Figure 1

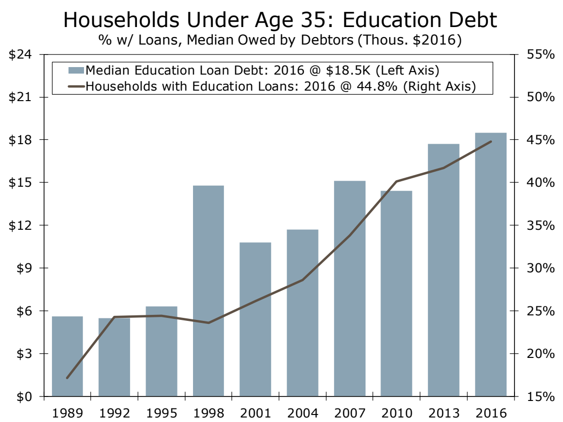
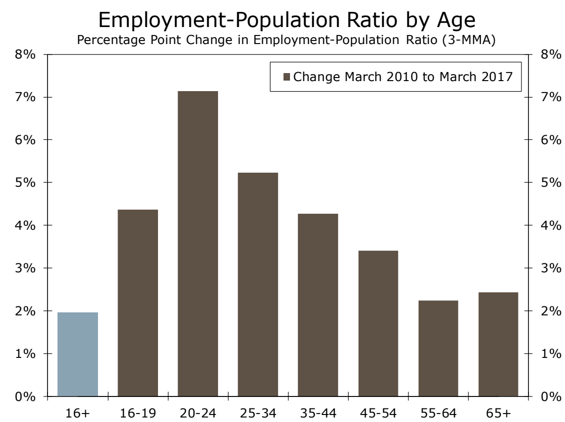


Figure 2



Source: Federal Reserve Board, U.S. Department of Labor and Wells Fargo Securities

Since hiring turned positive in 2010, workers ages 20-34 have seen the largest gains in employment.

Young workers have been among those to see their job prospects improve. Since hiring turned positive in 2010, workers ages 20-34 have seen the largest gains in employment (Figure 2). Unemployment has been slower to decline for recent college graduates than the overall population due to greater labor force attachment, but *under*-employment has fallen more substantially. According to the Federal Reserve Bank of New York, the share of college graduates ages 22-27 in jobs that typically do not require a degree fell 1.2 percentage points over the past year, versus a 0.2 percentage point decline for all college graduates.

An improving income picture has followed. In 2017, median weekly earnings posted the strongest annual gain of this expansion for 20-24 year olds (5.1 percent) and 25-34 year olds (2.9 percent). Although the cumulative gains since the recession continue to lag those of older workers, the gap appears to be closing (Figure 3). According to the Federal Reserve's Survey of Consumer Finances, income growth for young households has outpaced older households in recent years. College graduates have seen particularly impressive gains. The median income for households under 35 with a college degree rose 13.2 percent in real terms from 2013 to 2016, compared to 2.5 percent for older households (Figure 4).

Figure 3

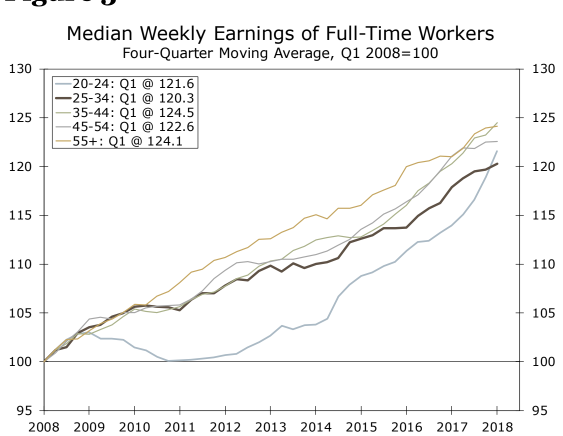
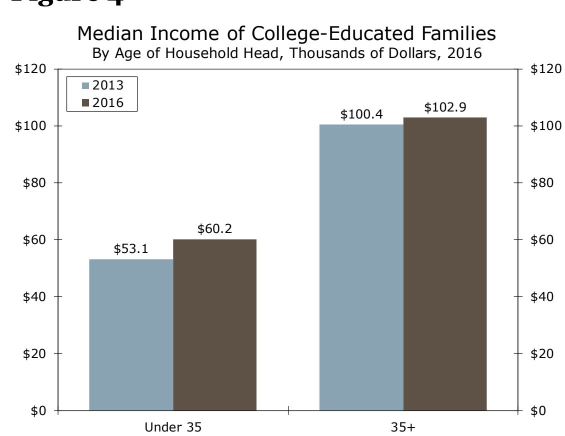


Figure 4



Source: U.S. Department of Labor, Federal Reserve Board and Wells Fargo Securities

College Cost Growth Slows

At the same time that income growth has strengthened for Millennials, college costs have been rising at a more tepid pace. The consumer price index (CPI) for college tuition and fees grew only 2 percent from 2016 to 2017. That marked the lowest annual increase since the series began in 1978 and the first time costs grew more slowly than average hourly earnings in 40 years (Figure 5). The cost of undergraduate tuition, room and board at two-year and four-year public schools, which combined enroll about three-quarters of undergraduate students, outright declined in 2016-2017.

College costs have been rising at a more tepid pace.

Years of tuition growth outpacing income, however, means that the cost of college is still formidable for most attendees; the average undergraduate student paid $23,100 in tuition, room and board during the 2016-2017 school year. By senior year, almost 70 percent of undergraduates will have taken out some kind of loan to help pay for their studies, amounting to more than $25,000 on average over the course of their degree. [4] That said, students have been taking on slightly less debt in recent years. Annual federal and nonfederal loan aid per full-time equivalent (FTE) undergraduate student has declined every year since 2010-2011 (Figure 6). Helping students reduce borrowing is increased grant aid over the same period, in addition to slower cost growth.

Figure 5

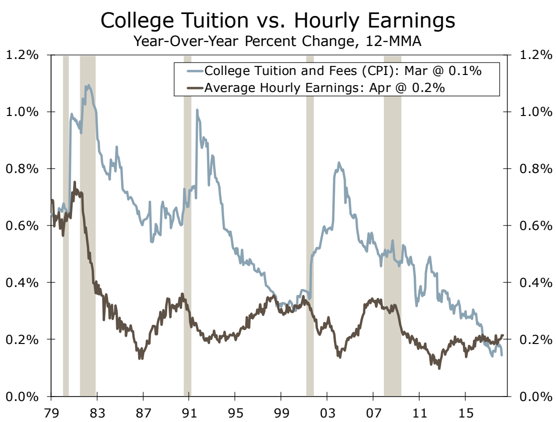
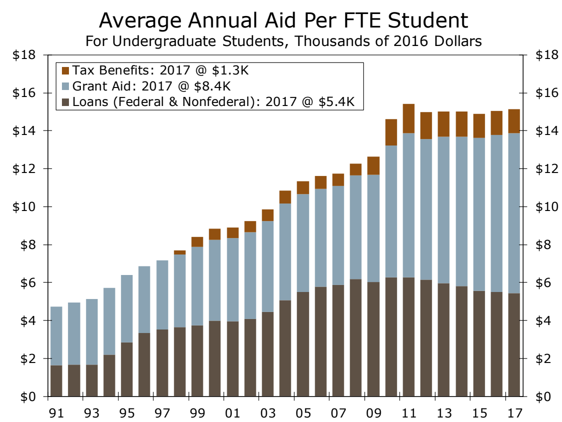


Figure 6



Source: U.S. Department of Labor, College Board and Wells Fargo Securities

Stronger Income, Slower Costs Enough to Bend the Leverage Trend?

Has the more favorable jobs and cost backdrop been enough to set Millennials finances straight, or are they still drowning in debt? One way to benchmark how Millennials are faring with their student loans is to look at the ratio of educational debt to income. Unlike a house or car, the asset accumulated with educational debt cannot be transferred. Yet the borrower's income should theoretically incorporate the current value of the asset.

As shown in Figure 7, Millennials continue to grapple with substantially higher student debt burdens than Gen X'ers did at the same age in the 1990s and early 2000s.[5] Yet, over the past three years, debt burdens have improved somewhat. The median educational debt-to-income ratio for households under 35 fell 5 percentage points between 2013 and 2016. Although the median ratio for borrowers ages 25-29 edged up over the period, that was the smallest increase since 1998, the year student loan debt could no longer be easily discharged in bankruptcy.

Over the past three years, debt burdens have improved somewhat.

With student debt being repaid over the course of years, debt-to-income ratios do not fully capture the strain placed on households' current ability to spend and save. Therefore, rather than only looking at the stock of debt, it also useful to look at the monthly payment (a flow measure) against monthly income (another flow measure). On this basis, student debt burdens have eased over the

[4] The most recent data available from the Dept. of Education on cumulative borrowing is from 2011-2012.

[5] In 1998, Congress passed a law that federal student loans could no longer be discharged in bankruptcy. Thus, the 1998 SCF saw a spike in student loan debt and payment figures.

past few years. In 2016, the typical Millennial household which was *actively* paying down debt spent 3.9 percent of income on repayments. That is down from 4.1 percent in 2013, but remains about 80 bps higher than households the same age in the mid-2000s (Figure 8).

Figure 7

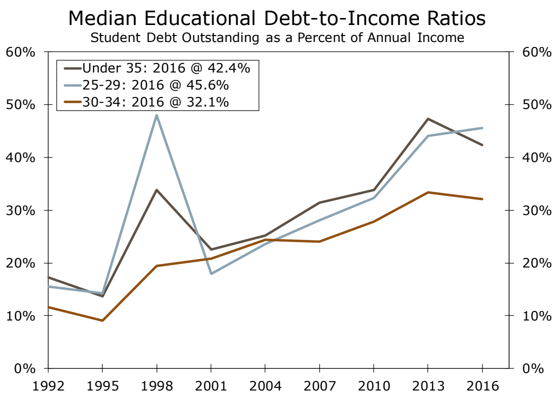
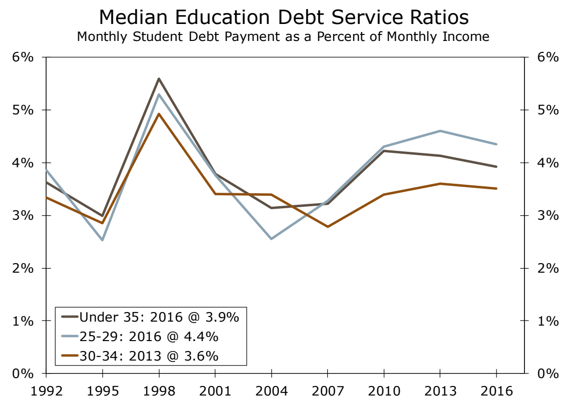


Figure 8



Source: Federal Reserve Board and Wells Fargo Securities

Despite higher levels of debt, monthly payments have been kept in check partially by the shift toward repayment plans beyond the traditional 10-year horizon. The number of borrowers on plans that allow repayment beyond a 10-year window, including income-based plans, has grown by 4.8 million over the past four years, compared to an increase of 1.8 million borrowers on plans requiring repayment in 10 years or less.[6] Over the same period, interest rates have also edged down for all major federal loan types. The pickup in earnings in 2017 and slower growth in college costs suggest debt dynamics have continued to improve since 2016, although borrowers for the most recent school year have seen interest rates begin to tick up again.

Default Rates Remain Elevated

Our focus thus far has been on the median student loan borrower, whose debt burden looks a bit more manageable in recent years. Not all borrowers, however, are faring as well. First, by looking at households under age 35, the SCF data excludes borrowers who are still living at home with their parents and not heading their own household. Although the share of 25-34 year olds living with a parent ticked down in 2017, it remains elevated compared to the 2000s. Second, the debt-service ratios are limited to households that are in fact servicing their debt, i.e, paying their loans. According to the 2016 survey, 37 percent of households age 25-34 with student loan debt were not making payments, compared to an average of 24 percent in the 2000s (Figure 9).

Default rates increased in the aftermath of the financial crisis, as students entered into a weaker labor market. The highest two-, three-, and five-year cumulative default rates were faced by the 2011 cohort (which left school in 2010, around the peak of unemployment). As the labor market has recovered, default rates have eased somewhat; the percent of student loan borrowers who defaulted within three years of entering repayment has declined from 20 percent for the 2011 cohort to 17 percent for the 2013 cohort (Figure 10). However, default rates remain higher than pre-recession, and are particularly elevated among certain populations (Figure 11).[7]

The biggest difficulties face student loan borrowers who attended for-profit institutions or who did not graduate. According to a recent study, among college entrants in 2004, 27.1 percent of all borrowers defaulted at some point in the intervening 12-year period, compared to 52.4 percent of

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[6] U.S. Department of Education Office of Federal Student Aid. We exclude borrowers on Alternative plans as repayment plans are customized and repayment horizons vary.

[7] Looney, Adam and Constantine Yannelis. "A Crisis in Student Loans? How Changes in the Characteristics of Borrowers and in the Institutions They Attended Contributed to Rising Loan Defaults." ***Brookings Papers on Economic Activity*****, 2015.**

those who attended for-profit institutions and 44.5 percent of those who never attained a degree.[8] Since many more students at for-profits borrow—88.6 percent versus 62.9 percent overall—the difference in default rates is even more extreme when considering all entrants (not just borrowers).

Figure 9

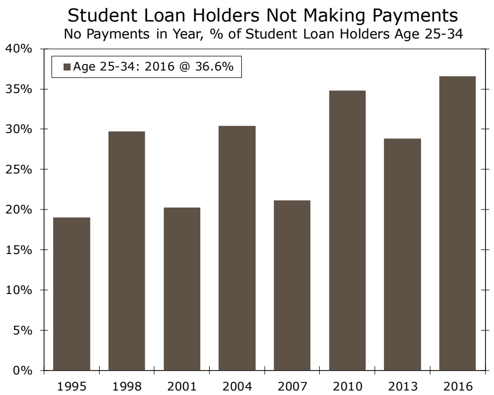
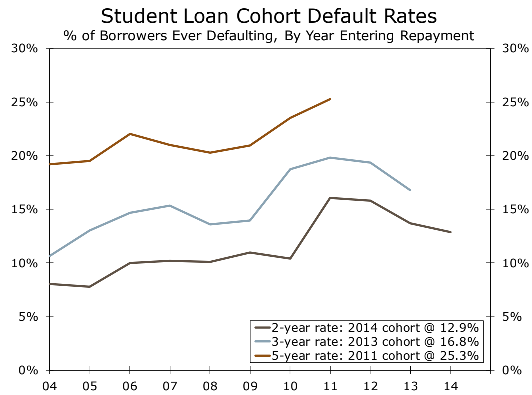


Figure 10



Source: Federal Reserve Board, Federal Reserve Bank of New York and Wells Fargo Securities

Default rates have more to do with the earning power of borrowers after leaving school (and therefore ability to service debt) than with the size of loan balances. In fact, borrowers with federal student loan balances below $5,000 have the highest default rates and make up more than a third of all defaulters three years after entering repayment.[9] These borrowers are more likely to have left school without graduating and have to pay back student loans without the full boost to earnings that a degree provides.

Post-college earnings differ greatly between institution types and majors.

Even for those who graduate, post-college earnings differ greatly between institution types and majors. At 30 percent of institutions, the median income of federal student loan borrowers sits below $25,000—the average salary of a high school graduate—10 years after entering college.[10] Those institutions, however, are heavily skewed toward for-profits and account for only 9 percent of borrowers. Mean salaries 10 years out for federal student loan borrowers at two-year for-profit schools ($31,300) are significantly lower than at four-year public schools ($49,700). Field of study also matters, with median starting salaries ranging from $36,200 for social work majors to $69,700 for engineering majors (Figure 12).

Income-based repayment plans were made available to federal student loan borrowers starting in 2009 as part of an effort to reduce defaults. These plans allow borrowers to cap payments based on income and family size, and any remaining debt is forgiven after 20-25 years of payments. At this point, income-based plans are still relatively new and remain a small share of the overall student loan market—about 27 percent of the $1.38 trillion in outstanding federal student loans.[11] However, initial research suggests that income-based plans have reduced default rates by providing borrowers with insurance against adverse income shocks.[12]

[8] Scott-Clayton, Judith. "The Looming Student Loan Default Crisis is Worse Than We Thought." ***Brookings Evidence Speaks Reports,*** **vol. 2, no. 34, 2018.**

[9] Council of Economic Advisors. "Investing in Higher Education: Benefits, Challenges, and the State of Student Debt." 2016.

[10] U.S. Department of Education College Scorecard 2013-2014.

[11] Sum of income-contingent, income-based, pay as you earn and revised pay as you earn loans.

[12] Mueller, Holger M., and Constantine Yannelis. "Students in Distress: Labor Market Shocks, Student Loan Default, and Federal Insurance Programs." ***NBER Working Paper,*** **no. 23284, 2017.**

Figure 11

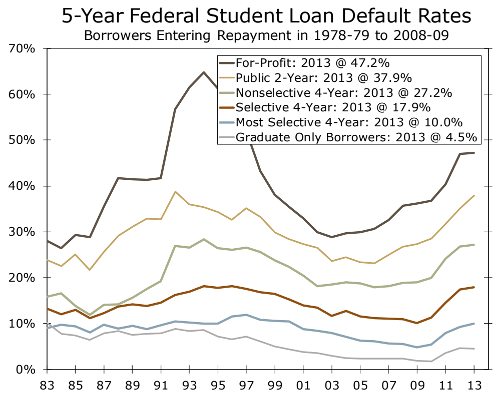
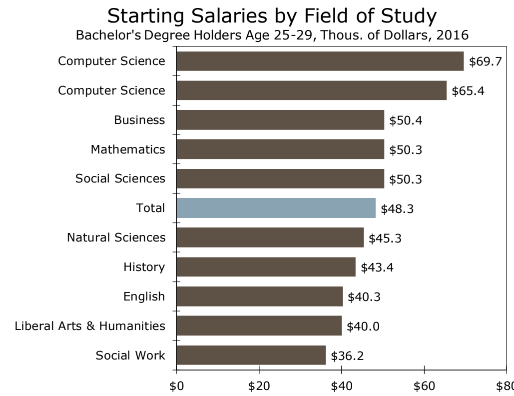


Figure 12



Source: Looney and Yannelis (2015), U.S. Department of Education and Wells Fargo Securities

But income-based repayment plans are not a catch-all solution for borrowers overburdened by student loans. The extended repayment term offered by income-based plans means that borrowers remain financially constrained by student loans for longer, and can often end up paying much more in interest. In addition, income-based plans are targeted at borrowers with high student loan balances, while defaults are concentrated among those with low balances.

Conclusion: Student Debt a Bit More Manageable, But Still Challenging

Educational debt among young households has continued to climb in recent years, but an increasingly tight labor market and more restrained growth for college costs has generated some improvement in debt dynamics. Student debt relative to income edged down for the median Millennial household from 2013-2016, while those repaying loans saw monthly debt service ease slightly. Further tightening in the labor market and stronger wage growth over the past year should continue to support these trends.

Even with the stronger economy, student debt loads remain daunting for many young households.

Even with the stronger economy, student debt loads remain daunting for many young households. Not only is leverage well above that of Generation X at the same age, but debt service has been kept in check in part due to longer repayment periods. While that eases the monthly burden and frees up income for other purchases, savings or loan payments, student debt borrowers will be contending with loan repayments later in life than prior generations. That will weigh on future spending and asset accumulation. In addition, lower interest rates have helped ease debt service, but federal loan rates are again moving higher. Given the high variability in returns to education, there also remains a significant subset of students for whom the cost of college is difficult to repay.

College education is a substantial investment, but one that pays off well for many students through higher future earnings. The return on education for the typical recent graduate has been supported by rising employment and wages in a tightening labor market. However, marginal improvement in earnings is not enough to make a significant dent in the subset of students who have taken on large debt burdens but have been unable to secure well-paying positions. Elevated student loan burdens and defaults will remain a challenge for borrowers beyond the current business cycle.

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