



HOUSEHOLD AND BUSINESS DEBT IN THE UNITED STATES: How is it measured and what do we learn from it?

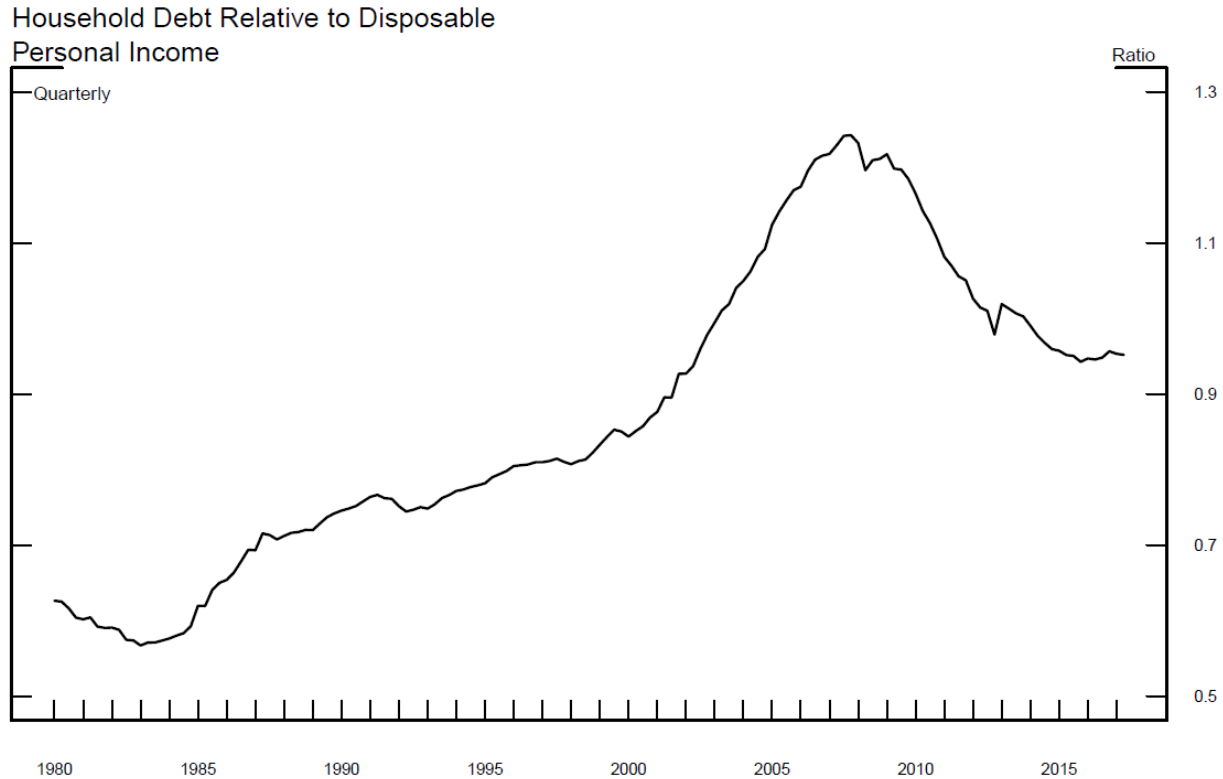
Marco Cagetti

Board of Governors of the Federal Reserve System

Flow of Funds section

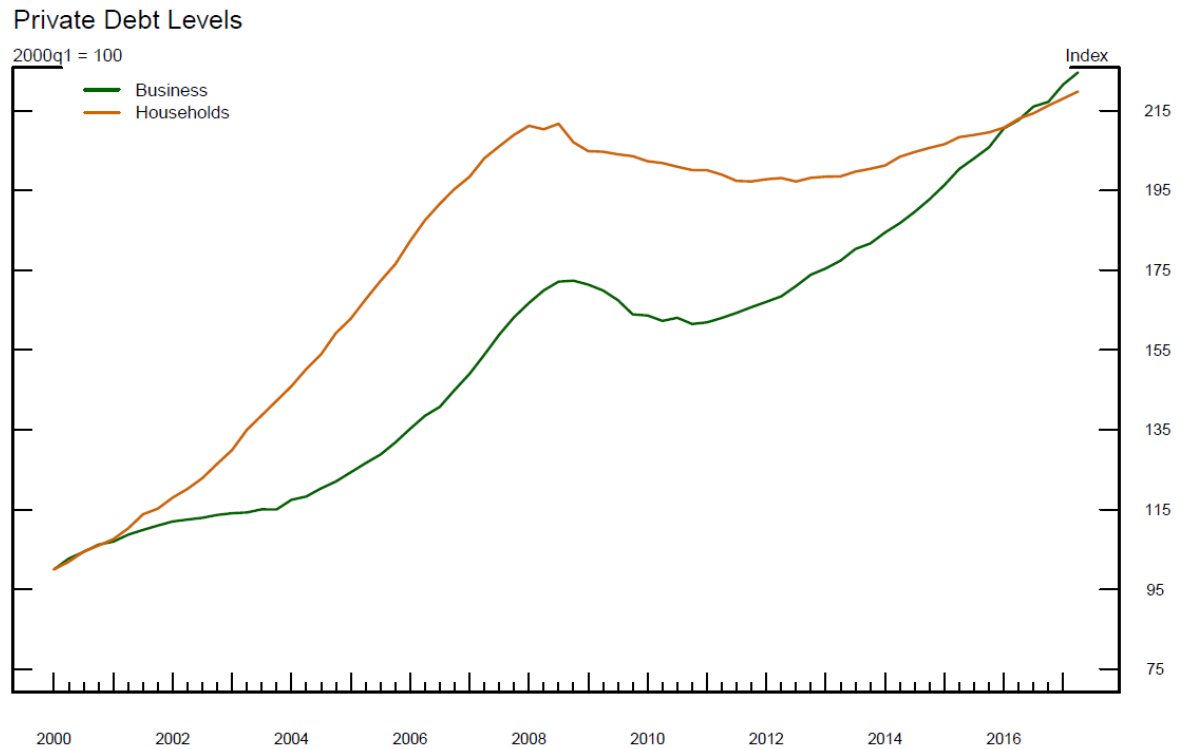


Leveraging and deleveraging before and after the Great Recession





Leveraging and deleveraging before and after the Great Recession



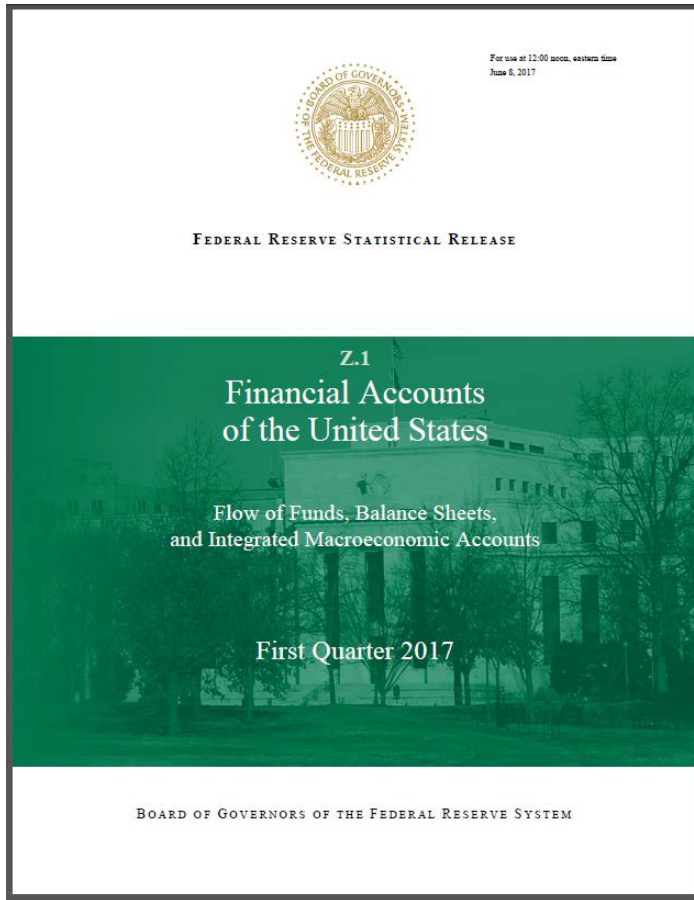


Private nonfinancial debt in the U.S.

- Definitions and measurement issues
- Recent trends
- Enhancing Financial Accounts data



Financial Accounts of the United States (FA)



- Macro level data set that includes consistent flow and balance sheet detail for sectors in the U.S. economy
- Published by Board of Governors of the Federal Reserve System
- Quarterly data 1952:Q1 – 2017:Q2; Annual data beginning 1945
- Published 10 weeks after the end of the reference quarter



Household debt

- Mortgages and consumer credit
- Consumer credit (G.19)
 - Credit extended to households excluding loans secured by real estate
 - Obtained from a variety of sources from lenders (banks, finance companies, federal agencies, ABS markets)
- Mortgages
 - All loans backed by owner-occupied real estate (including heloc)
 - Obtained from lenders sources (banks, GSEs, nonbank institutions, MBS markets)



Household debt: other surveys

- Survey of Consumer Finances
 - Triennial survey of households
 - Extensive information on wealth
 - Matches well
- FRBNY Consumer Credit Panel
 - Quarterly aggregation of Equifax credit report data
 - Also matches well, mortgages a bit higher in Financial Accounts

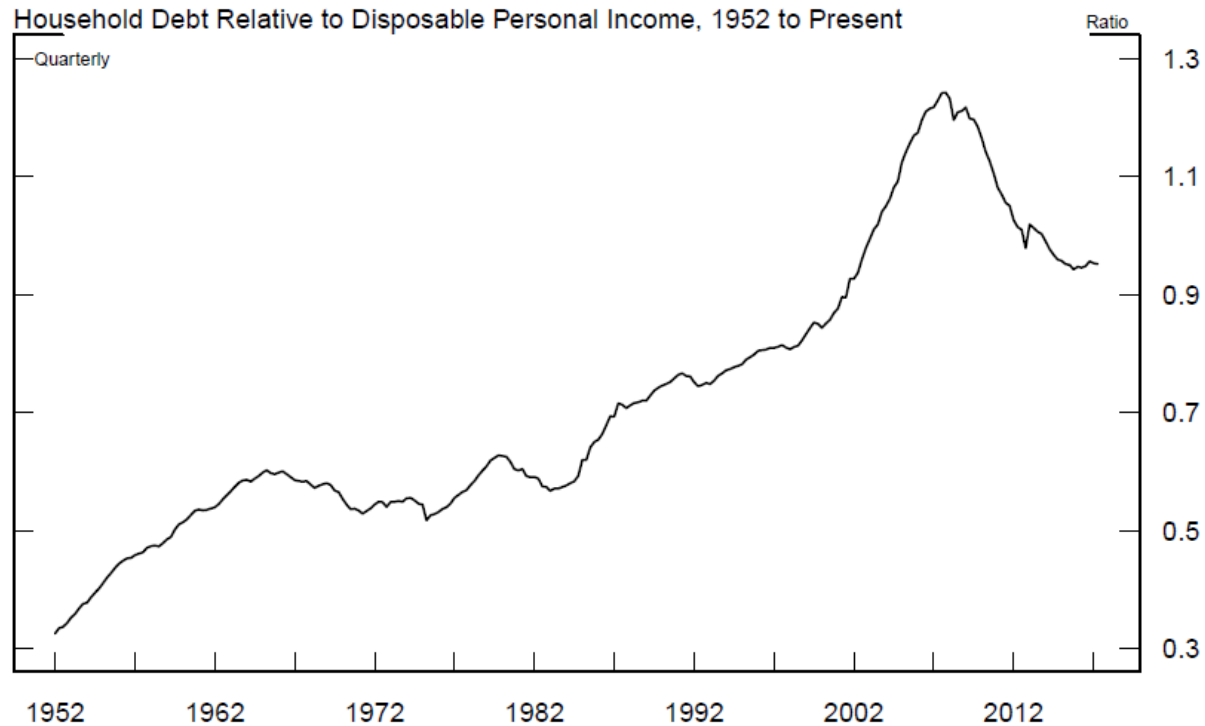


Nonfinancial business debt

- Securities
 - Corporate bonds
 - Commercial paper
 - Other bonds
- Loans
 - C&I loans
 - Mortgages (commercial and rental properties)
 - Nonbank loans
- Also obtained from lender's side



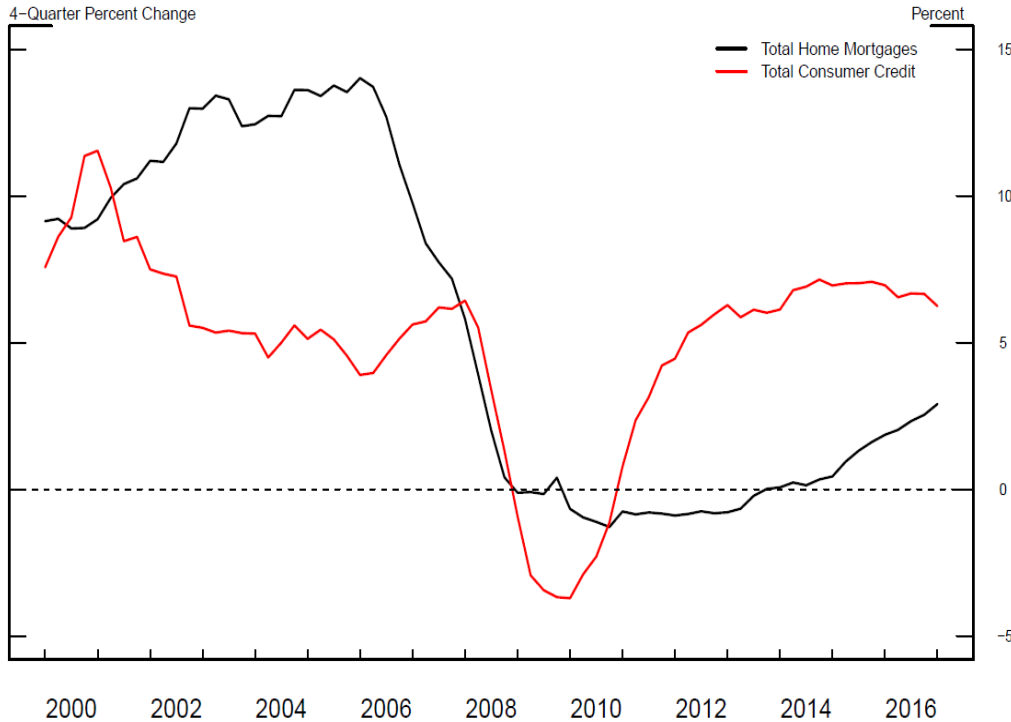
Household debt: long run trends





Household debt: components

Growth Rates of Home Mortgages and Consumer Credit



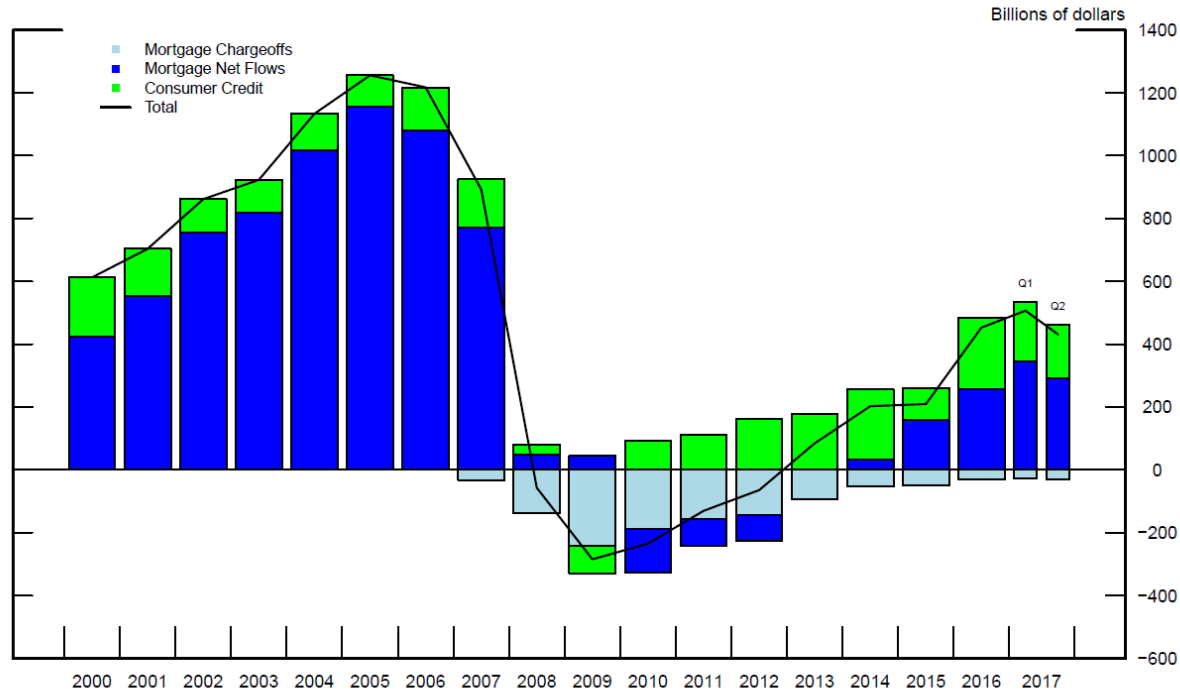
Source: Federal Reserve Board, Financial Accounts of the United States and G.19 Statistical Release "Consumer Credit."

- Mortgage boom, decline, and recent moderate growth
- Consumer credit picked up more quickly



Household debt: changes

Changes in Household Debt

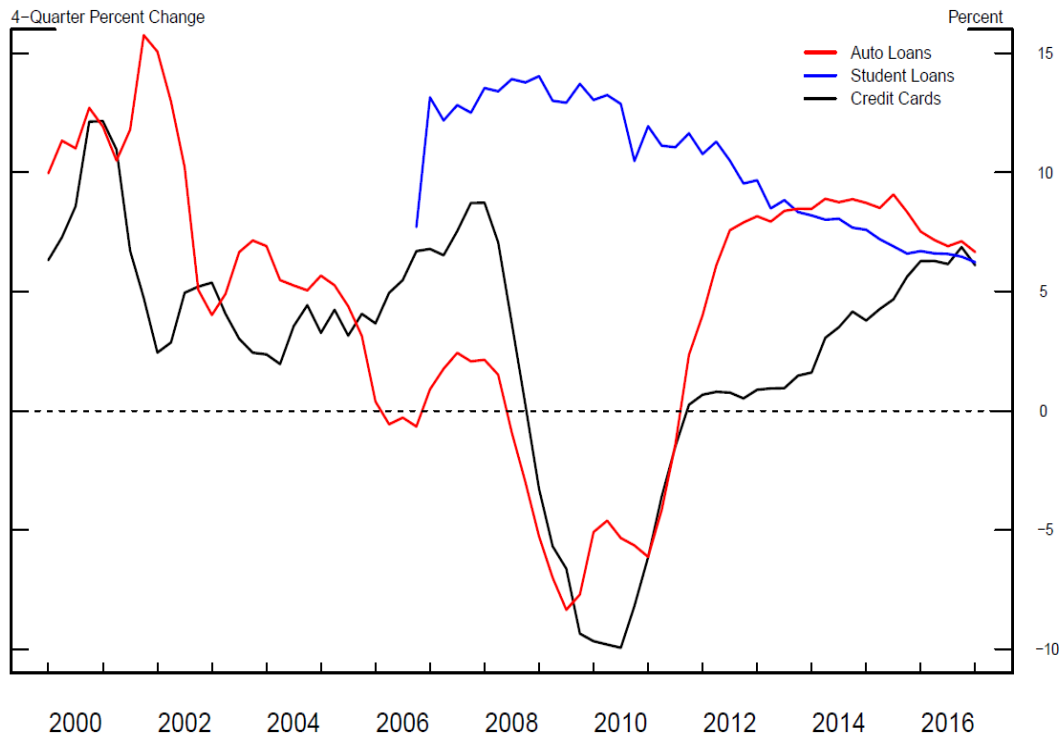


Note: Includes only home mortgage debt and consumer credit. Quarterly flows are annualized.
Source: Financial Accounts of the United States



Consumer credit growth

Growth Rates of Components of Consumer Credit



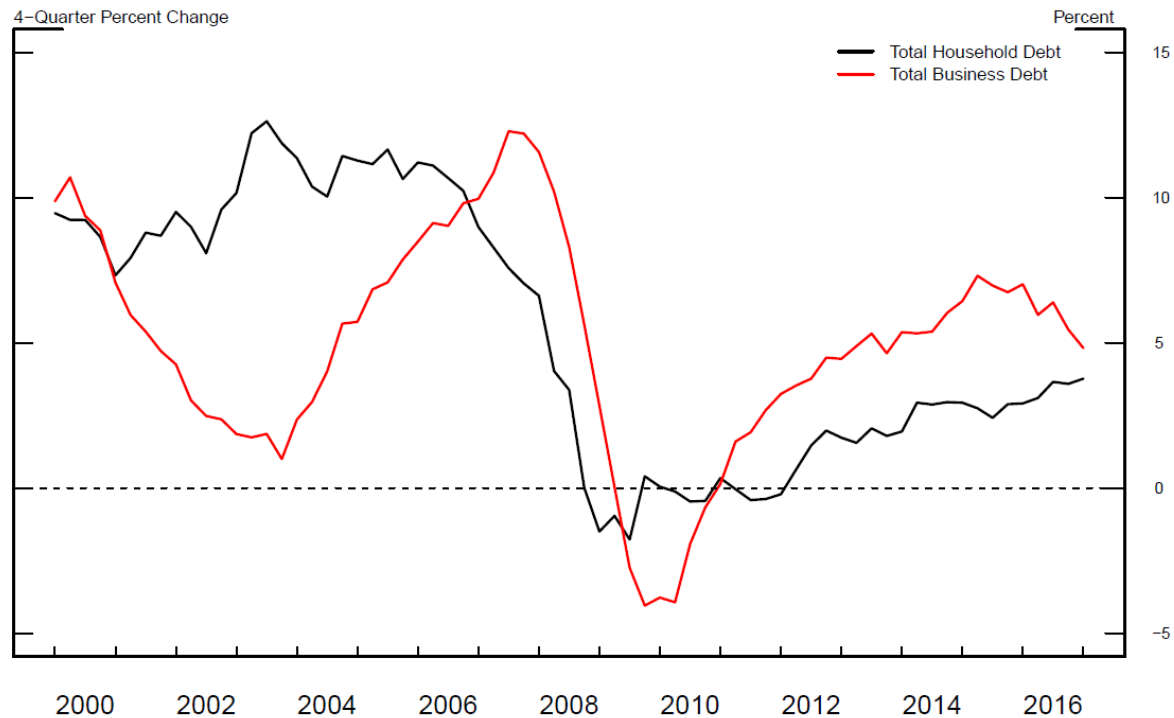
Source: Federal Reserve Board, Financial Accounts of the United States and G.19 Statistical Release "Consumer Credit."

- Student loans (federally provided)
- Auto loans: decline and recovery
- Credit cards: slower recovery



Nonfinancial business debt

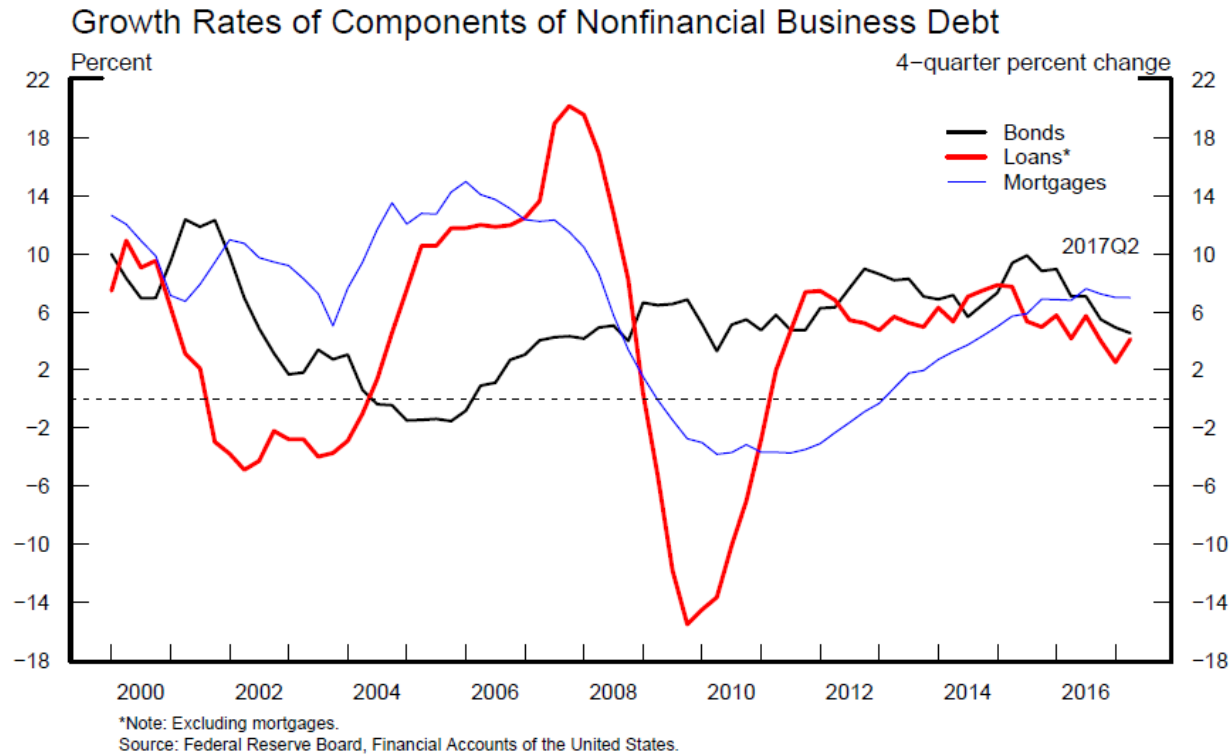
Growth Rates of Household and Business Debt



Source: Federal Reserve Board, Financial Accounts of the United States.

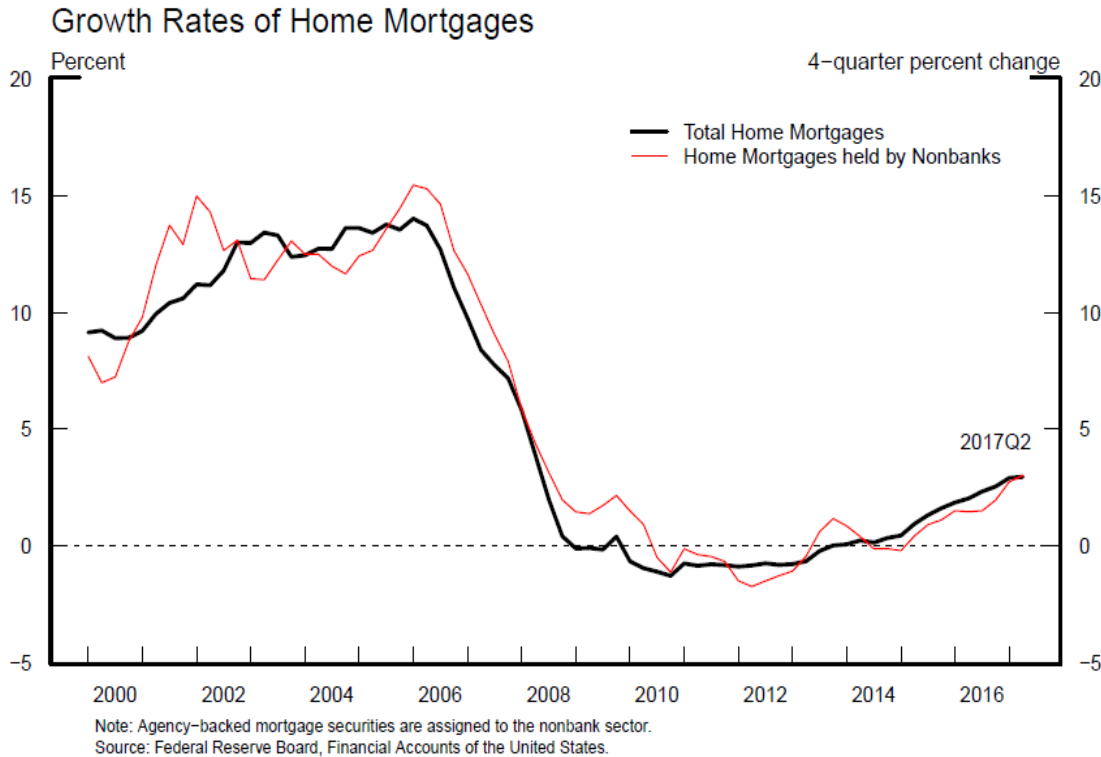


Nonfinancial business debt: main components





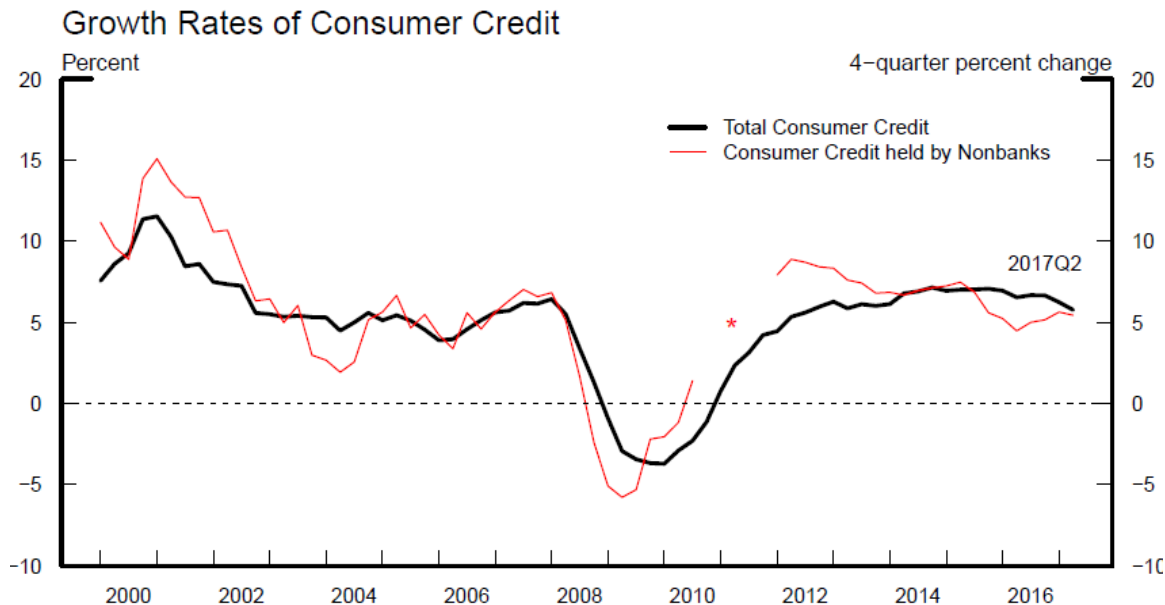
Bank and nonbank lending: residential mortgages



- Decline-slow recovery
- Nonbank: GSE versus private label MBS



Bank and nonbank lending: consumer credit



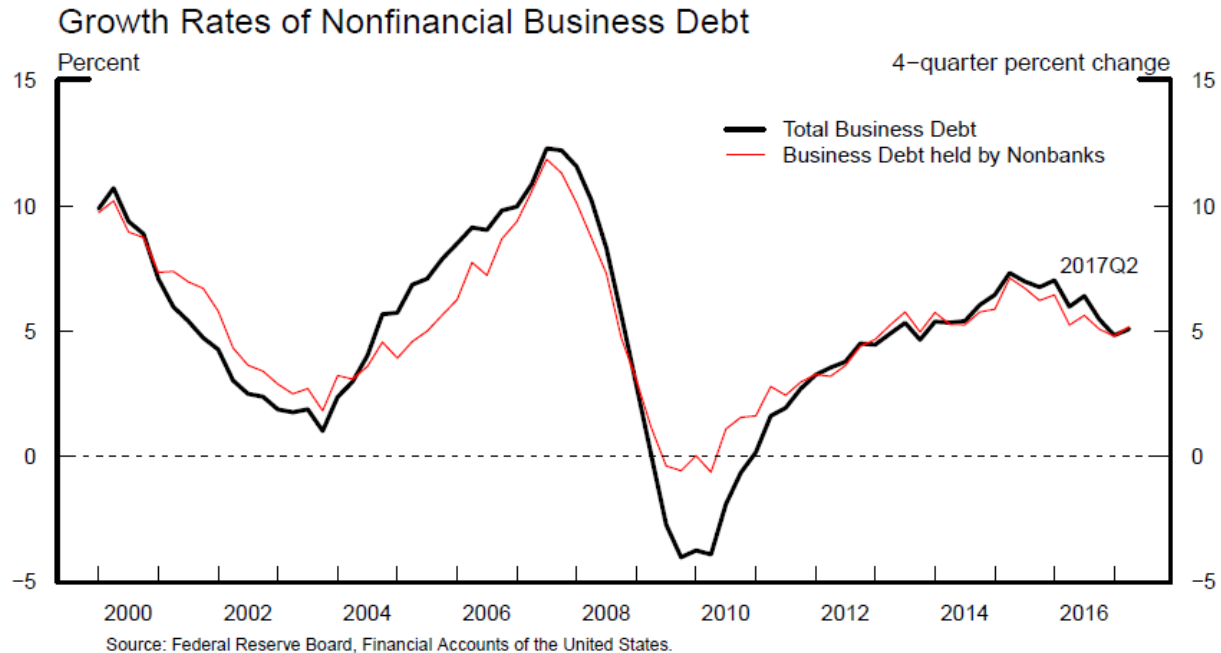
- Nonbank: student loans, some auto loans
- Bank: auto loans and credit cards

*Note: The break in the nonbank debt series is due to the implementation of Financial Accounting Standards 166 and 167, which require that banks consolidate onto their balance sheets certain securitized assets that were previously held in off-balance-sheet entities. This consolidation created mechanical changes to the calculated growth rates that do not reflect market conditions.

Source: Federal Reserve Board, Financial Accounts of the United States and G.19 Statistical Release "Consumer Credit."



Bank and nonbank lending: businesses





Enhancing the Financial Accounts

- Enhanced Financial Accounts:
 - Provide complementary information around the core Financial Accounts
 - Higher frequency, alternative definitions
 - Higher disaggregation
- <https://www.federalreserve.gov/releases/efa/enhanced-financial-accounts.htm>
- Household debt by county, CBSA, state
- Distributional Financial Accounts



Disaggregated household debt

- Debt/income by county, core-based statistical areas, states
- Based on FRBNY CCP
- To be published in mid-January
- Substantial geographical variation in levels and in rates of growth
- Coastal vs central areas



Distributional Financial Accounts

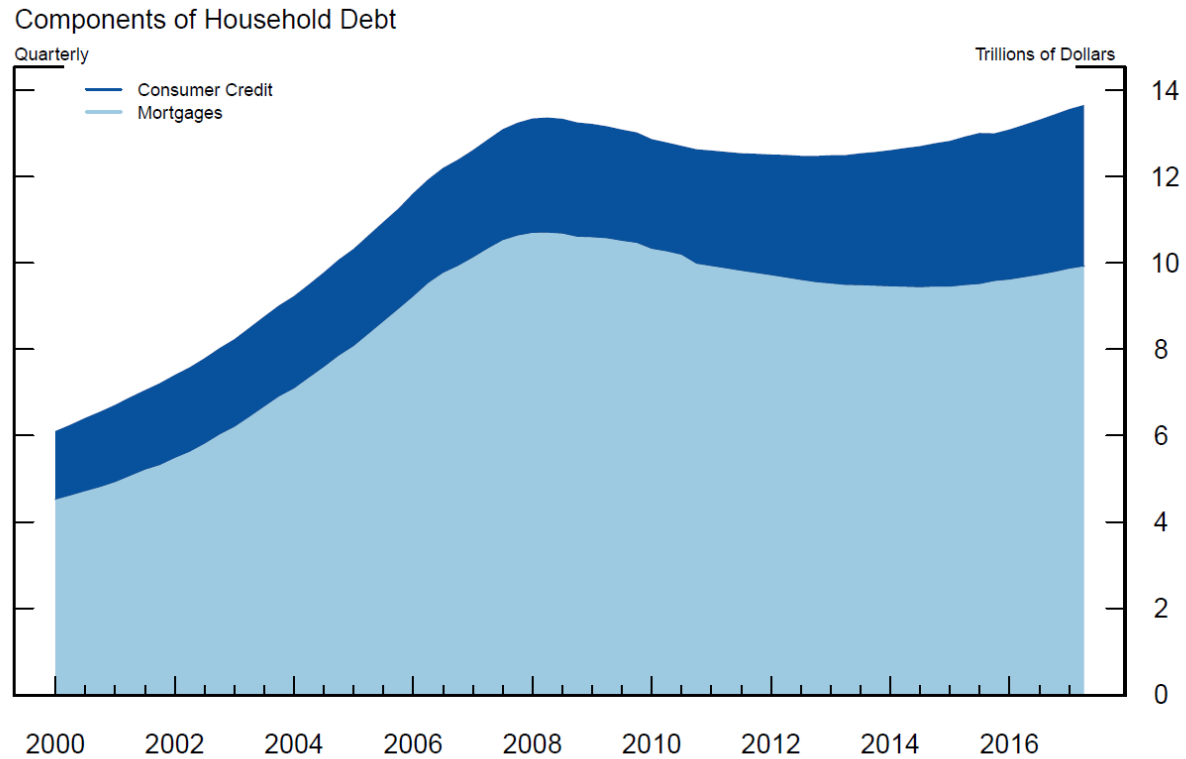
- Distributional accounts for income
- Plan to construct DF for household wealth
- Trends by various income, wealth, and demographic group
- Merging SCF micro data with FA aggregates
- Work in progress

Additional slides



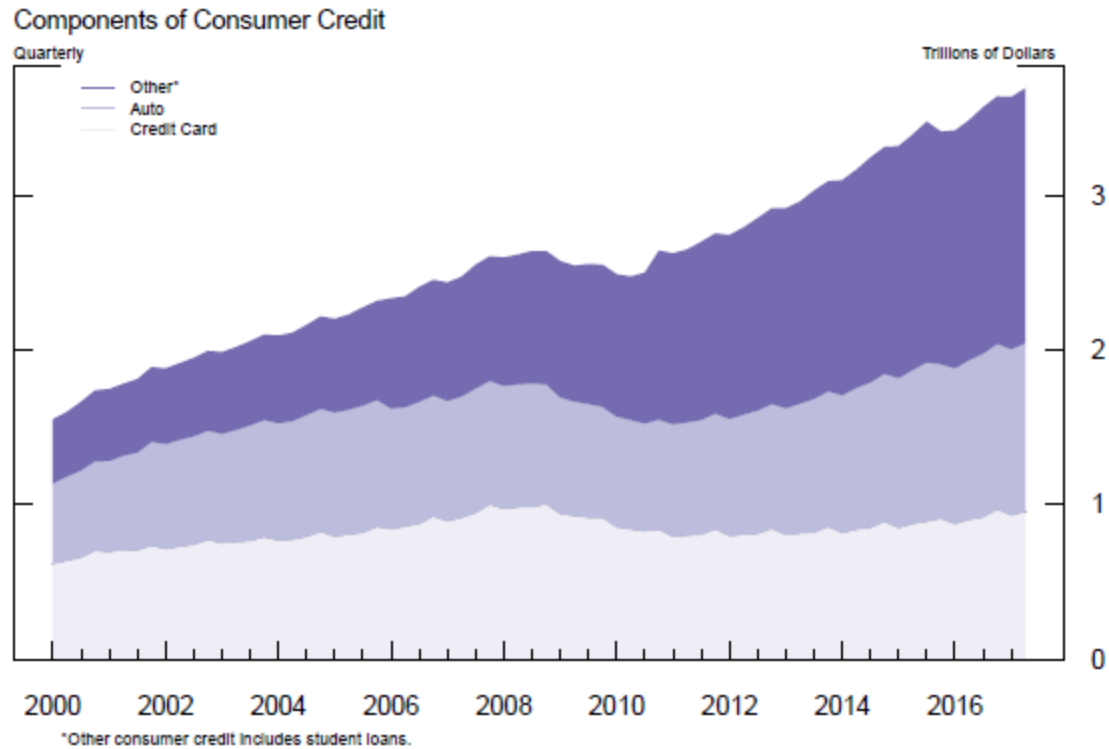


Household debt: components





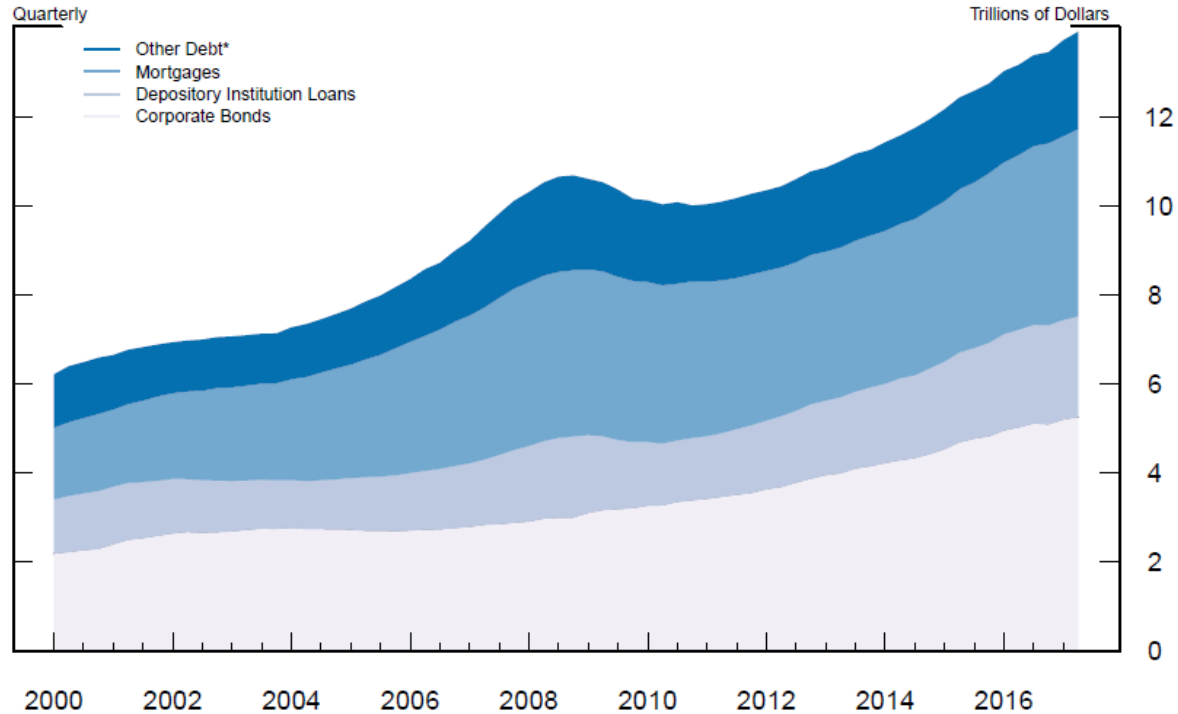
Consumer credit: components





Nonfinancial business debt: components

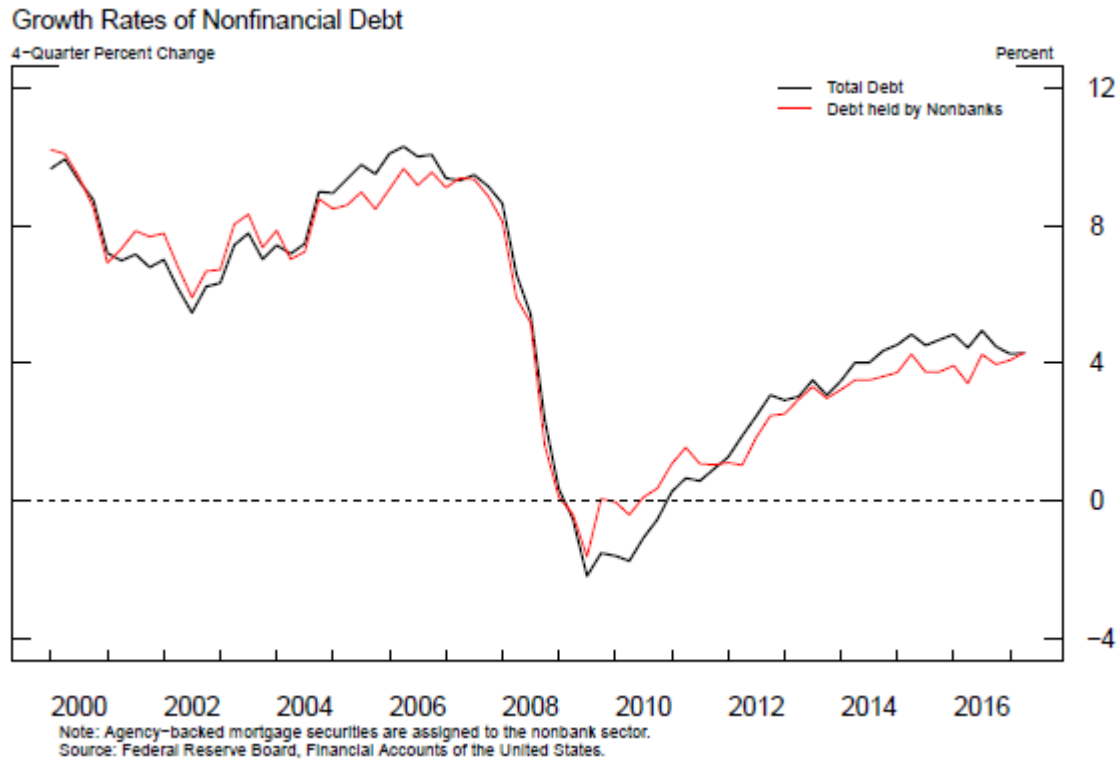
Components of Nonfinancial Business Debt



*Other debt includes commercial paper, municipal securities, and non-bank loans
Source: Federal Reserve Board, Financial Accounts of the United States.



Nonfinancial private debt: bank and nonbank lending





Bibliography - 1

Bhutta, Neil (2015) "The ins and outs of mortgage debt: an update", FEDS Note, <https://www.federalreserve.gov/econresdata/notes/feds-notes/2015/the-ins-and-outs-of-mortgage-debt-an-update-20151207.html>

Gallin, Joshua, and Paul Smith (2014) "Enhanced Financial Accounts", FEDS Note, <https://www.federalreserve.gov/econresdata/notes/feds-notes/2014/enhanced-financial-accounts-20140801.html>

Hannon, Simona, and Alvaro Mezza (2014) "A few thoughts on the recent deceleration of student loan debt", FEDS Note, <https://www.federalreserve.gov/econresdata/notes/feds-notes/2014/a-few-thoughts-on-the-recent-deceleration-of-student-loan-debt-20140219.html>

Henriques, Alice, and Joanne Hsu (2014) "Analysis of Wealth Using Micro and Macro Data: A Comparison of the Survey of Consumer Finances and Flow of Funds Accounts," in Jorgenson, Dale W., J. Steven Landefeld, and Paul Schreyer eds., *Measuring Economic Sustainability and Progress, Studies in Income and Wealth*, vol. 72. Cambridge, MA: National Bureau of Economic Research, pp. 245-274.



Bibliography - 2

Kennedy, James E., Maria Perozek, Paul A. Smith (2014). "Accounting for Mortgage Charge-Offs in the Financial Accounts of the United States," FEDS Notes 2014-10-31. Board of Governors of the Federal Reserve System (U.S.).

Lee, Donghoon and Wilbert van der Klaauw (2010). "An Introduction to the FRBNY Consumer Credit Panel", Federal Reserve Bank of New York Staff Report #479.

Mian, Atif and Amir Sufi (2011). "House Prices, Home Equity—Based Borrowing, and the US Household Leverage Crisis." *American Economic Review*, 101(5), pp. 2132-2156.

Piketty, Thomas, and Emmanuel Saez, and Gabriel Zucman (2016) "Distributional National Accounts: Methods and Estimates for the United States", NBER working paper No. 22945.