

SPECIAL REPORT

TD Economics



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US STUDENT DEBT A NEAR-TERM CONSTRAINT ON HOMEOWNERSHIP

Highlights

- Student debt levels have risen significantly over the past decade due to rising school enrollment, higher educational costs and a difficult labor market.
- Young college-educated workers are prime candidates for homeownership due to the higher incomes that follow relative to those without college degrees. And, despite the severe housing market crash, millennials (people born after 1980) are more likely than older generations to see a home purchase as a good financial investment.
- Although the spirit is willing, the ability to own a home is being constrained by tighter credit standards and higher delinquencies on student debt, as evidenced by lower homeownership rates among younger aged households with student debt versus those without it.
- Scratching beneath the surface reveals a slightly less negative picture. Over the past decade, the distribution of student debt has changed such that the increase in aggregate debt has disproportionately accrued to a minority of borrowers.
- A strengthening economy and job market will feed into the virtuous cycle of a greater capacity to save and pay down debt. Alongside an improvement in credit scores and rising loan-to-value ratios, this will eventually work in favor of college graduates with student debt looking to purchase a home.

As college students celebrate graduation, more are weighed down by the burden of student debt than ever before. In an economic recovery that is heavily dependent upon the strength of the housing market, a central issue is whether student debt loads will lead first-time homebuyers to delay home purchases or, worse, drop the decision to purchase a home altogether.

While there appears to have been little change in the desire of young people to purchase homes, there is evidence that student debt burdens have become a constraint for some would-be buyers. Homeownership rates have fallen for both young student debt holders and non-student debt holders alike, but the decline has been worse among households carrying student debt (Chart 1). At the same time, delinquency rates on student debt have risen and the credit scores of student borrowers have deteriorated relative to young people without that burden. Given the tightening in lending standards that has hit people with a blemished credit history, this has made homeownership more difficult for those with college loans.

The upside to the rise in student debt is that there is a greater share of the population with higher educational attainment. In turn, this is associated with higher incomes and rates of homeownership. Over time, the impact of education should win out over the rise in student debt, but in the short-term, higher debt burdens in

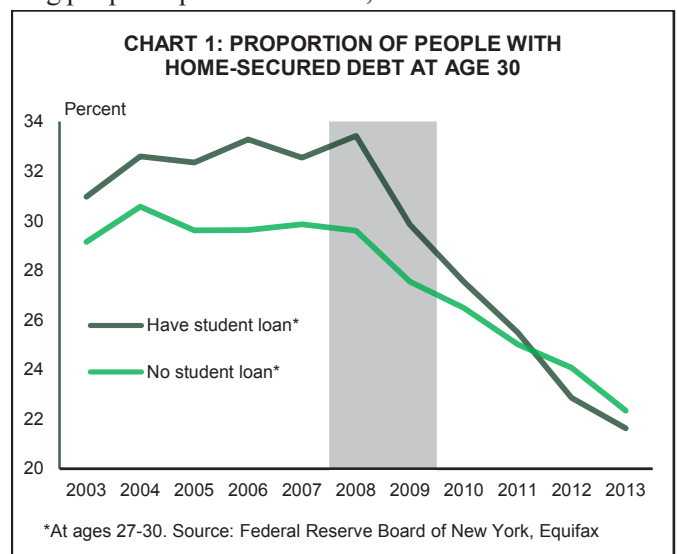
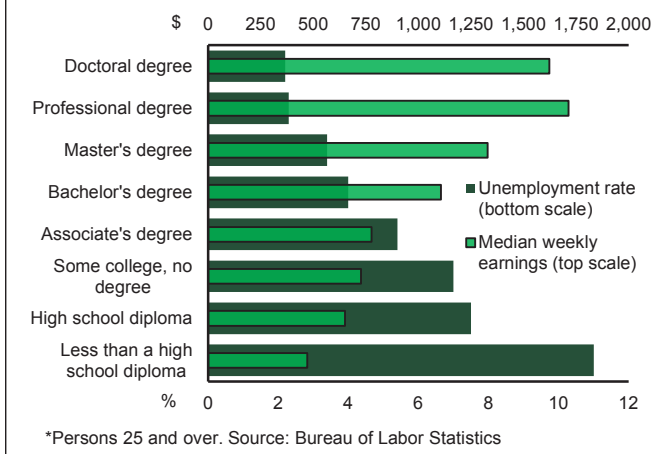


CHART 2: EARNINGS & UNEMPLOYMENT RATE BY EDUCATIONAL ATTAINMENT*, 2013


combination with tighter mortgage lending standards are likely to weigh on first-time home purchases.

College graduates have increased, so too has student debt

Sometimes for the sake of simplicity, economists will distinguish debt into two categories: good versus bad. Funding education and skills development falls into the first category. There is plenty of research supporting the view that college educated workers have greater earnings potential than non-college workers ([link](#)).

The earnings gap for college-educated workers has widened considerably over the past thirty years. Between 1979 and 2012, the income gap between a household with two college educated workers and two non-college educated workers nearly doubled from just over \$30,000 to almost \$60,000 annually. Put another way, based on the expected earnings of a college graduate relative to a high school graduate, the value of a college education net of tuition has doubled.¹

When America fell into the recession, it was quite clear that low skilled jobs and incomes suffered materially more than the high skilled. Likewise, the recovery has favored college educated workers, as evidenced by earnings and unemployment rates by educational attainment (Chart 2). These opportunity differences did not go unnoticed. College enrolment tends to rise during weak economic episodes and this time was no exception. According to research from the Federal Reserve Bank of New York (FRBNY), an increase in the number of borrowers explained roughly half of the increase in student debt between 2004 and 2012.²

The other half of the increase in student debt is due to higher levels of debt per student borrower. Rising costs of attending college were a contributing factor here. Research by the Brookings Institute, revealed that the cost of tuition net of subsidies outstripped economy-wide inflation by 16% over the past decade.³

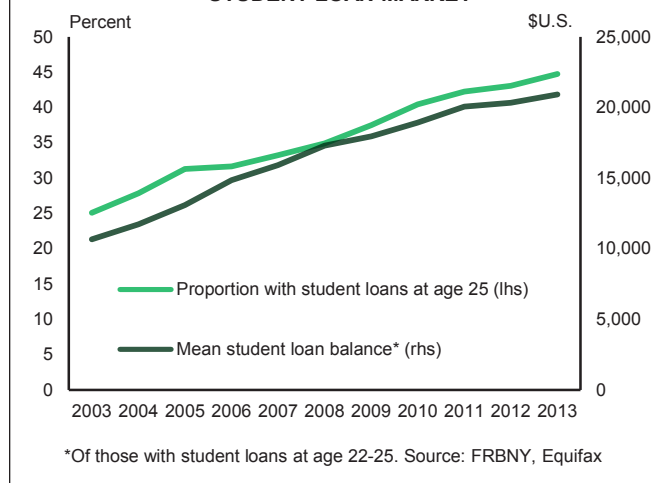
Other likely causes of the rise in student debt were the fall in income of both students and their parents during the recession, as well as an increase in the length of time students spent in college, with more students opting to pursue post-graduate degrees rather than enter a weak labor market. This contributed to both the number of students taking on debt, as well as the average amount of debt per borrower.

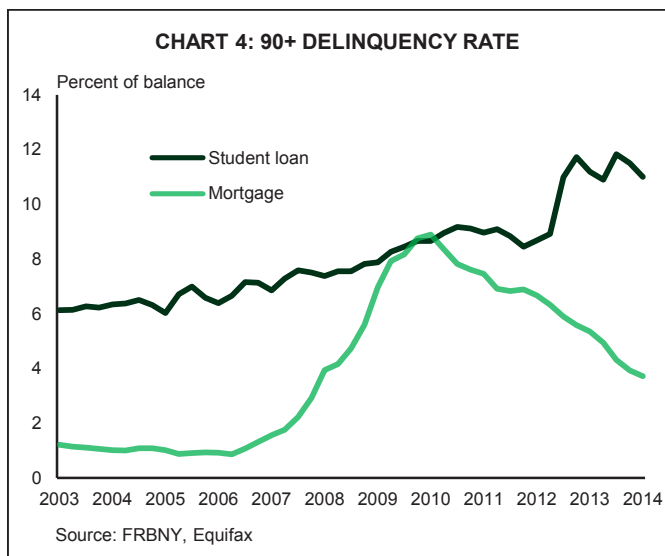
As a result, over the past eight years, the share of young people who have taken on student debt has risen from 25% to 45%, while the average level of student debt per borrower has doubled from \$10k in 2003 to over \$20k in 2013 (Chart 3).

Higher education supports homeownership, but benefits diluted by rising student debt

Just like a widening gap is observed between incomes of college graduates and non-college graduates, so too is one evident in homeownership, especially over the final two decades of the twentieth century.⁴ A person with a college degree is significantly more likely to have a mortgage and own a home relative to someone without a degree.⁵

However, in the near-term, challenges to homeownership come from increasing debt service costs and rising delinquency rates. Measured as a share of total student debt balances, the 90+ delinquency rate reached a peak of

CHART 3: GROWTH OF THE STUDENT LOAN MARKET




11.8% in the third quarter of 2013, up from just over 6% in 2003. It appears to have finally stabilized, edging down to 11.0% in the first quarter of 2014 (Chart 4). However, these official rates understate the true level of delinquency because they include in the denominator many borrowers who are not currently in repayment – people still in school or deferring payment for a variety of reasons. These folks make up 44% of borrowers. Excluding them from the tally resulted in an effective delinquency rate for borrowers under the age of 30 of 35% in 2012 (the latest available), up from just over 20% in 2004.

As a result of the rise in delinquency, average credit scores for student borrowers have fallen below those of non-student borrowers. Prior to the recession, the credit scores of student loan borrowers were similar to non-student borrowers. Since then, they have stagnated while non-student borrowers have risen.⁶

Given that recent growth in mortgage originations has been entirely to borrowers with pristine credit, this implies that many would-be borrowers are currently unable to access mortgage credit. Even once delinquent borrowers become current on their loan payments, it will take time to repair their credit scores.

The constraint that student debt presents to homeownership is apparent and has a long standing relationship. As Chart 1 on the front page demonstrates, between 2003 and 2012, homeownership rates among young people with student loans were higher than those without. However, a longer running data series from the Federal Reserve’s Survey of Consumer Finances tabulated by researchers at Brookings, shows that from 1989 through 2001, homeownership

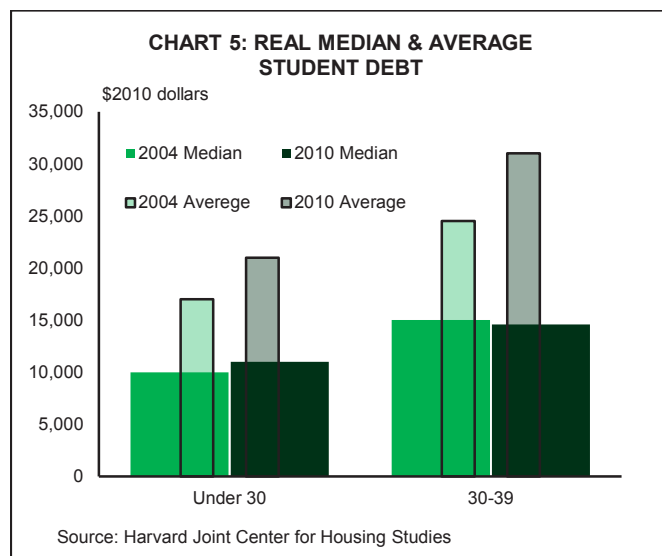
rates of student loan borrowers were consistently lower than households without student debt.⁷

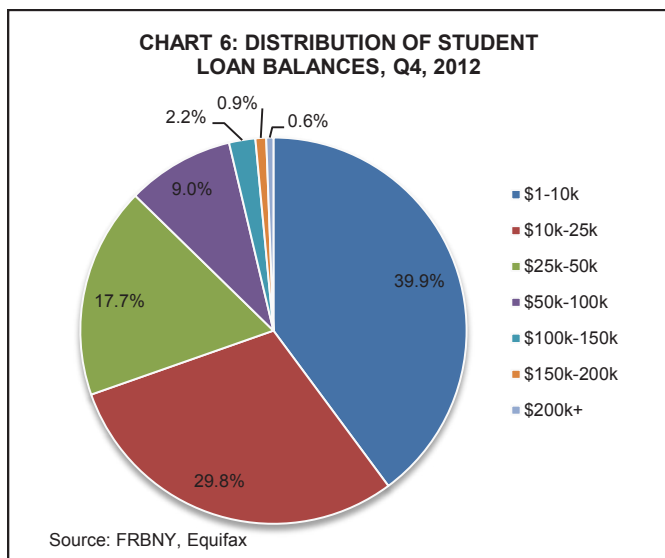
This leads us to believe that the higher homeownership rates of student borrowers during the housing boom were likely rationalized by lenders under the proof that college graduates have a higher lifetime earning potential. Of course, it also corresponded with weaker standards around credit quality that accompanied the housing bubble. As credit standards tightened in the aftermath of the housing crash, the reality of reduced income and savings during university and the resulting debt burden, weighed on the homeownership rates of young student borrowers.

According to a recent study, the debt-service ratio of the average student borrower with the median amount of debt is 49%, up from 43% in 2002.⁸ Given that FHA loans require a debt service ratio of 41% or less, this would disqualify or present a huge hurdle to would-be homeowners in this population segment from acquiring a mortgage.

A short-term constraint

Although the discussion thus far paints a rather dim picture for recent graduates and their near-term homeownership prospects, when we scratched beneath the surface of the data, there is reason for optimism. Looking at student debt data on the basis of averages masks the fact that the distribution of debt has changed over the past decade. In real inflation-adjusted terms, *median* student debt (as opposed to average) rose rather modestly between 2004 and 2010 (the latest data available) for borrowers under the age of 30, and actually fell modestly for borrowers between the age of 30 and 39 (Chart 5).⁹ This indicates that the increase in student debt





has disproportionately accrued to a minority of borrowers, and suggests that the overall impact of the rise in debt may not be as detrimental as it appears on the surface.

Looking at the overall distribution of student debt, nearly 40% of borrowers have balances less than \$10k and another 30% have debt between \$10k and \$25k. A small minority of borrowers – around 3.7% – have debt levels higher than \$100k (Chart 6). However, many of these borrowers have financed post-graduate and professional degrees, which often carry higher income levels than undergraduate degrees. The median weekly earnings of a person with a professional degree is double the overall median earnings and 55% higher than a person with a bachelor’s degree. This enables these individuals to pay down even large debts relatively quickly and start accumulating savings towards homeownership.

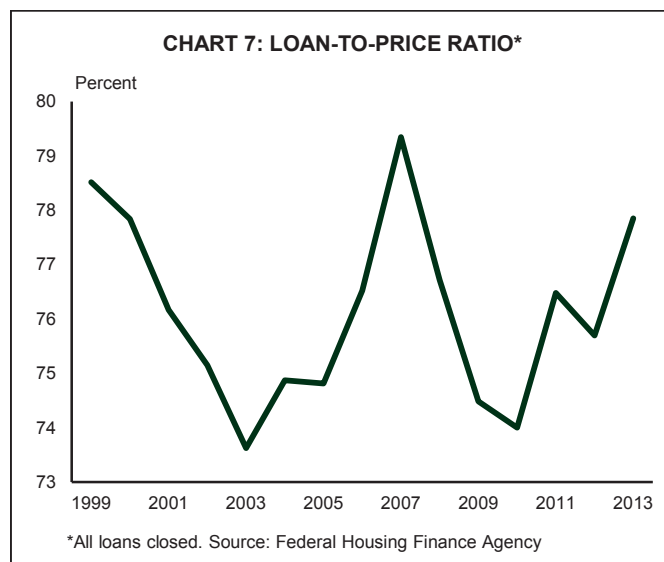
Admittedly, the recession has made it more difficult for recent graduates to find good paying jobs that align to their degrees relative to previous generations. But, research by the FRBNY suggests that the longer college graduates are in the labor market, the less significant this impact becomes. And, in this respect, the current economic cycle is proving to be no different to other cycles.¹⁰

Moreover, good news is starting to emerge. Credit scores turned up modestly in 2013 for student borrowers and non-student borrowers alike.¹¹ At the same time, lenders are slowly loosening the purse strings. Loan-to-value ratios for new loans have been rising over the past two years following a sharp drop in this ratio in the aftermath of the financial crisis (Chart 7). This uniquely benefits recent college graduates. Given low savings and lower levels of incomes among graduates just starting a career, entering the housing market

may require higher levels of mortgage debt relative to current income. An OECD study found that holding all else equal, a 10 percentage point increase in the loan-to-value ratio could raise the homeownership rate among 25 to 34-year olds in the average OECD country by 4.4 percentage points. This impact is weakened in countries like the United States with more generous tax treatment of mortgage debt, but is still stronger than the impact on other age groups.¹²

What is more, the improvement in the job market is likely to lead to greater income growth for college graduates. Already through the recovery, job growth among college graduates has consistently outpaced that of people without a degree. In May, the unemployment rate for college educated workers fell to just 3.2%, down from a peak of 5.0%. While the unemployment rate of recent graduates is higher than for those college graduates that have been in the labor market longer, it is still below the overall unemployment rate for the U.S. and has been trending downward since the recession. In certain fields that require college degrees, like engineering, education and health, rates of employment are well above other professions, providing greater opportunities for recent college graduates from these programs.¹³

Thus, as the “means” to own a home rises with time, the only remaining question is whether the “will” to own exists. There is a general perception that the unprecedented housing collapse may have tainted the desire of young people to own a home, particularly after witnessing the hardship experienced by family members. However, a March 2014 survey from the National Association of Realtors suggests this is not necessarily the case. In fact, millennials (people born after 1980) were cited as being more likely than older



generations to perceive housing as a good financial investment. A full 87% of millennials considered a home purchase a good investment, which was notably the highest ratio among all the age-cohorts surveyed. Saving for a down-payment was listed as one of the more onerous steps of a home purchase among millennials, with just over half citing student debt burdens as a barrier.¹⁴ As credit conditions and incomes improve, these younger college-educated workers are likely to jump into the housing market.

Bottom Line

Young people play an important role in the housing market, with those born after 1980 representing the largest share of homebuyers at 31% of the total. Moreover, 76% of first time homebuyers are below the age of 34. Increasingly

young people have been attending university and taking on additional levels of debt to do so. For those who have taken on large amounts of debt, the additional burden is a definite constraint on homeownership. The recent decline in the homeownership rate of young people demonstrates the difficulty posed by the rise in student debt.

However, looking at the distribution of student debt, its rise appears somewhat less worrying. For most student borrowers, the increase in leverage has been moderate over the past decade. For a small minority, it has been excessive. For the median borrower, the most important influence on the ability to purchase a home is conditions of the job market and here we can at least confirm a strengthening trend is in the works and is expected to persist.

Beata Caranci
VP & Deputy Chief Economist
416-982-8067

James Marple
Senior Economist
416-982-2557

ENDNOTES

- 1 Autor, David. 2014. "Skills, Education, and the Rise of Earnings Inequality Among the "Other 99 Percent." *Science* 23, Vol. 344, no. 6186, pp. 843-351. Available at <http://www.sciencemag.org/content/344/6186/843.full>
- 2 Brown, Meta, Andrew Haughwout, Donghoon Lee, Maricar Mabutas and Wilbert van der Klaauw. 2014. "Measuring Student Debt and Its Performance." Federal Reserve Bank of New York *Staff Reports*, no 668, April 2013. Available at http://www.newyorkfed.org/research/staff_reports/sr668.pdf
- 3 Gale, William, Benjamin Harris, Bryant Renaud, Katherine Rodihan. 2014. "Student Loans Rising: An Overview of Causes, Consequences, and Policy Options." The Brookings Institution. May 2014. Available at <http://www.brookings.edu/research/papers/2014/05/student-loan-debt-rising-gale-harris>
- 4 Segal, Lewis M. and Daniel G. Sullivan. 1998. "Trends in Homeownership: Race, Demographics, and Income." *Economic Perspectives* Federal Reserve Bank of Chicago, vol. 22, March-April. Available at http://geography.tamu.edu/class/bednarz/ep2Q98_4.pdf
- 5 Andrews, Dan and Aida Caldera Sánchez. 2011. "The Evolution of Homeownership Rates in Selected OECD Countries: Demographic and Public Policy Influences." *OECD Journal: Economic Studies*, Vol. 2011/1. Available at <http://www.oecd.org/eco/growth/evolution%20of%20homeownership%20rates.pdf>
- 6 Brown, Meta, Sydnee Caldwell, and Sarah Sutherland. 2014. "Just Released: Young Student Loan Borrowers Remained on the Sidelines of the Housing Market in 2013." Liberty Street Economics blog, Federal Reserve Bank of New York. Available at <http://libertystreeteconomics.newyorkfed.org/2014/05/just-released-young-student-loan-borrowers-remained-on-the-sidelines-of-the-housing-market-in-2013.html#.U5cjpvmwJKA>
- 7 Akers, Beth. 2014. "Reconsidering the Conventional Wisdom on Student Loan Debt and Home Ownership." The Brookings Institution Brown Center Chalkboard. Available at <http://www.brookings.edu/blogs/brown-center-chalkboard/posts/2014/05/08-student-loan-debt-and-home-ownership-akers>
- 8 Mishory, Jen and Rory O'Sullivan. 2012. "Denied: The Impact of Student Debt on the Ability to Buy a House. Available at <http://younginvincibles.org/wp-content/uploads/2012/08/Denied-The-Impact-of-Student-Debt-on-the-Ability-to-Buy-a-House-8.14.12.pdf>
- 9 Herbert, Chris. 2013. "Will Student Loan Debt Keep Young People from Buying Homes?" *Housing Perspectives*. Harvard Joint Center for Housing Studies. Available at <http://housingperspectives.blogspot.ca/2013/02/will-student-loan-debt-keep-young.html>
- 10 Abel, Jaison R., Richard Deitz and Yaqin Su. 2014. "Are Recent College Graduates Finding Good Jobs?" *Current Issues in Economic & Finance*, Vol. 20, Number 1, Federal Reserve Board of New York. Available at http://www.newyorkfed.org/research/current_issues/ci20-1.pdf
- 11 Brown, Meta, Sydnee Caldwell, and Sarah Sutherland. 2014. "Just Released: Young Student Loan Borrowers Remained on the Sidelines of the Housing Market in 2013." Liberty Street Economics blog, Federal Reserve Bank of New York. Available at <http://libertystreeteconomics.newyorkfed.org/2014/05/just-released-young-student-loan-borrowers-remained-on-the-sidelines-of-the-housing-market-in-2013.html#.U5cjpvmwJKA>
- 12 Andrews, Dan and Aida Caldera Sánchez. 2011. "The Evolution of Homeownership Rates in Selected OECD Countries: Demographic and Public Policy Influences." *OECD Journal: Economic Studies*, Vol. 2011/1. Available at <http://www.oecd.org/eco/growth/evolution%20of%20homeownership%20rates.pdf>
- 13 Abel, Jaison R., Richard Deitz and Yaqin Su. 2014. "Are Recent College Graduates Finding Good Jobs?" *Current Issues in Economic & Finance*, Vol. 20, Number 1, Federal Reserve Board of New York. Available at http://www.newyorkfed.org/research/current_issues/ci20-1.pdf
- 14 National Association of Realtors. 2014. "Home Buyer and Seller Generational Trends." Available at <http://www.realtor.org/sites/default/files/reports/2014/2014-home-buyer-and-seller-generational-trends-report-full.pdf>

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