

# The Quarterly Debt Monitor Appendix

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## Introduction

This appendix for the fourth issue of *The Quarterly Debt Monitor* updates all of the standard tables and figures contained within the initial issue of the report. The summary report presents a subset of the following figures. In contrast, the appendix provides the same figures each quarter updated with the latest data. This allows readers to follow developments for figures of interest. The label numbers of the figures in the summary report will not necessarily match those of the same figures in the appendix.

The appendix is structured as follows:

- Introduction
  - Year-over-Year Percent Change
- Consumer Debt: Levels and Growth
  - Total Per Capita Debt in the U.S. and Largest District MSAs
  - Per Capita Consumer Debt, by Type
  - Average Consumer Debt Balance, by Type
  - Contributions to Total Per Capita Debt Growth, by Type
  - Developments in Consumer Debt, a Demographic Perspective
- Consumer Debt Delinquency
  - Serious Delinquency Rates, by Type
  - Serious Delinquency Rates, a Demographic Perspective
- Loan Originations, by Equifax Risk Score
  - Real Auto Loan Originations
  - Real Mortgage Loan Originations
- Methodology
- Definitions

The following table offers a quick summary of important indicators and trends in debt levels and delinquency rates within the past year across geographic areas. The figures are rounded.

## Year-over-Year Percent Change from 2015:Q4 to 2016:Q4

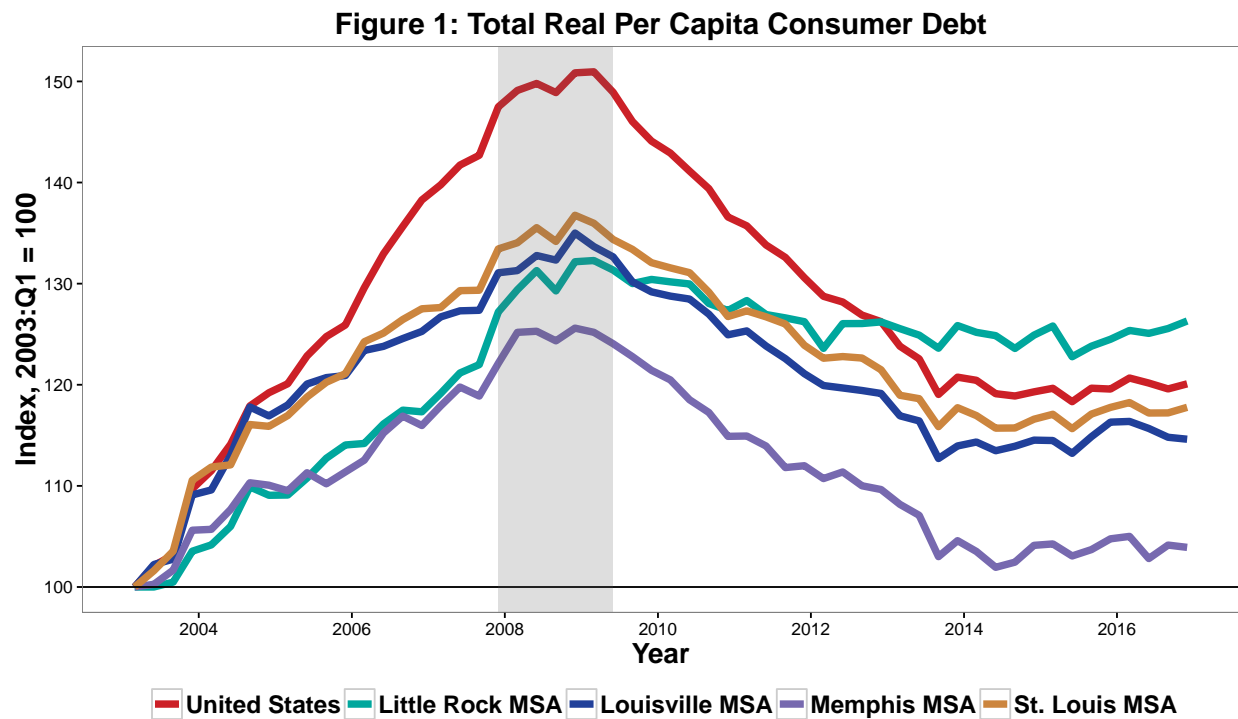
2016:Q4	United States	Little Rock MSA	Louisville MSA	Memphis MSA	St. Louis MSA
<b>% Change in Per Capita Consumer Debt</b>					
Total	0.4	1.5	-1.5	-0.8	0
Mortgage	-0.9	-0.5	-3.5	-4.3	-1.8
HELOC	-5	-11.5	-2.8	-6.8	-6.7
Auto	5.1	4	5.4	5.5	4.2
Credit Card	2.9	3.8	0.9	3.4	1.4
Student	5.3	6.7	4.8	6.6	5.6
<b>Change in Serious Delinquency Rate</b>					
Mortgage	-0.5	-0.6	-0.1	-0.7	-0.2
HELOC	0.1	0.1	0.1	0.2	-0.2
Auto	0.4	0.6	0.5	1.2	0.1
Credit Card	-0.2	0	-0.4	-0.1	-0.1
Student	-0.2	0.1	0.1	-0.1	0.4

SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

NOTE: The change in serious delinquency rates is given as the difference in percentage points.

## Consumer Debt: Levels and Growth

### Total Per Capita Debt in the U.S. and Largest District MSAs

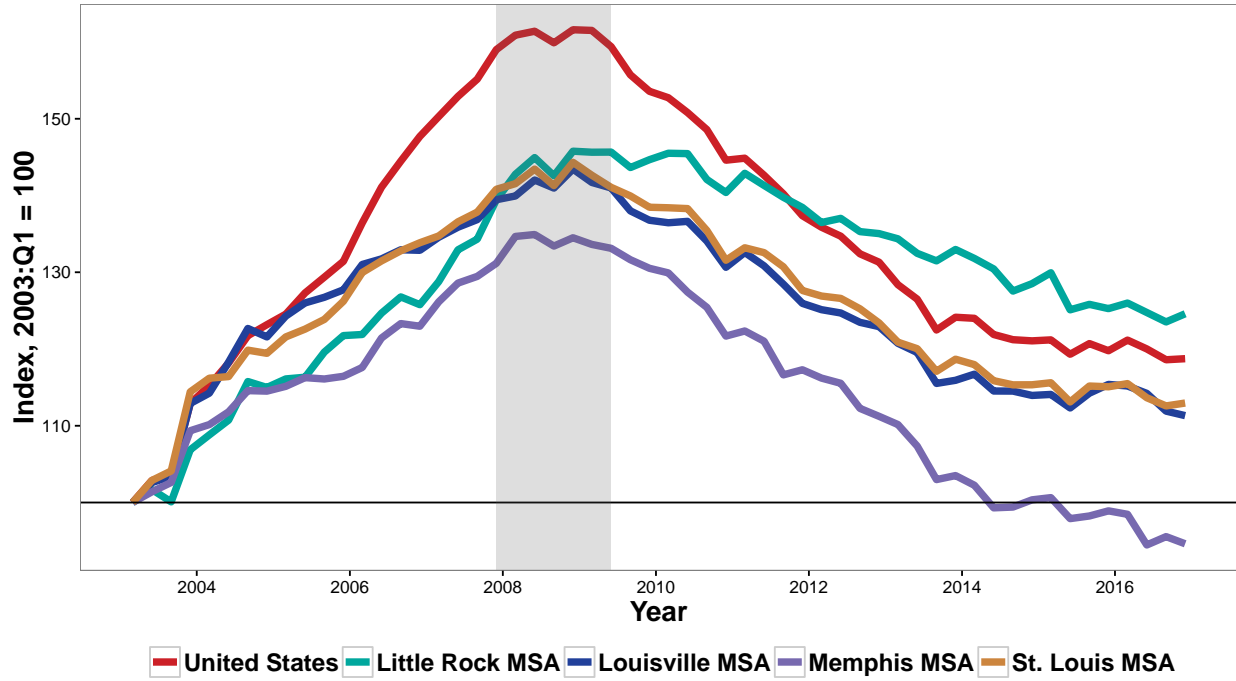


SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

NOTE: "Real" data are inflation-adjusted. The gray bar indicates recession.

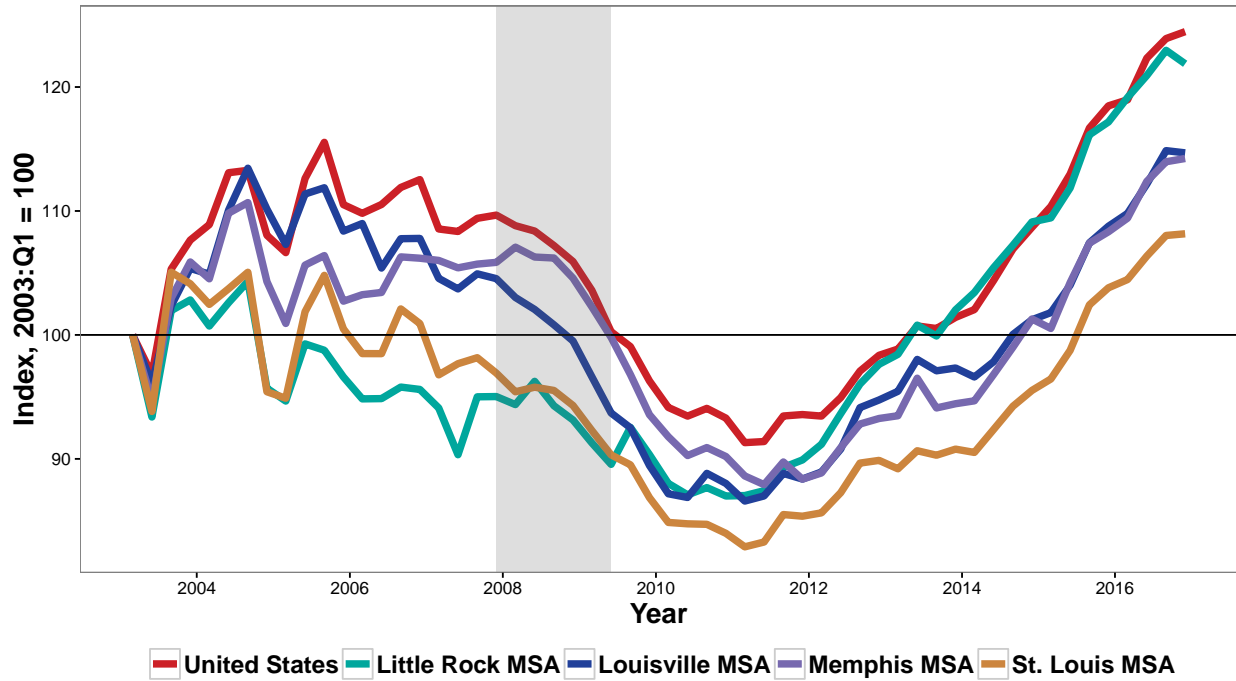
Per Capita Consumer Debt, by Debt Type

Figure 2A: Total Real Per Capita Mortgage Debt



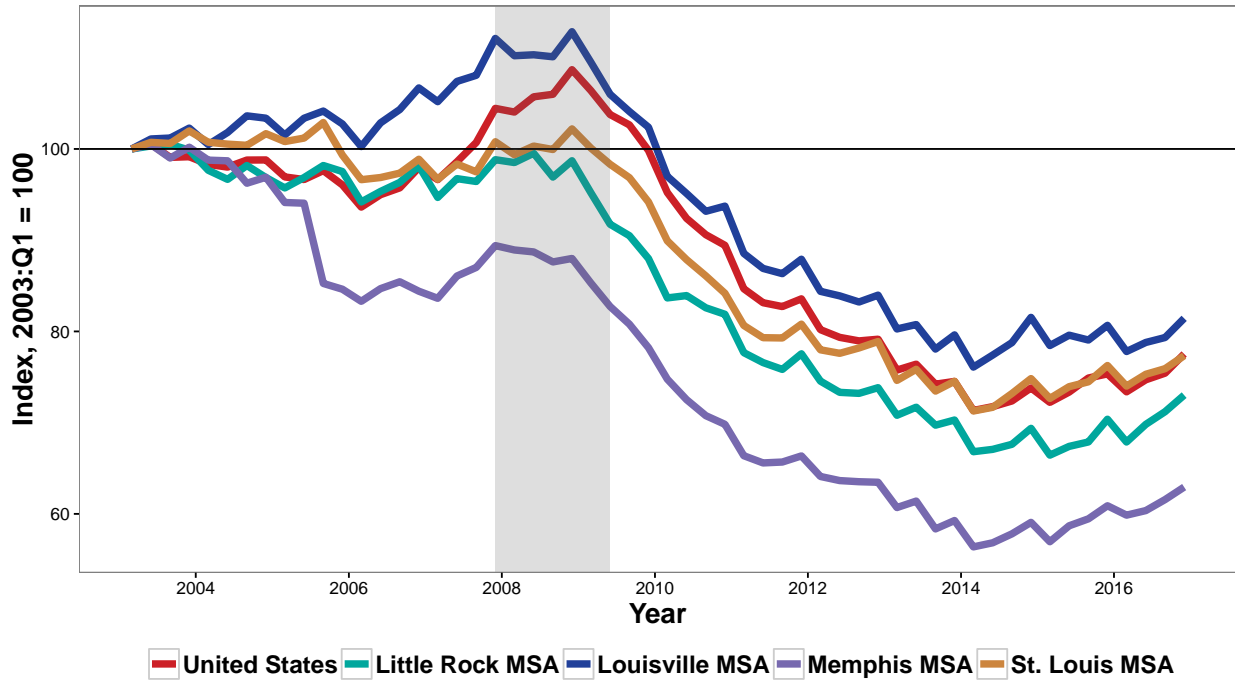
SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

Figure 2B: Total Real Per Capita Auto Debt



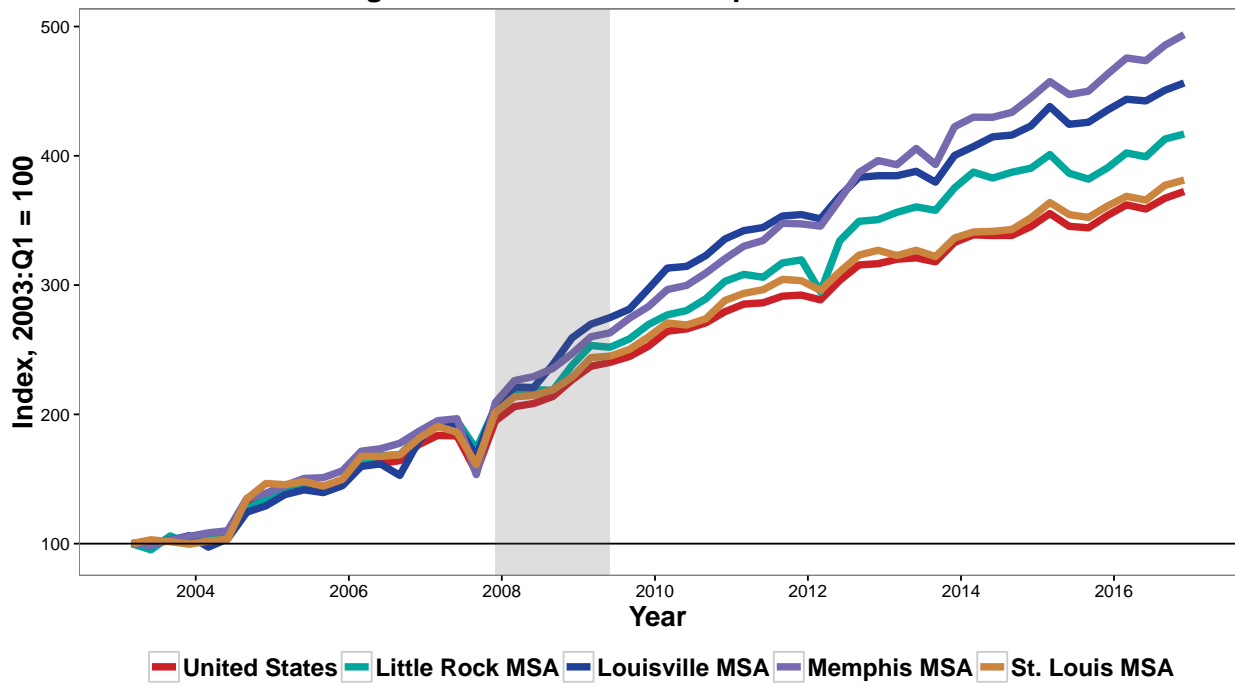
SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

Figure 2C: Total Real Per Capita Credit Card Debt



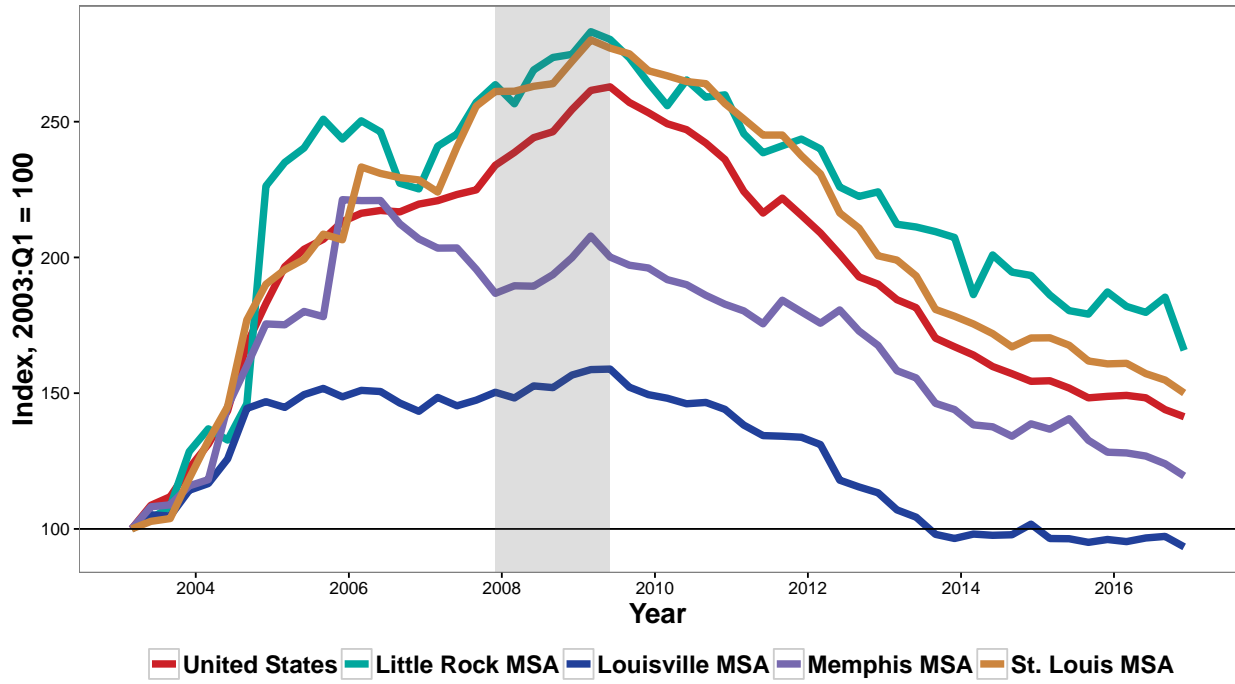
SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

Figure 2D: Total Real Per Capita Student Debt



SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

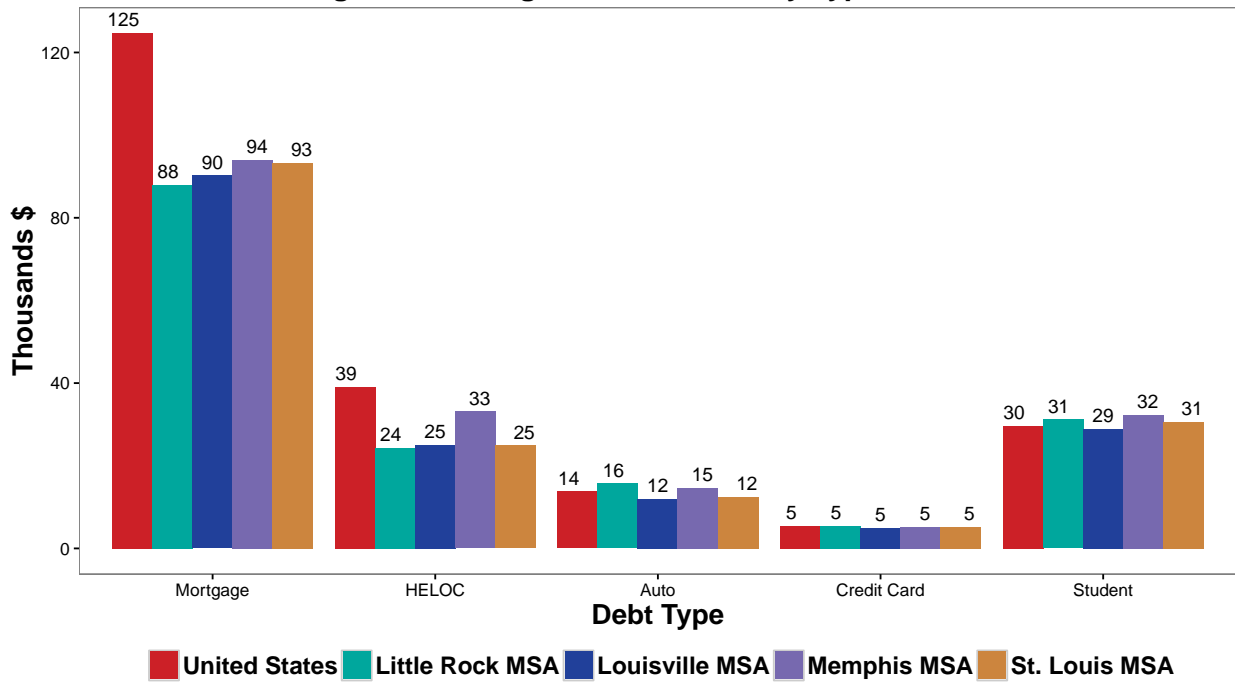
**Figure 2E: Total Real Per Capita HELOC Debt**



SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

**Average Consumer Debt Balance, by Type**

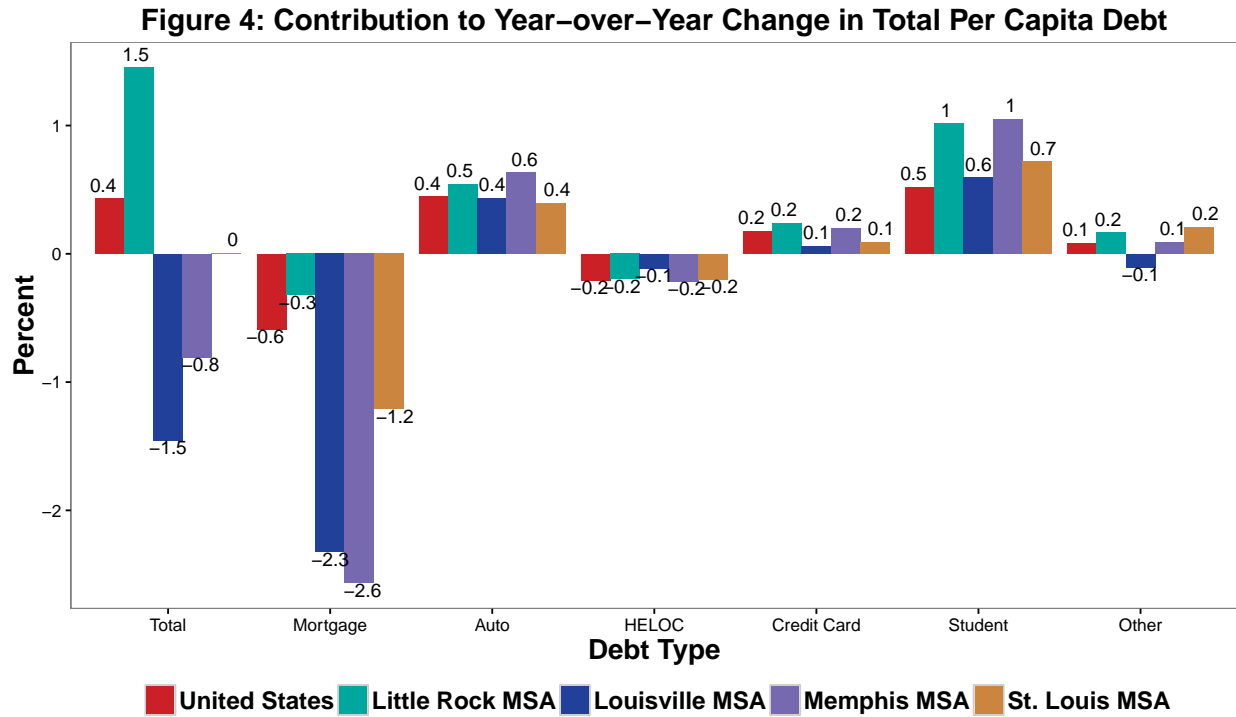
**Figure 3: Average Debt Balance, By Type, 2016:Q4**



SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

NOTE: All average balances are conditional on carrying that type of debt and are unadjusted for inflation.

## Contributions to Total Per Capita Debt Growth, by Type

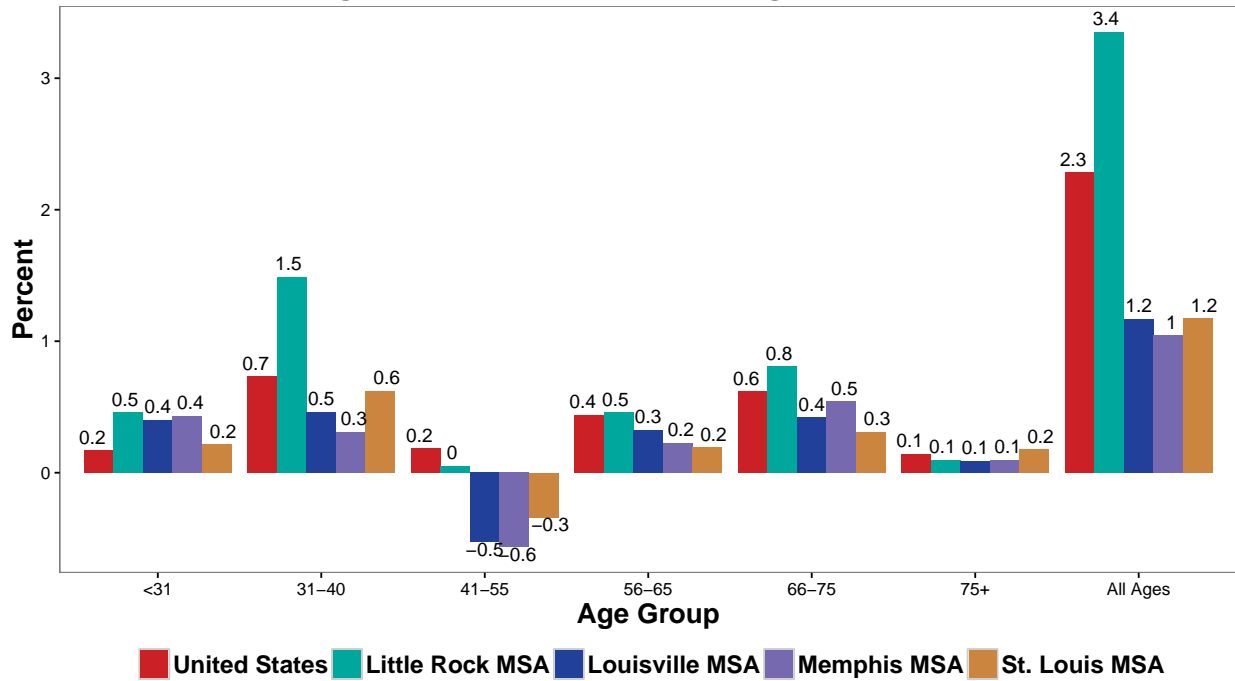


SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

NOTES: Growth in each type of debt is relative to total debt. All data labels have been rounded.

## Developments in Consumer Debt, a Demographic Perspective

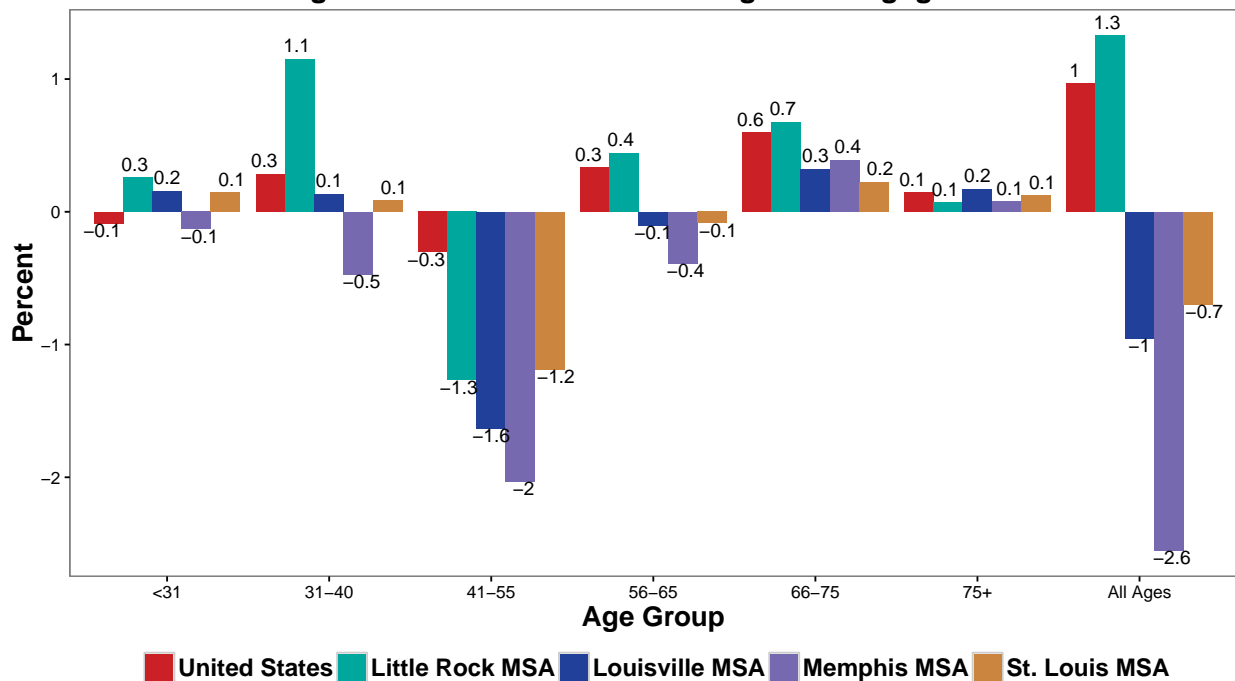
**Figure 5A: Year-over-Year Change in Total Debt**



SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

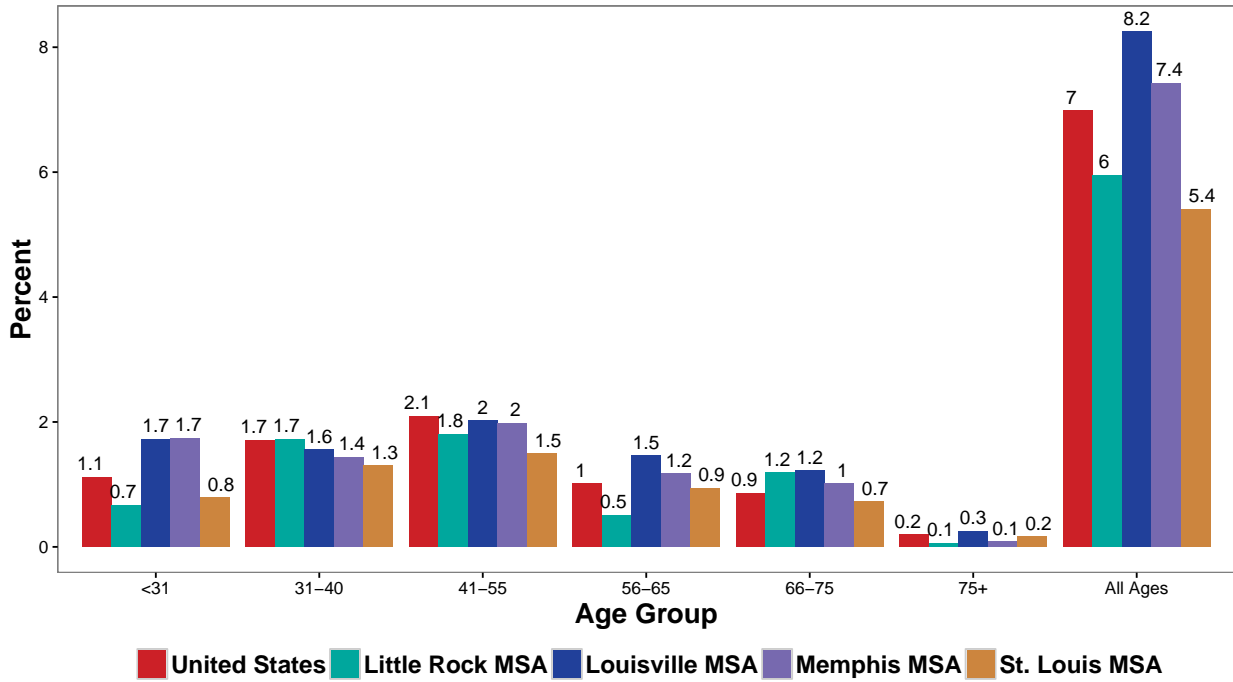
NOTE: Figures 5A to 5F are weighted with respect to the total by debt type.

**Figure 5B: Year-over-Year Change in Mortgage Debt**



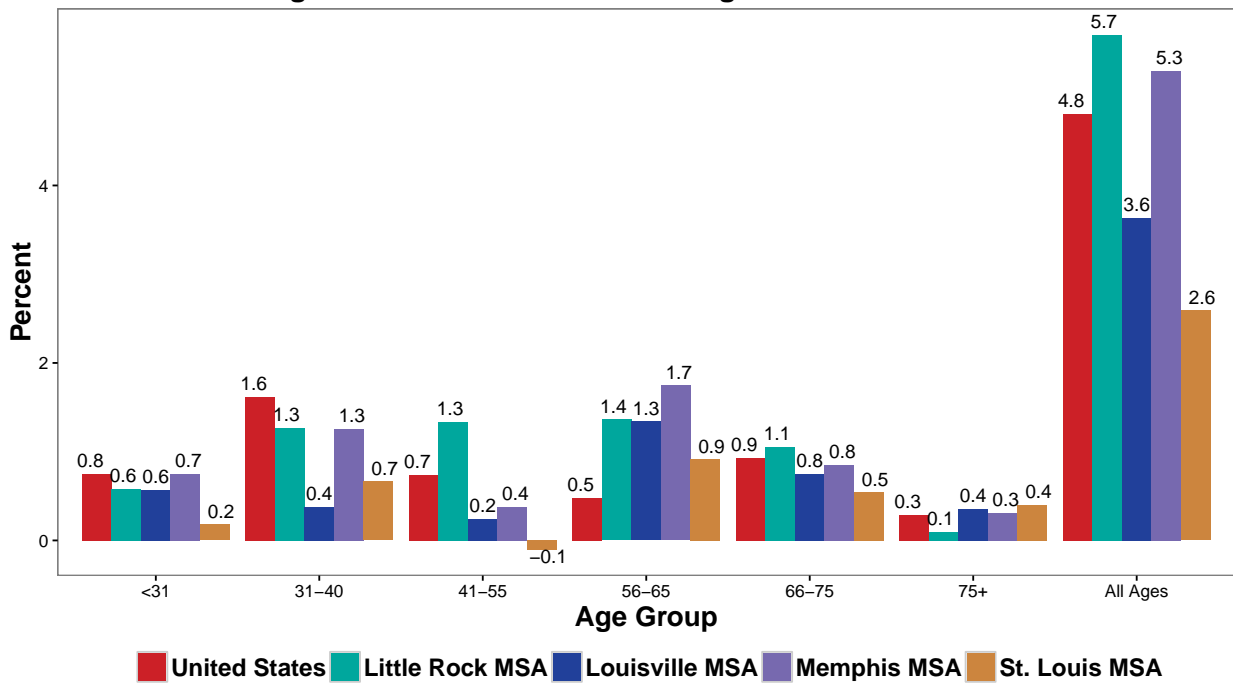
SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

**Figure 5C: Year-over-Year Change in Auto Debt**



SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

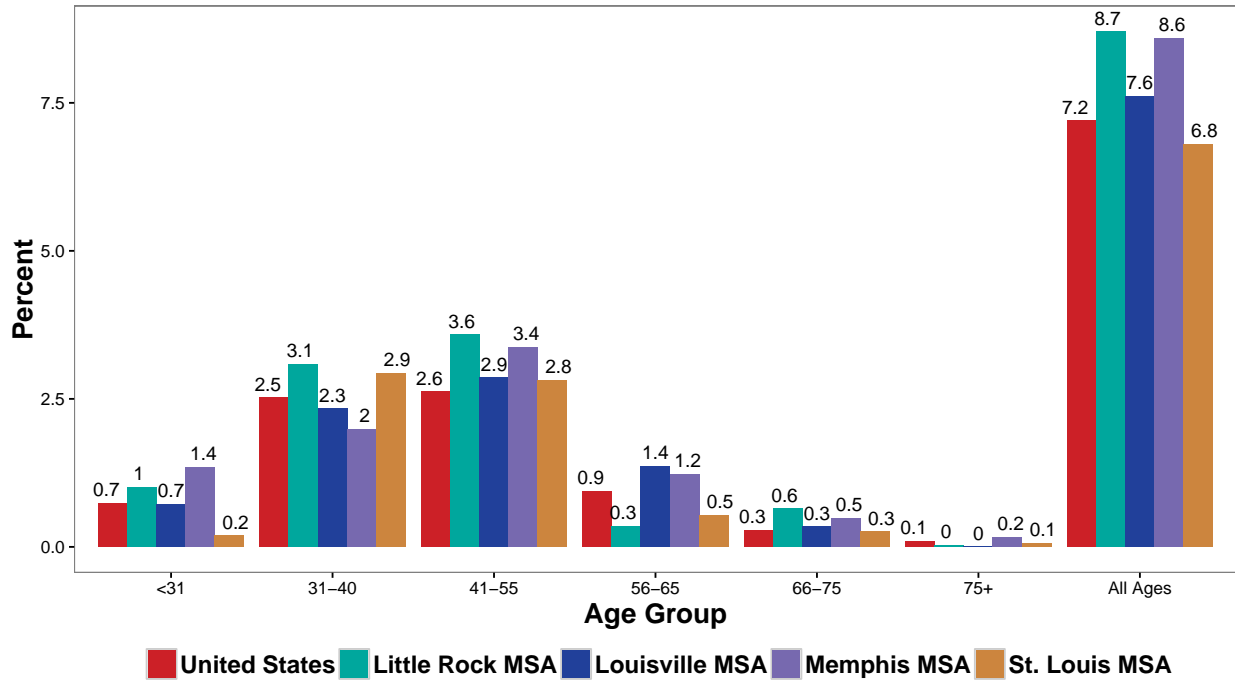
**Figure 5D: Year-over-Year Change in Credit Card Debt**



SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

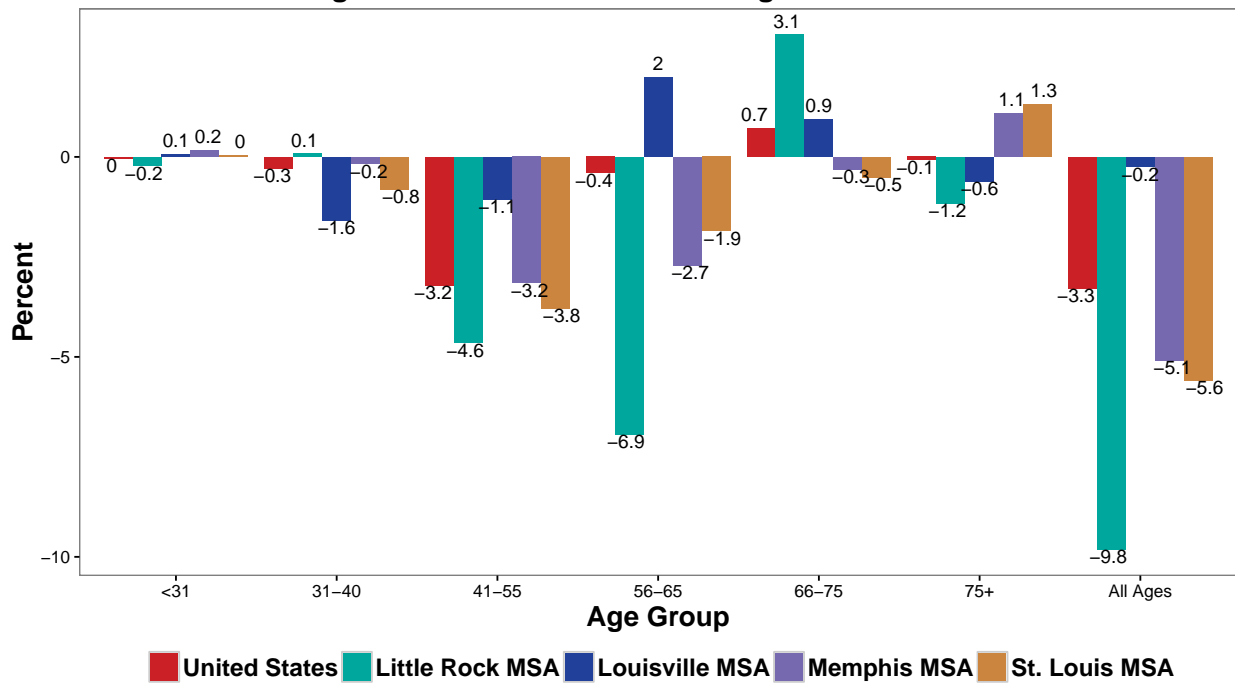


**Figure 5E: Year-over-Year Change in Student Debt**



SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

**Figure 5F: Year-over-Year Change in HELOC Debt**

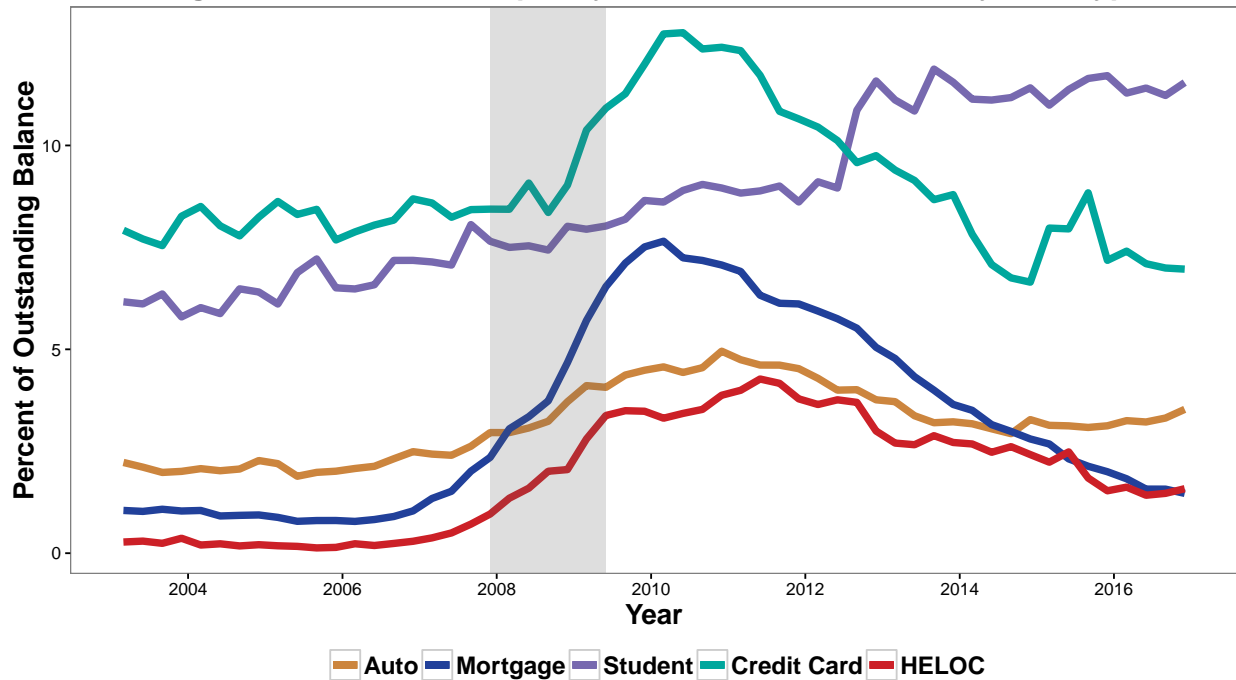


SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

# Consumer Debt Delinquency

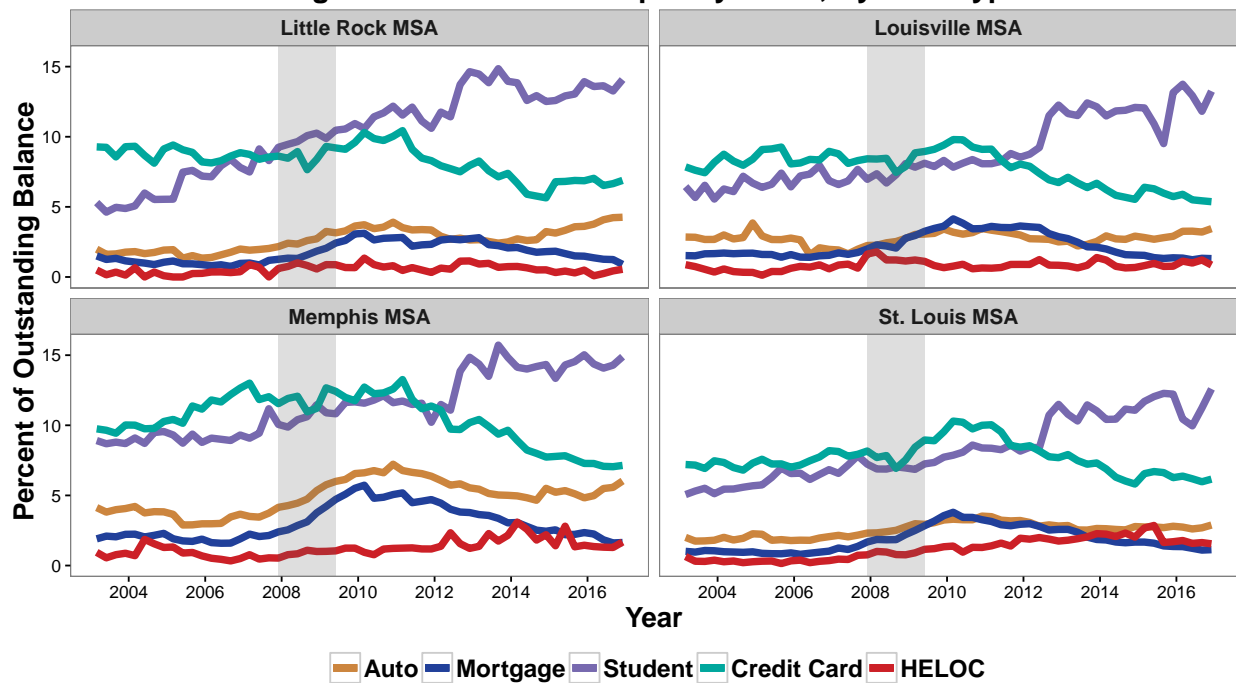
## Serious Delinquency Rates, by Type

**Figure 6A: Serious Delinquency Rates for United States, By Debt Type**



SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

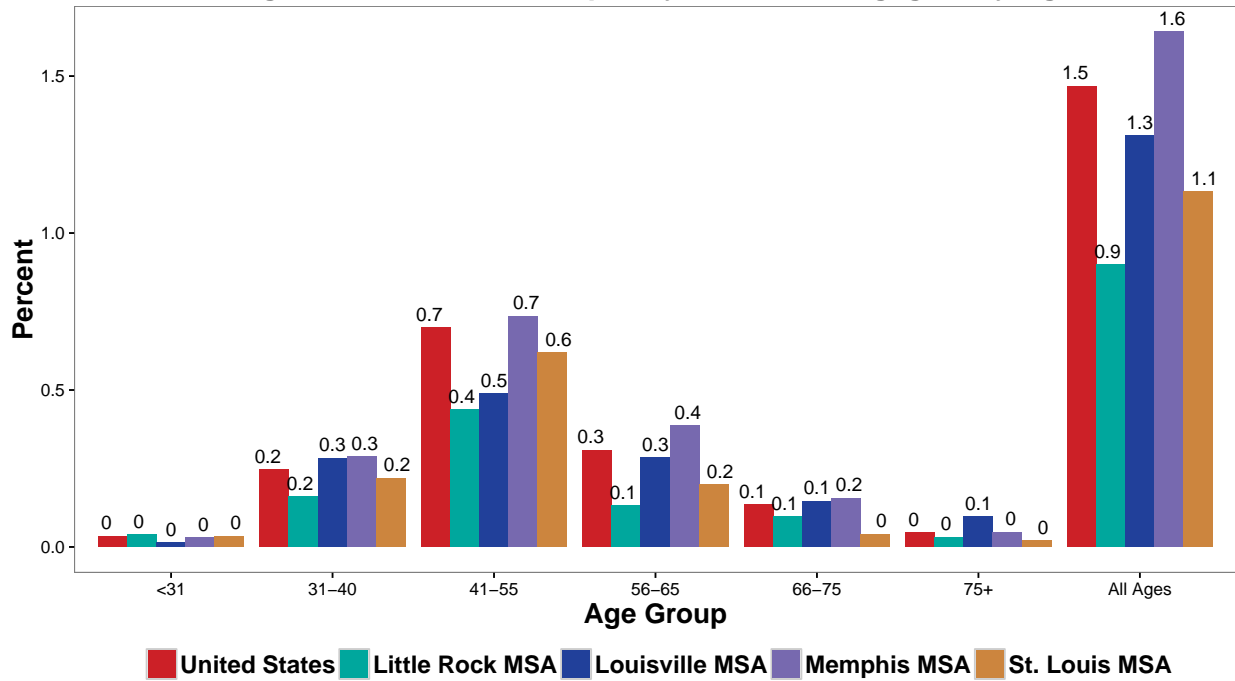
**Figure 6B: Serious Delinquency Rates, By Debt Type**



SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

## Serious Delinquency Rates, a Demographic Perspective

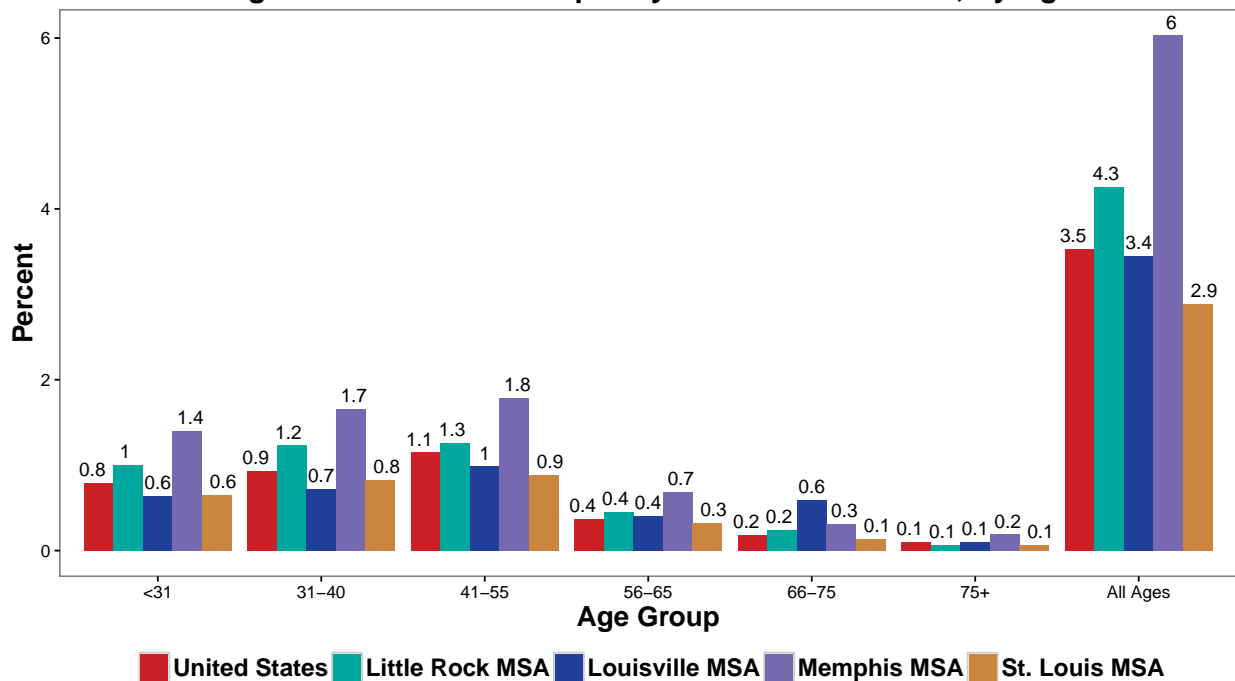
**Figure 7A: Serious Delinquency Rate for Mortgages, By Age**



SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

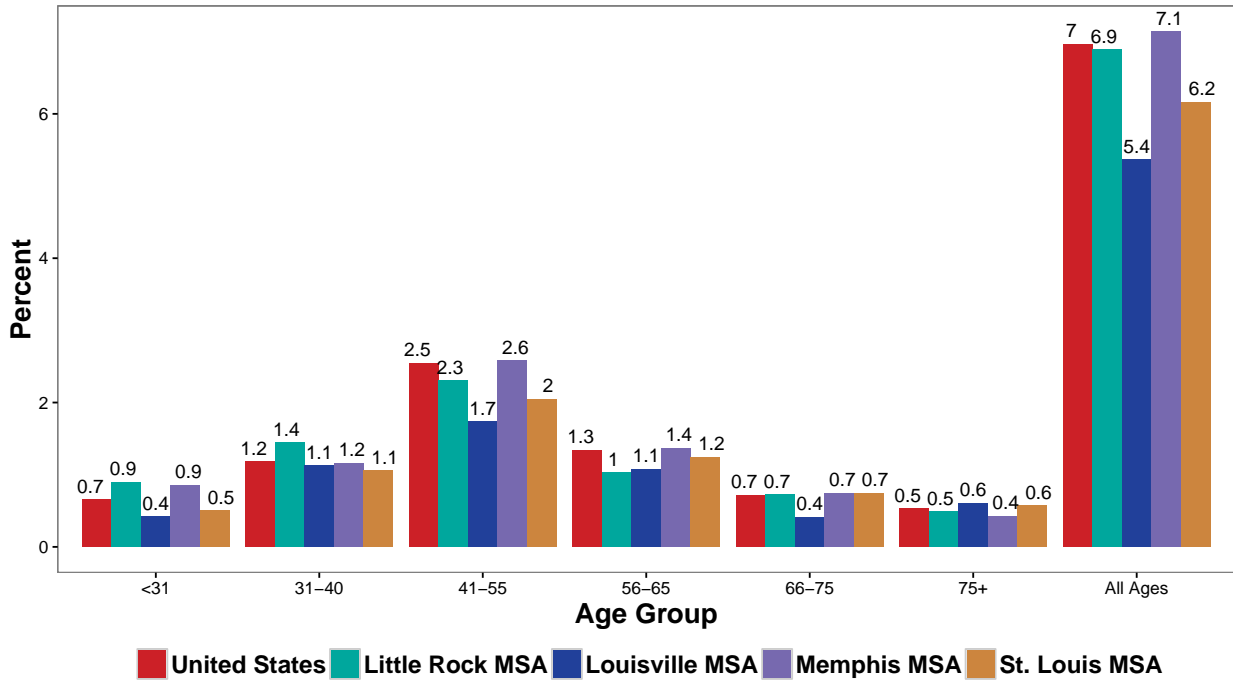
NOTE: Figures 7A to 7E are weighted with respect to the total by debt type.

**Figure 7B: Serious Delinquency Rate for Auto Loans, By Age**



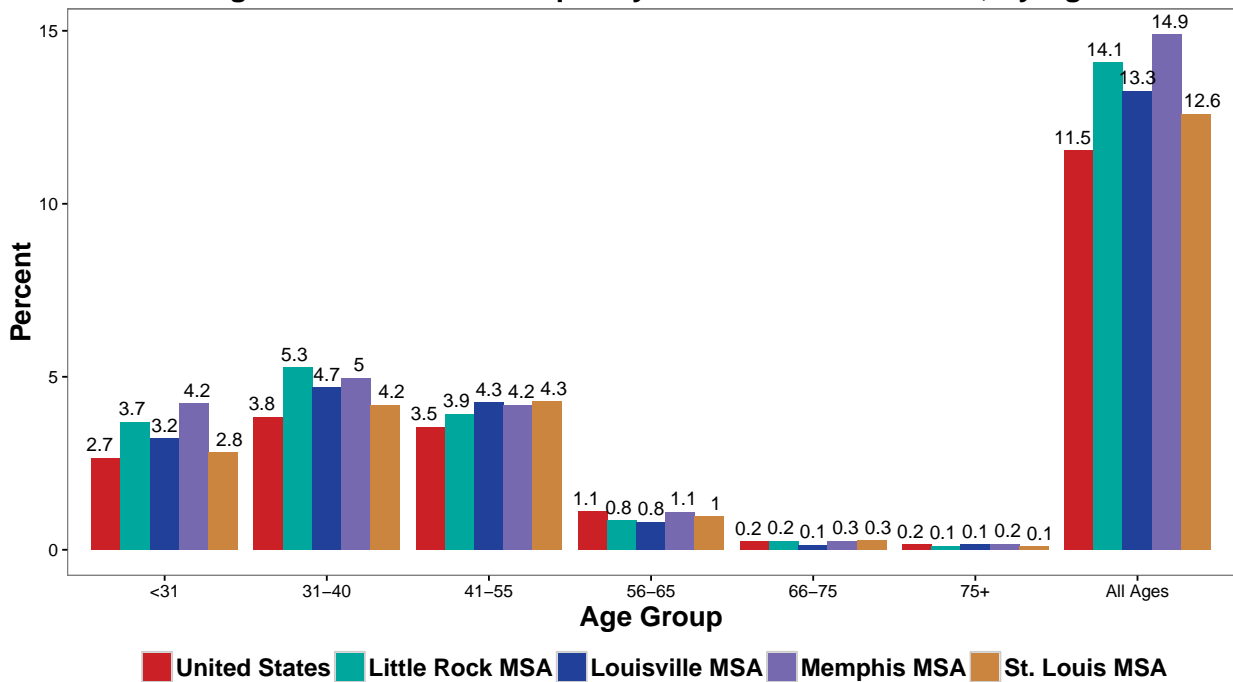
SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

**Figure 7C: Serious Delinquency Rate for Credit Card Loans, By Age**



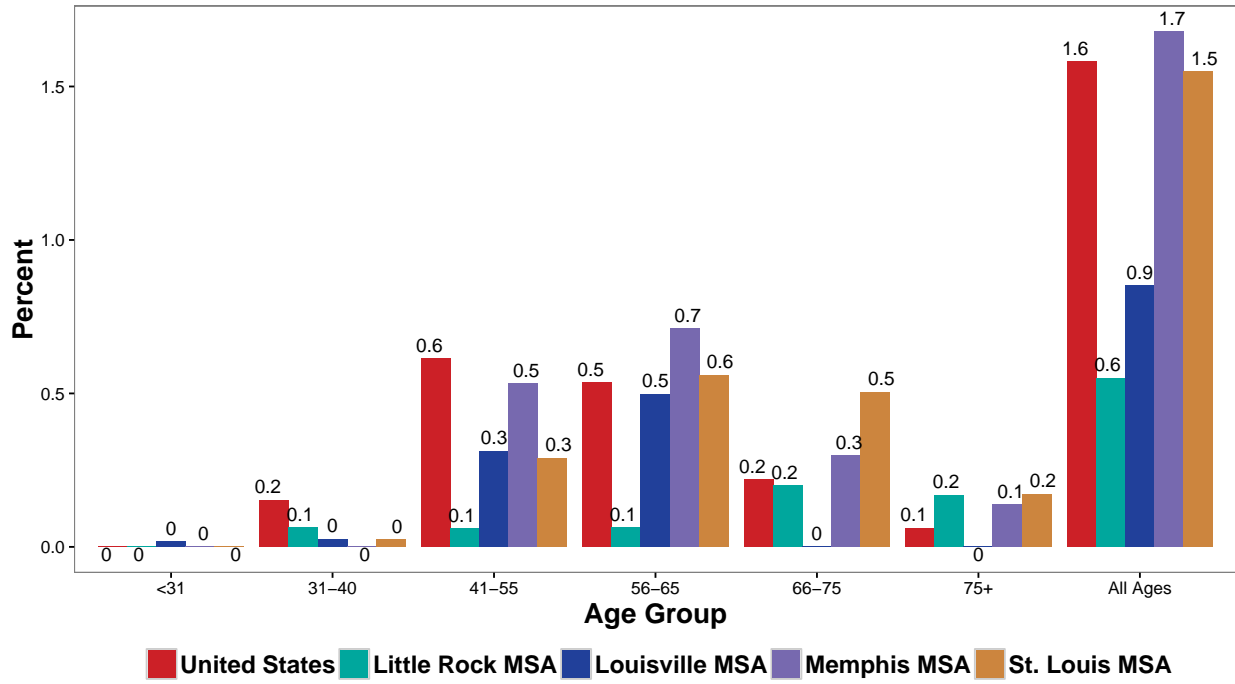
SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

**Figure 7D: Serious Delinquency Rate for Student Loans, By Age**



SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

**Figure 7E: Serious Delinquency Rate for HELOC Loans, By Age**

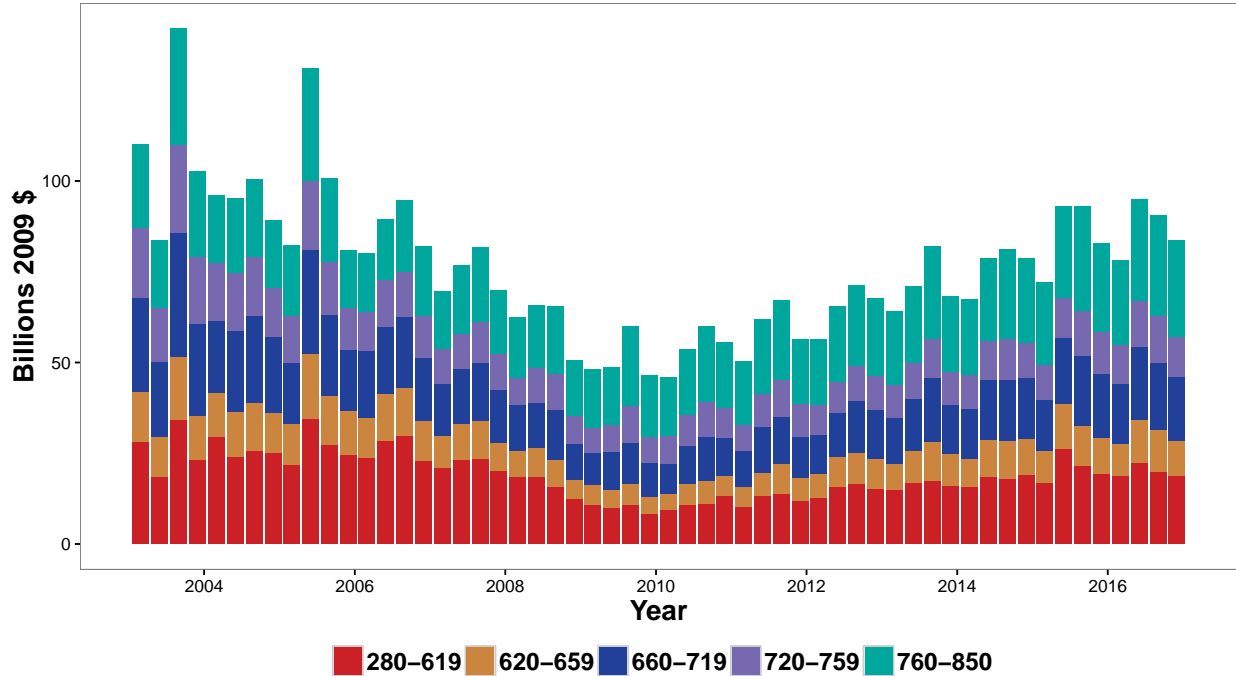


SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

# Loan Originations, by Equifax Risk Score

## Real Auto Loan Originations

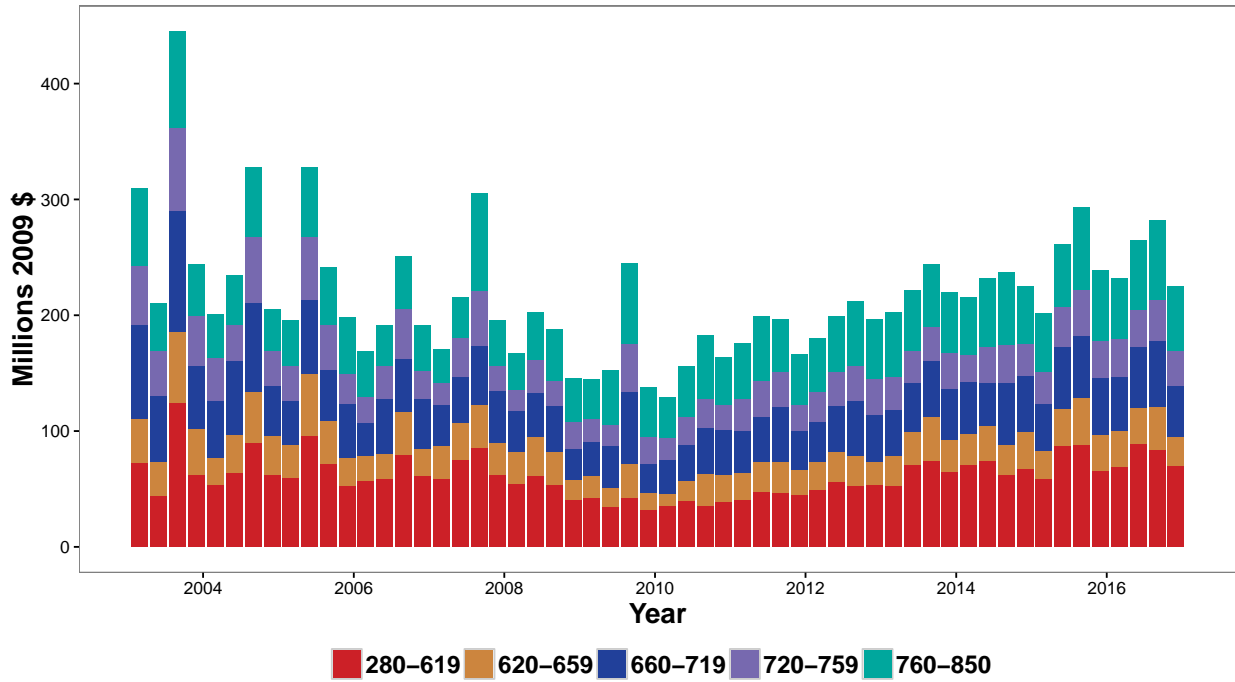
**Figure 8A: Auto Loan Originations, By Equifax Risk Score, United States**



SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

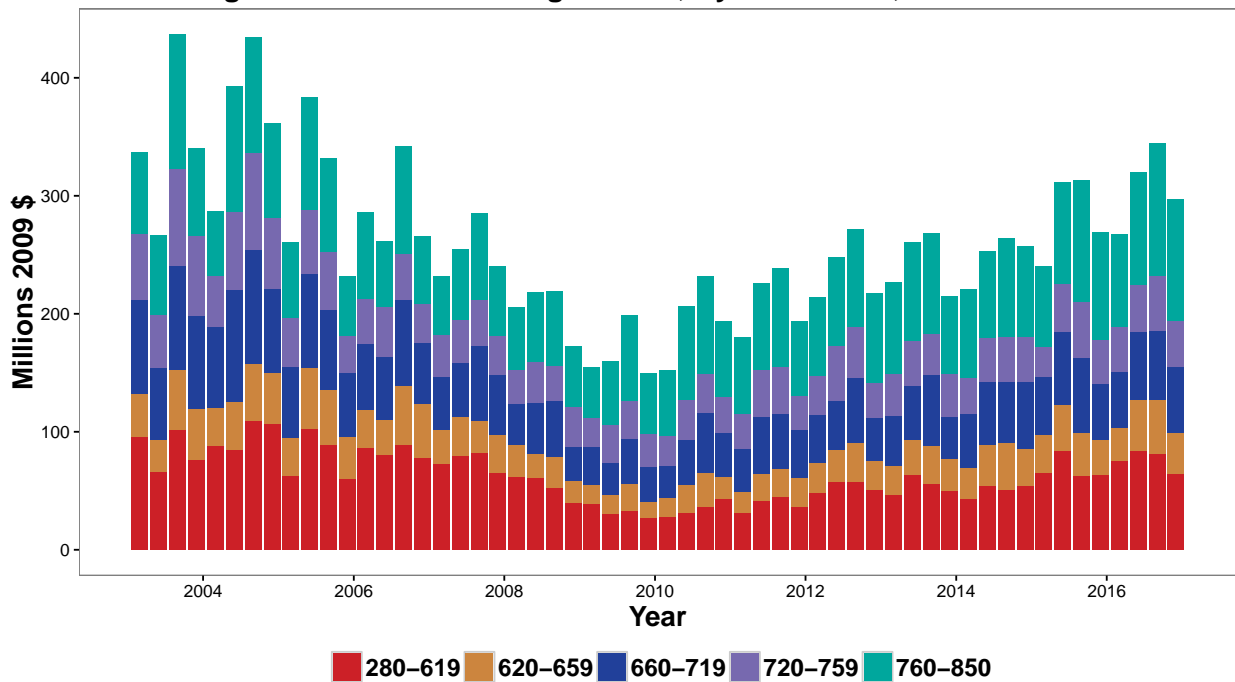
NOTES: For inflation adjustment, 2009 dollars are used, in line with the Bureau of Economic Analysis' personal consumption expenditures chain-type price index. Equifax developed the score to measure lending risk. Typically, credit scores below 620 are considered subprime. A score below 500 would qualify as deep subprime. These lower scores indicate that the borrower is more likely to have problems repaying the loan.

**Figure 8B: Auto Loan Originations, By Risk Score, Little Rock MSA**



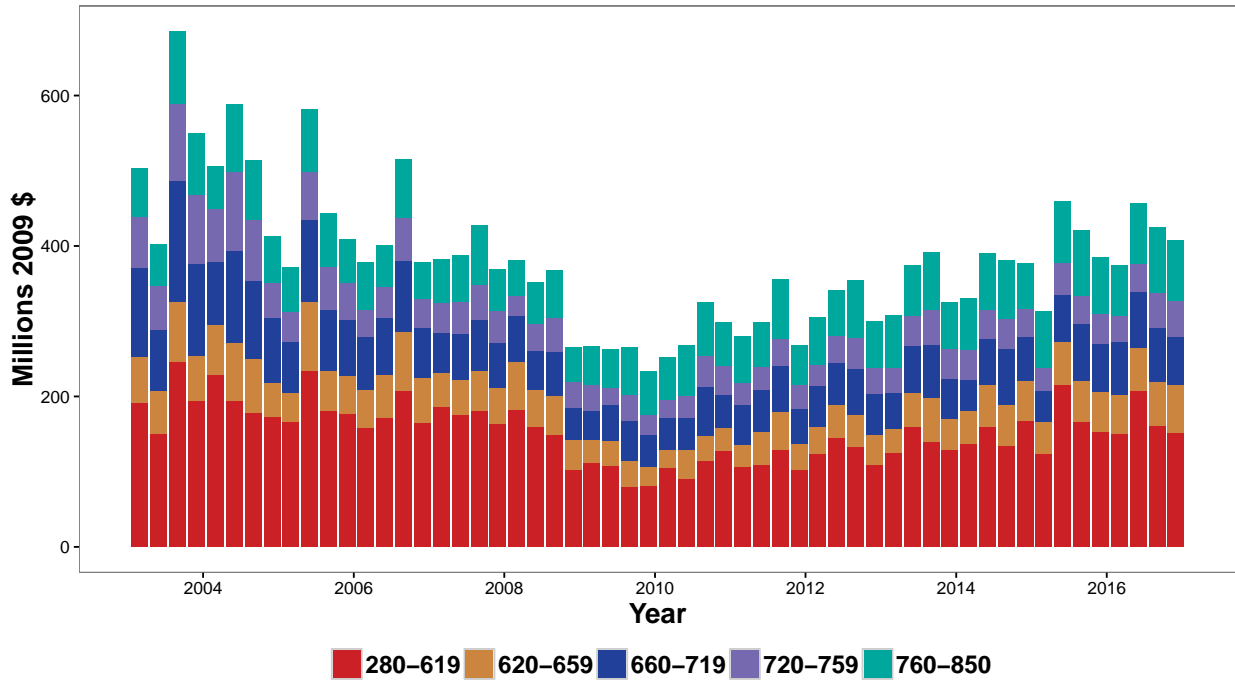
SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

**Figure 8C: Auto Loan Originations, By Risk Score, Louisville MSA**



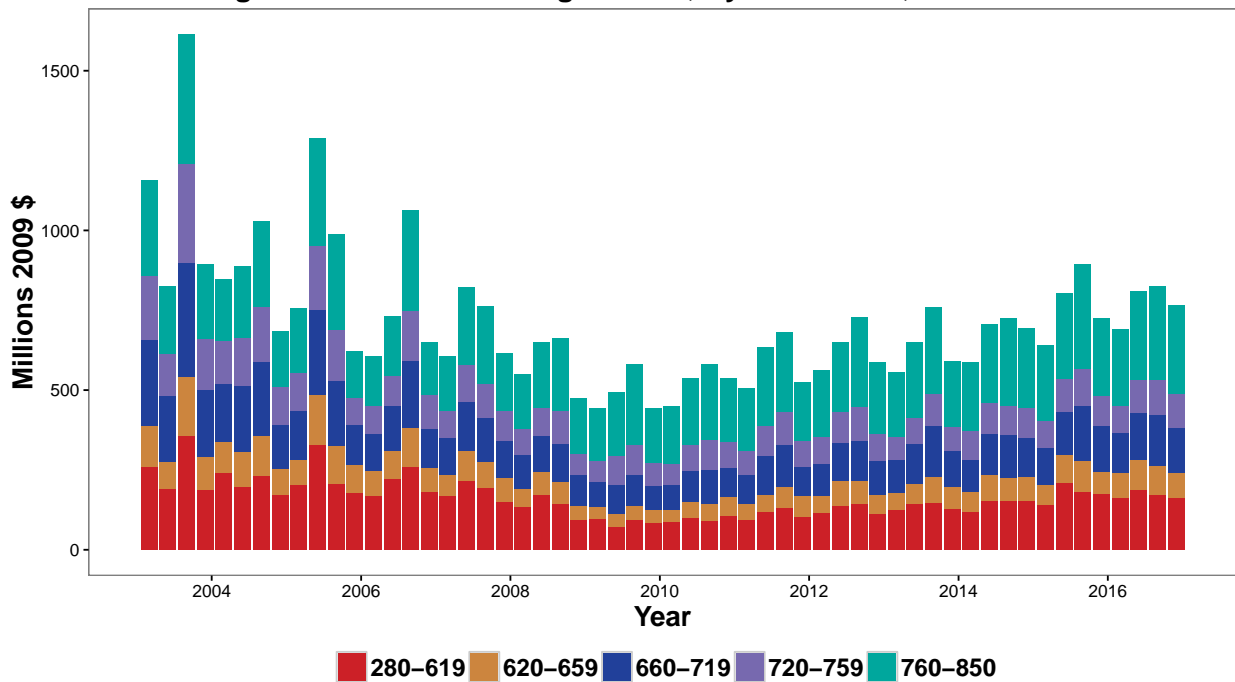
SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

**Figure 8D: Auto Loan Originations, By Risk Score, Memphis MSA**



SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

**Figure 8E: Auto Loan Originations, By Risk Score, St. Louis MSA**

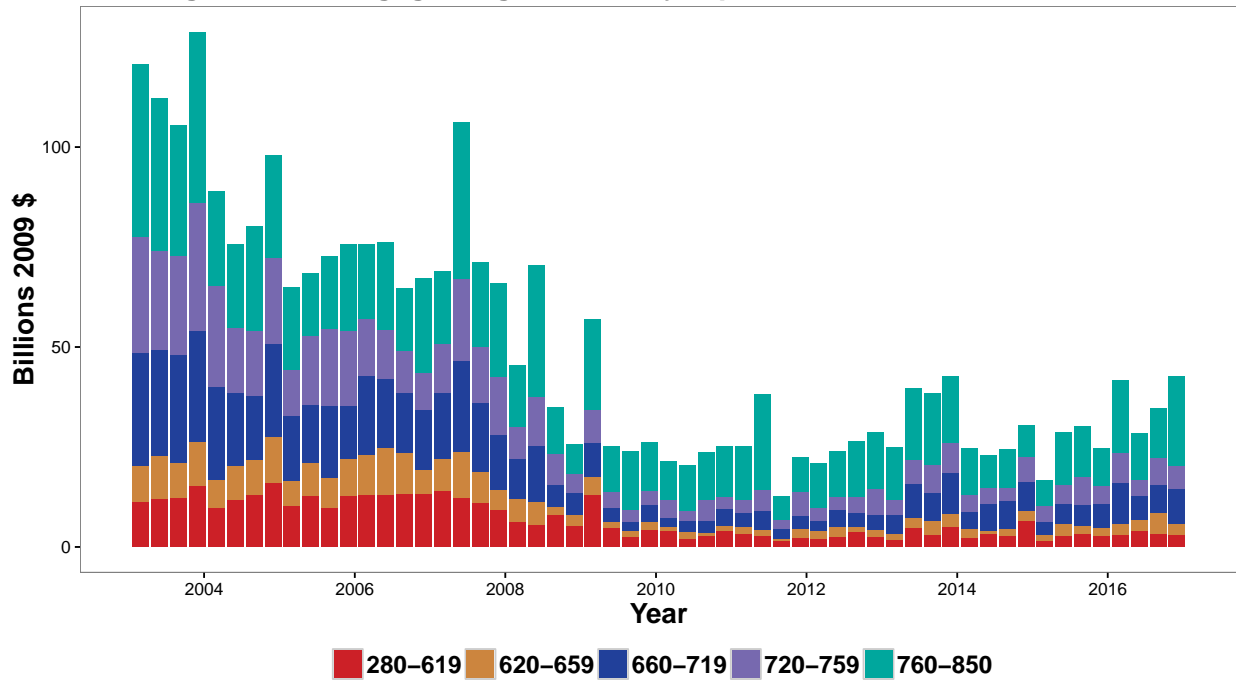


SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.



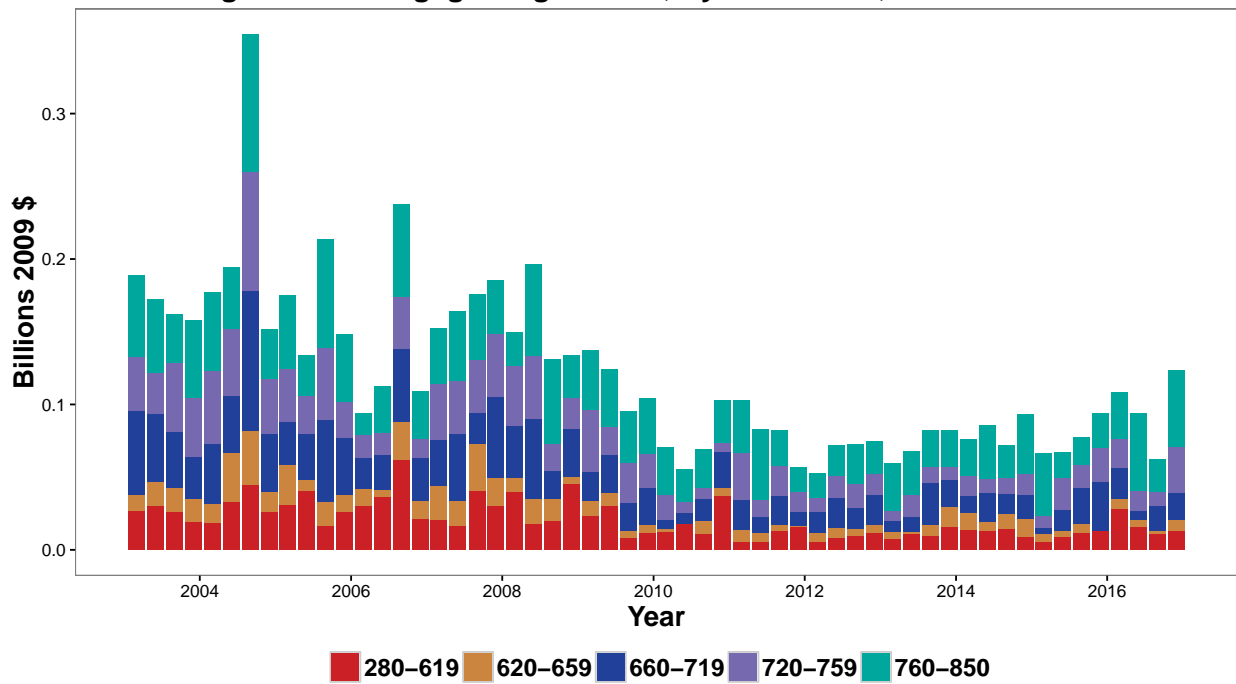
## Real Mortgage Loan Originations

**Figure 9A: Mortgage Originations, By Equifax Risk Score, United States**



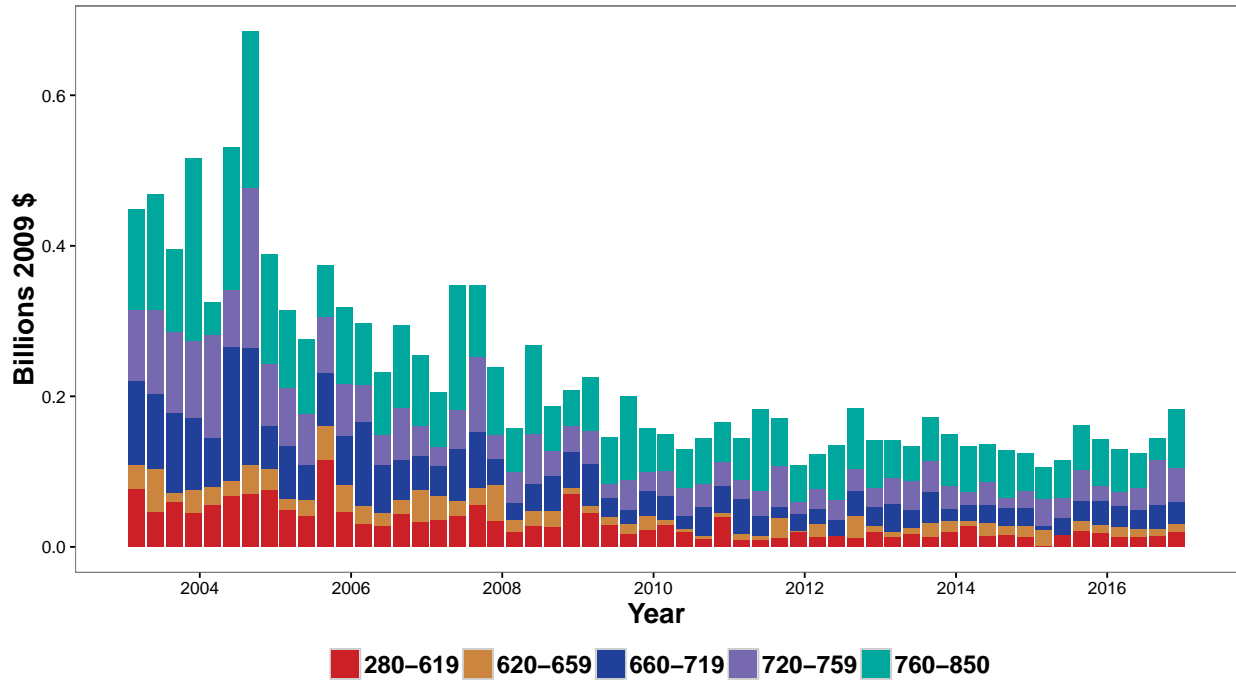
SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

**Figure 9B: Mortgage Originations, By Risk Score, Little Rock MSA**



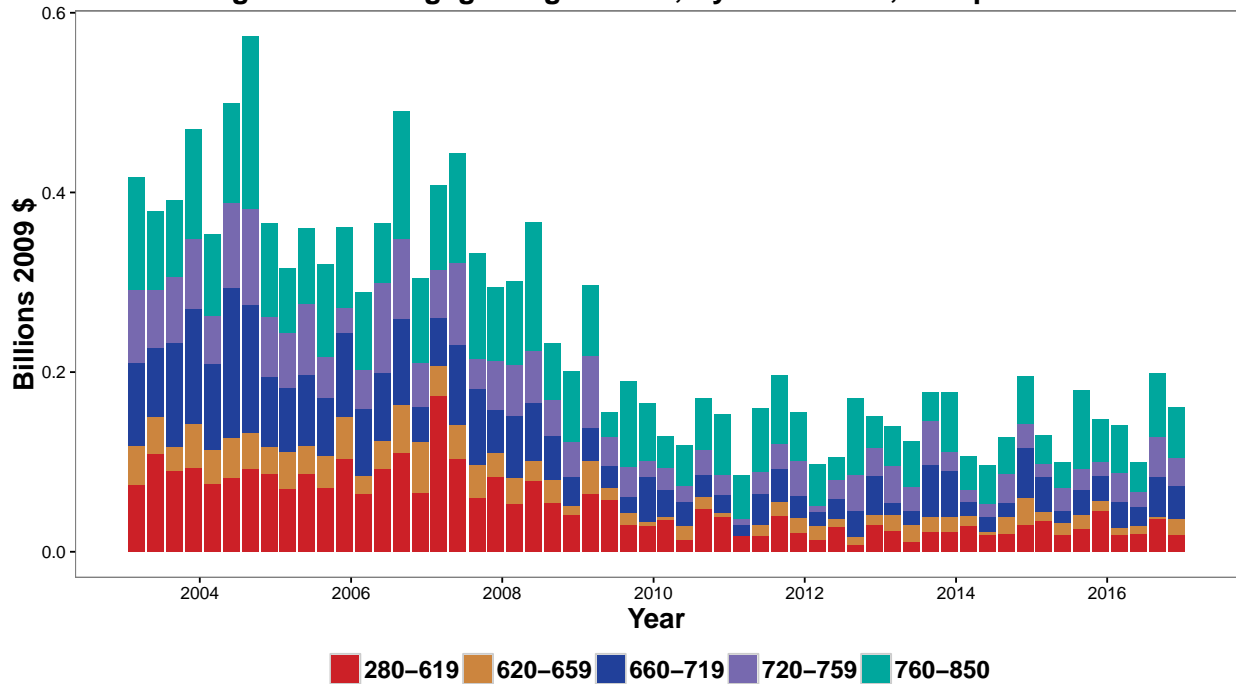
SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

**Figure 9C: Mortgage Originations, By Risk Score, Louisville MSA**



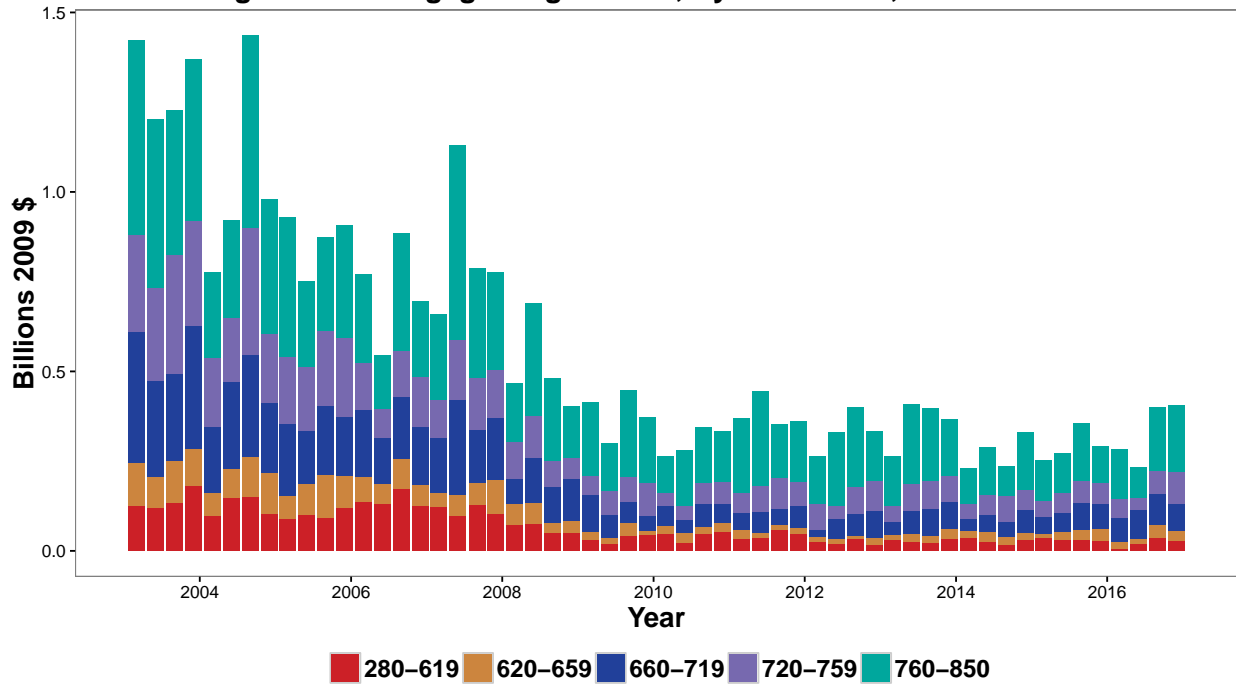
SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

**Figure 9D: Mortgage Originations, By Risk Score, Memphis MSA**



SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

Figure 9E: Mortgage Originations, By Risk Score, St. Louis MSA



SOURCE: Federal Reserve Bank of NY/Equifax Consumer Credit Panel.

## Methodology

The Federal Reserve Bank of New York/Equifax Consumer Credit Panel consists of Equifax credit report data for a longitudinal quarterly panel of individuals from 1999 to the present. Due to reporting irregularities prior to 2003, we restrict our sample so that it begins in the first quarter of 2003. The panel is a nationally representative 5 percent random sample of all individuals with a Social Security number and a credit report. Thus, our analysis excludes debt held by individuals without Social Security numbers. We use only data for individual consumers, but the sample also includes all other individuals living at the same address as the primary sample members. The resulting database includes a maximum sample of over 44 million individuals in each quarter.

The Consumer Credit Panel offers a variety of variables for several important consumer debt categories:

- For mortgage debt, we combine balances for first mortgages and home equity installment loans.
- We put home equity lines of credit (HELOC) in a separate debt category because HELOC is a revolving line of credit that may fluctuate depending on when the homeowner chooses to borrow.
- Auto debt is the sum of all loans taken out to buy an automobile; these loans include those financed by a banking institution, as well as those financed by dealerships or auto financing companies.
- Credit card debt is the balance for all revolving accounts for banks, bankcard companies, national credit card companies, credit unions, and savings and loan associations.
- Student loans include all loans used to finance education expenses; the loans are provided by banks, credit unions and other financial institutions, as well as by federal and state governments.
- An “other” category includes consumer finances (sales financing, personal loans) and retail (clothing, grocery, department stores, home furnishings, gas, etc.) loans. This category represents a very small share of total debt, and its varied components inhibit useful interpretation of trends. For that reason, it is not included on most of the figures.

To reduce computing requirements, we use a 2 percent subsample for all national estimates and figures. For all regional analysis, we use the entire 5 percent sample in order to maximize the sample size available for smaller geographic areas. While estimating individual total balances, we avoid double counting by attributing 50 percent of the balance associated with each joint account to each individual. Aggregate debt totals are calculated by multiplying estimated figures by  $20 = (1 / .05)$  for the regional analysis and by  $1,000 = (1 / (.05 * .02))$  for the nation. All debt figures, with the exception of average debt balance, are adjusted for inflation using the personal consumption expenditures chain-type price index, with a base year of 2009. Analysis of regional MSAs uses the July 2015 definitions set forth by the Office of Management and Budget.

## Definitions

**Total Debt Balance:** Total balance across all accounts, excluding those in bankruptcy.

**Average Balance:** All average balances are conditional on carrying that type of debt. For example, average student debt pertains to the average balance among individuals who have a student loan. Also, average debt balances are reported unadjusted for inflation. This was done to make those balances more relatable to a reader's personal financial obligations.

**Equifax Risk Score:** Predicts the likelihood of a consumer becoming seriously delinquent (90-plus days past due on debt). The score ranges from 280 to 850, with someone with a higher score being viewed as a better risk than someone with a lower score.

**Serious Delinquency Rate:** The share of debt that has a payment at least 90 days past due, divided by the total outstanding balance for that type of debt.

Debt at least 90 days past due includes:

- Debt categorized as 90 days late—between 90 and 119 days late with not more than four payments past due;
- 120 days late—at least 120 days past due with five or more payments past due;
- In collections; and
- Severely derogatory—any of the previous states combined with reports of a repossession, charge-off to bad debt or foreclosure.

The total outstanding balance includes debt at least 90 days past due in addition to:

- Debt which is current or paid as agreed;
- 30 days late—between 30 and 59 days late with not more than two payments past due; and
- 60 days late—between 60 and 89 days late with not more than three payments past due.

Not all creditors provide updated information on payment status, especially after accounts have been derogatory for a longer period of time.

**Student Loan Reporting Issues:** There are some reporting issues related to student loans in the raw Equifax data. This involves a temporary or sustained period of nonreporting of student loan accounts. We leave the data as they were provided by Equifax.

**Auto Loan Originations:** In calculating the balance of new auto loan originations, we use both the number of accounts and total balance on an individual credit report in consecutive quarters. New auto loan originations are then defined as an increase in the balance accompanied by an increase in the number of accounts reported.