## ASK AN ECONOMIST

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### *Q: How did consumer borrowing change after the Great Recession?*

**A:** Following the run-up in household debt during the early 2000s, consumers have been steadily reducing their overall debt level (i.e., deleveraging) since the Great Recession ended in June 2009. The ratio of household debt to personal income peaked in the mid-2000s at nearly 1.2, and it has declined to about 0.9 in the second quarter of 2017.

However, looking at aggregate data tells us only part of the story. To better understand the run-up in debt and subsequent deleveraging, Carlos Garriga, Bryan Noeth and I studied patterns in mortgage debt, credit card debt, auto loans and student loans held by different age groups between 1999 and 2013.[1]

Obviously, the biggest change in borrowing over that period has been mortgage debt. In the early 2000s, average mortgage debt increased among all age groups, but especially for younger households. In 1999, homeowners with the largest mortgage debt (about $60,000 in 2013 dollars) were around 45 years old. In 2008, peak mortgage debt (about $117,000) occurred for those around age 42. Despite large deleveraging after the recession (particularly among those younger than 60), average mortgage debt remained higher in 2013 than in 1999.

For the other types of debt, the general patterns we found were:

- Credit card debt also increased, primarily for those older than 30, and then began to decline after 2008. Unlike other types of debt, average credit card debt in 2013 was below its 1999 level for most age groups.
- Auto debt also rose between 1999 and 2008, but dropped across all age groups after the recession. Auto debt then rebounded in 2013.
- Student debt, on the other hand, consistently grew from 2005 to 2013 for all age groups. For those over 50, the rise is likely due to parents or grandparents taking on loans or co-signing for relatives.

Having debt is not necessarily bad, as it allows individuals to make up for the mismatch between income and consumption expenditures earlier in life; consumers just need to be prudent with the amount of debt they take on. By studying debt patterns, however, we hope to gain a better understanding of the tipping point between manageable debt and debt levels that expose consumers to excessive risk.

[1] Garriga, Carlos; Noeth, Bryan; and Schlagenhauf, Don E. Household Debt and the Great Recession. Federal Reserve Bank of St. Louis Review, Second Quarter 2017, Vol. 99, No. 2, pp. 183-205.

## LETTERS TO THE EDITOR

These letters pertain to articles in our Third Quarter issue (stlouisfed.org/publications/regional-economist/third-quarter-2017). The first letter is about the article Quantitative Easing: How Well Does This Tool Work?

**Dear Editor:**

I agree with you on the point that QE should not be repeatedly used in the future as a monetary policy because (1) purchasing private bonds is too influential to the firms' financial health, which may result in economic biases; and (2) public sentiment can no longer be more optimistic than it was from 2008. On the other hand, I believe that people's faith in QE positively worked at least in the past.

In the analyses with Japan and Canada, you did not mention exchange rates. However, both Japanese yen and Canadian dollars significantly changed during the past decade. I also studied international economics and learned that Canadian transports with the U.S. remarkably increased after US-Can FTA (1989), and its economy became more reliant on the U.S. economy. Likewise, Japanese trade volumes and its stock prices are reacting in accordance to JPY-USD exchange rates.

Therefore, the fact that Canadian real GDP boosted without QE is explained by 1) its reliance on US economy, and 2) large fluctuations in exchange rates.

By the way, nominal GDP in U.S. dollars shows completely different trends. The growths from 2008 to 2015 are: Canada 0.24 percent, Japan –13.06 percent and U.S. 23.11 percent.

**Emi Igawa, Nagoya, Japan**

The second letter comments on the article titled Household Participation in Stock Market Varies Widely by State.

**Dear Editor:**

I think the methodology in this analysis is very flawed, and a wide variety of conclusions could, therefore, be drawn.

Our household falls within the key household income group discussed. We do all of our savings within tax-deferred retirement vehicles and have substantial savings, with about 75 percent in equities. We never report dividends because we own no equities outside the tax-deferred accounts; so, we are a reason that they report low participation in the stock market.

So an alternative explanation of the data shown in this paper is that the people in the states with high stock market participation rates are investing in tax-inefficient vehicles and could benefit from financial advice to put more or all of their savings into tax-deferred plans. Between Roth and Regular IRAs, 401(k)s, and 403(b)s, there is no reason for anybody making less than $200k per year to have ANY taxable stock dividends.

We may have a retirement crisis, but it is not because people are not buying stocks outside of tax-deferred accounts.

**Raymond D'Hollander, Fayetteville, N.Y., an engineer**

**We welcome letters to the editor, as well as questions for "Ask an Economist." You can submit them online at www.stlouisfed.org/re/letter or mail them to Subhayu Bandyopadhyay, editor, The Regional Economist, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, MO 63166-0442.**