Global macro matters

No bubble to burst: U.S. student debt is not housing

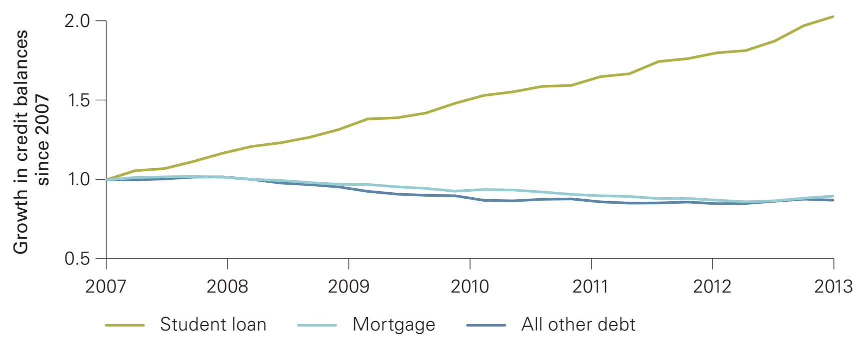
Vanguard research | Joseph Davis, Ph.D. | July 2014

U.S. student loan debt now exceeds $1 trillion

In an environment of broader U.S. consumer deleveraging, student debt is the only form of consumer debt that has risen since 2007, having doubled since the recession.

Both the number of borrowers and average debt balances of student loans have increased more than 70% since 2004 (source: Federal Reserve Bank of New York). Factors in this rapid increase include higher tuition costs, the deep recession, and overall demand for higher education.

Student loan debt has doubled since the recession



Note: Growth of debt levels indexed to 1 in December 31, 2007.

Sources: Vanguard, based on data from Federal Reserve Bank of New York.

Macro view: Student debt growth too small to repeat debt crisis like that of 2007–2009

Size matters. At 7% of U.S. gross domestic product, student debt outstanding is a fraction of the size of mortgage debt to GDP, which peaked in 2007 at 62%.

Student loan debt lacks the financial interconnectedness of some types of mortgage debt, too. For instance, total student loan asset-backed securities (ABS) represent less than 2.5% of total mortgage-backed securities (MBS) in 2007. Also, student loans are recourse loans, meaning borrowers can't "walk away" from the payment obligation.

U.S. student debt today versus mortgage debt in 2007

Criteria	Mortgage debt, 2007			Student debt, 2014
Average balance ($)	$93,000	▲	▼	$25,000
Percentage of GDP	62%	▲	▼	7%
Payment to income (%)	36%	▲	▼	4%
Number of borrowers	98 M	▲	▼	40 M
ABS ($B)	$9,372	▲	▼	$225
Growth rate of debt (%)	12%	●	●	11%
Delinquencies	9%	▼	▲	12%

Notes: Mortgage "Payment to income" represents median monthly mortgage payment as percentage of median monthly income as of 2007; student debt "Payment to income" represents median monthly student debt payment as percentage of median monthly income as of 2010; "Growth rate of debt" represents five-year average growth through peak debt level; "Delinquencies" represent percentage of account holders delinquent at peak of delinquencies (2010 Q1 for mortgages; 2013 Q3 for student debt).

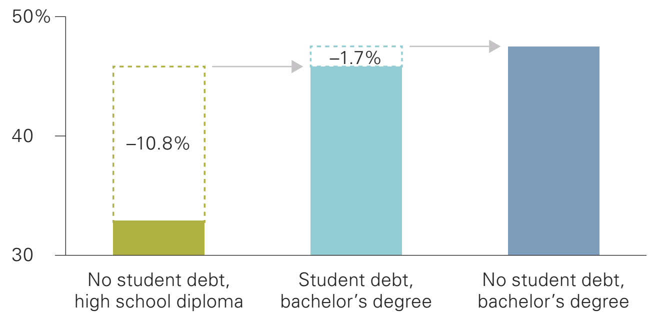
Sources: Vanguard calculations, based on data from U.S. Census Bureau; Federal Reserve Bank of New York; Securities Industry and Financial Markets Association; and Moody's Analytics Data Buffet.

Micro view: Student debt matters for housing market, as does education.

According to our estimates, *all else equal*, student debt lowers the probability of owning a home in one's lifetime by –1.5%. The increase in student loan borrowers from 2008 to 2012 lowered U.S. housing demand by approximately 36,000 homes per year (or 3.5% of first-time home buyers) over that time.

However, this drag on the housing market should be compared with the positive housing demand associated with higher levels of education and, on average, income. Although financing a bachelor's degree with student debt decreases the likelihood of a typical 30-year-old college graduate purchasing a home by –1.7%, obtaining that degree also increases the likelihood of purchasing a home by 10.8%, relative to not attending college at all.

Homeownership rate for typical 30-year-olds with varying student debt status



Notes: Figure based on results of probit model accounting for demographics, income, level of education, and student debt. Estimates based on a 30-year-old with annual income of $55,000.

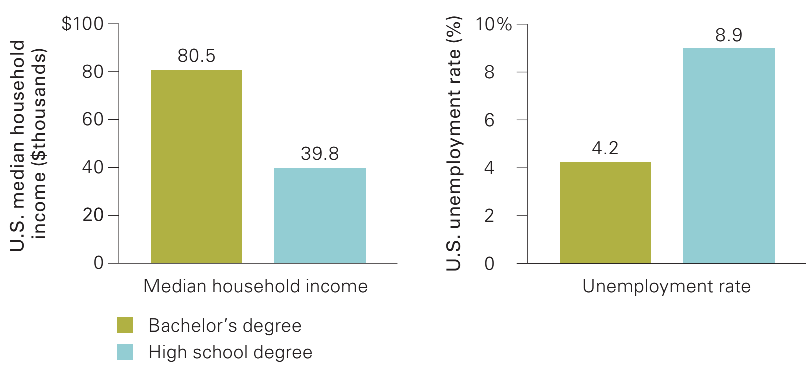
Sources: Vanguard, based on data from Federal Reserve's 2010 Survey of Consumer Finances and U.S. Census Bureau.

The return on education

Although all segments of the U.S. labor market have suffered over the past several years, American workers with higher levels of education have, on average, notably higher income levels and lower jobless rates. If anything, these differentials have widened over the past decade.

In an ever-more-competitive global economy, one could argue not only that returns on greater education and skills attainment will remain high in the future, but also that they may in fact *increase* over time.

U.S. student loan debt is associated with the benefits of higher educational attainment



Sources: Vanguard, based on data from Data Buffet, U.S. Bureau of Labor Statistics, and U.S. Census Bureau.

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