

Household Debt in America: A Look Across Generations Over Time

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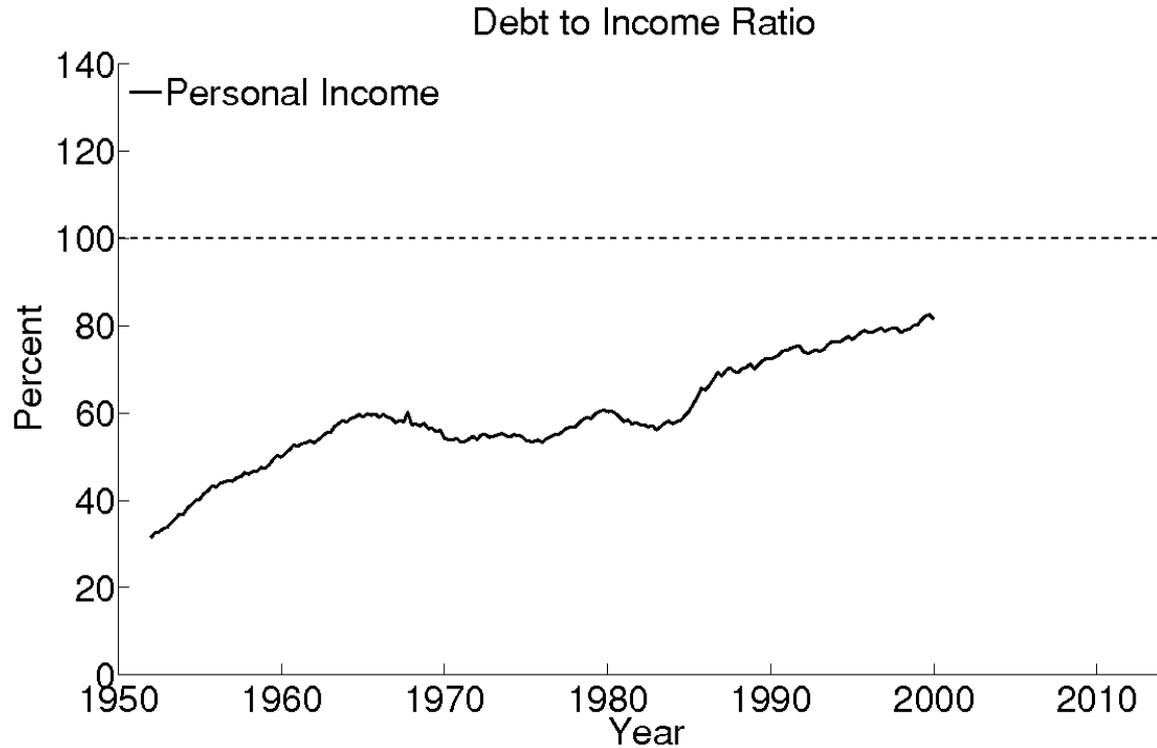
November 5, 2014

The views expressed here are those of the speakers and do not necessarily represent the views of the Federal Reserve Bank of St. Louis or of the Federal Reserve System.



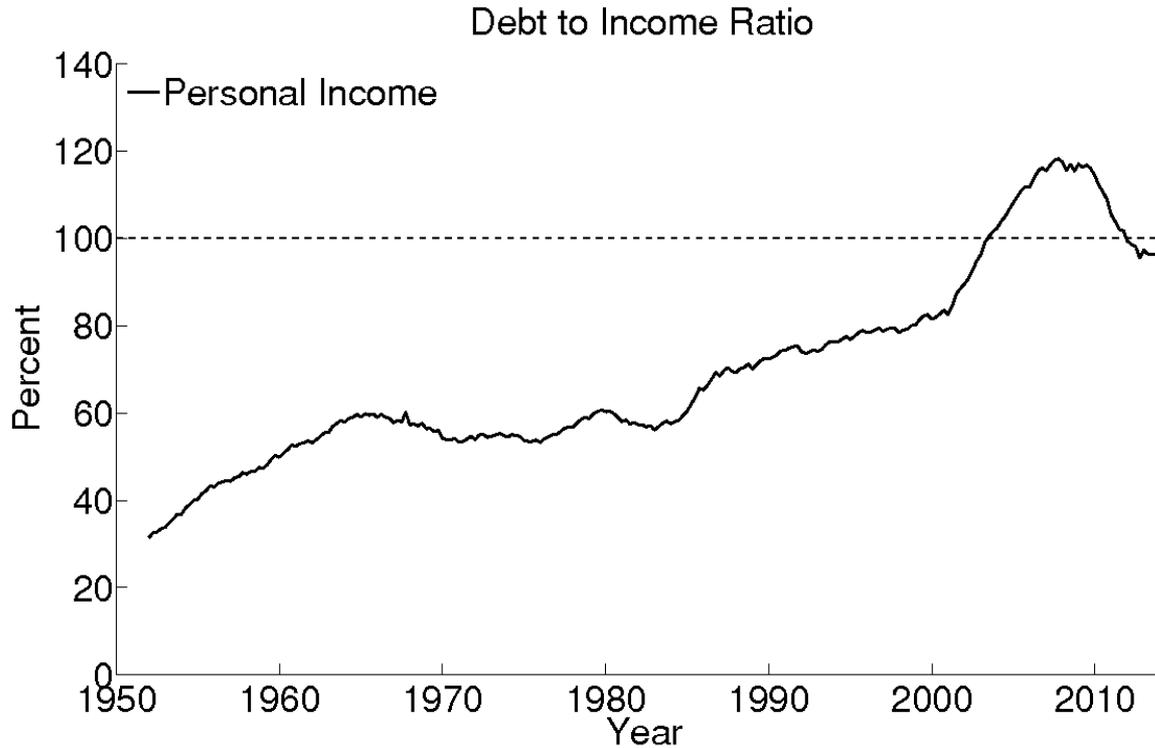
How Much Have Different Generations of Americans Borrowed Relative to Their Income?

Household Debt in America



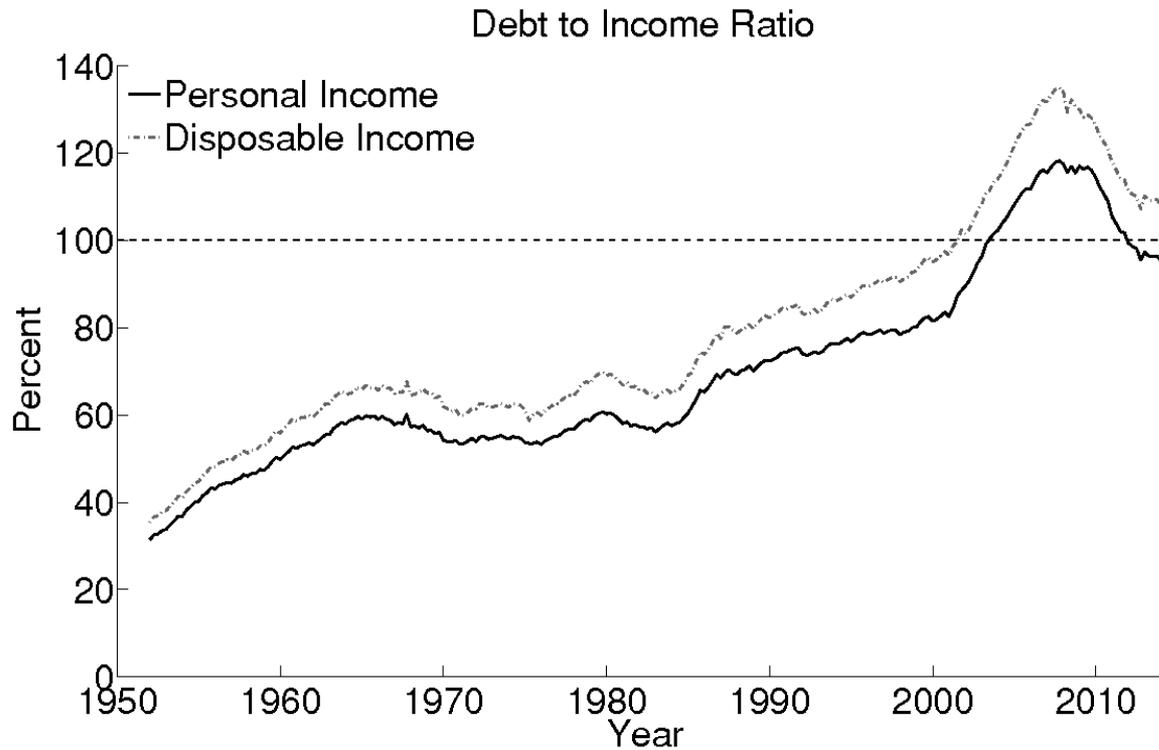
SOURCES: Bureau of Economic Analysis and Federal Reserve Board.

Household Debt in America



SOURCES: Bureau of Economic Analysis and Federal Reserve Board.

Personal vs. Disposable Income



SOURCES: Bureau of Economic Analysis and Federal Reserve Board.

Household Debt in America: Interest Rate



SOURCES: Bureau of Economic Analysis and Federal Reserve Board.

Interest Rates and Debt

- ❑ The connection between these factors is not obvious. Why?
 - Future rates matter as much as current rates.
 - Expectations.
 - Demographics (i.e., baby boom generation).



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Debt and the Great Recession

- ❑ This was the **first postwar U.S. recession** in which deleveraging has played a key role.
- ❑ **Evidence:** States with the largest declines in home values had the weakest recoveries.
- ❑ **Monetary policy** may not be able to reach households that are deleveraging.



Thomas Northcut/Photodisc/Thinkstock

Purpose of Today's Talk

- ❑ Why do households use debt?
- ❑ Which are the most important forms of debt over the life cycle?
- ❑ What role did borrowing play in the financial crisis?
- ❑ What has been the response of the Fed?

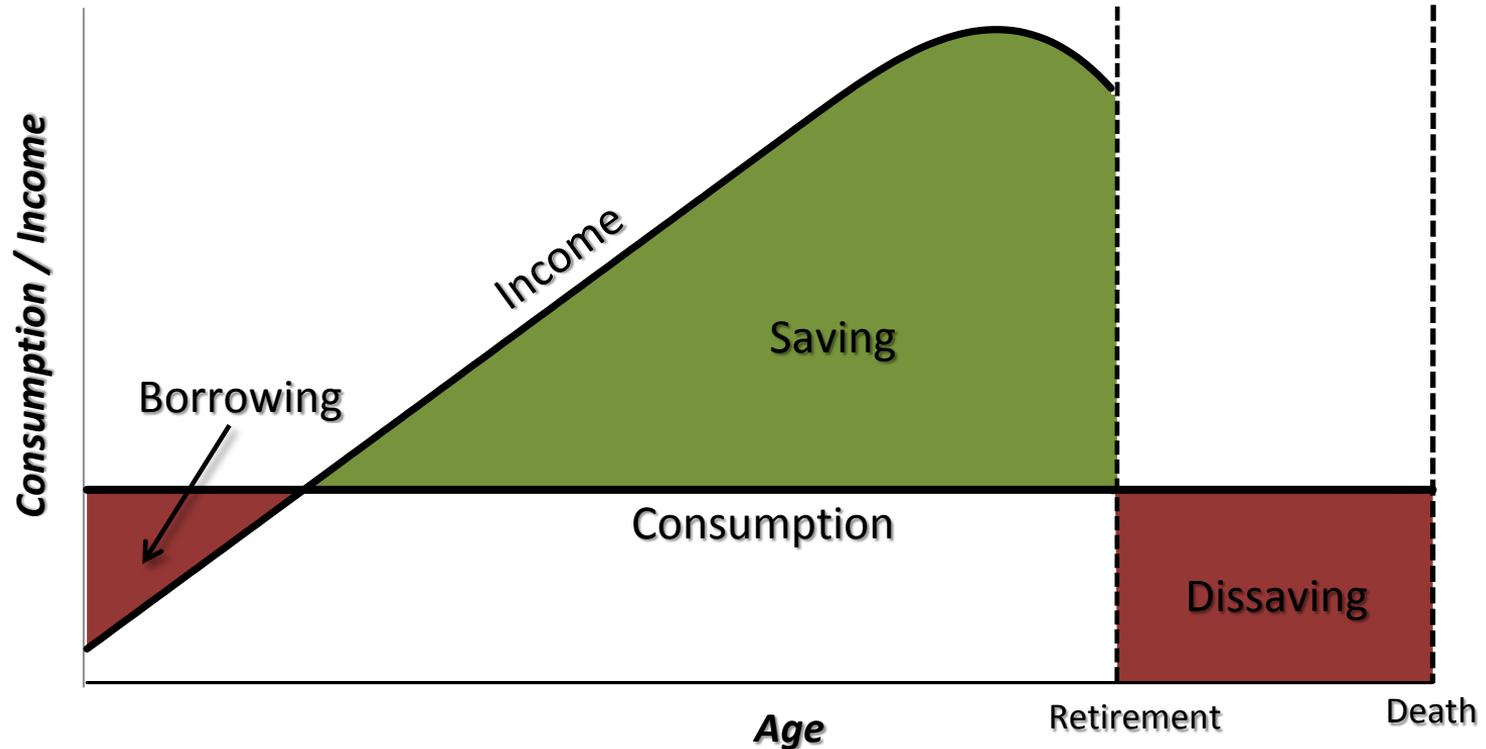
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- ❑ What has been the response of the Fed?

These questions will be analyzed through the lens of a life-cycle framework

Why Do Households Borrow (or Save)?

Consumption and Income Over the Life Cycle



The Message from this Framework

- ❑ Over an individual's life, there is a natural mismatch of income and consumption that can result in borrowing.
- ❑ Holding debt does not necessarily indicate a future financial problem!
- ❑ Household debt decisions must be consistent with repayment over the life horizon.
- ❑ What determines consumption?

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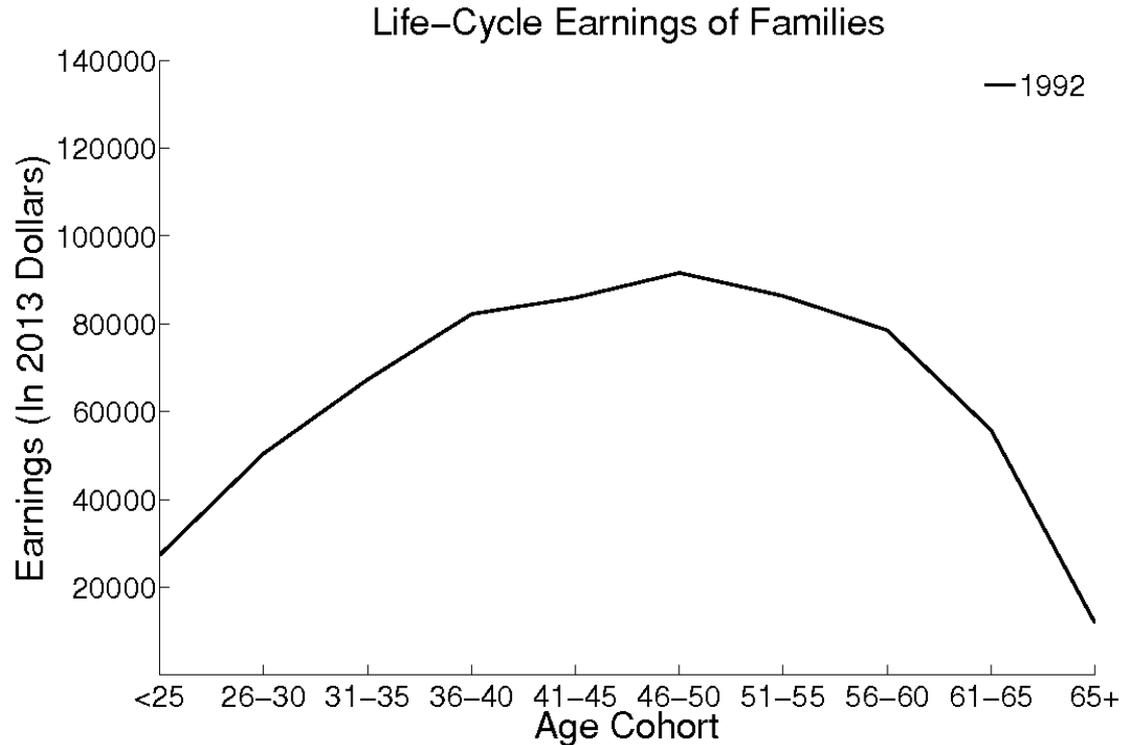
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- ❑ Household debt decisions must be consistent with repayment over the life horizon.
- ❑ What determines consumption?
 - Current income
 - Expected future income
 - Unexpected income variations (e.g., job loss)

Average Life-Cycle Income in the United States



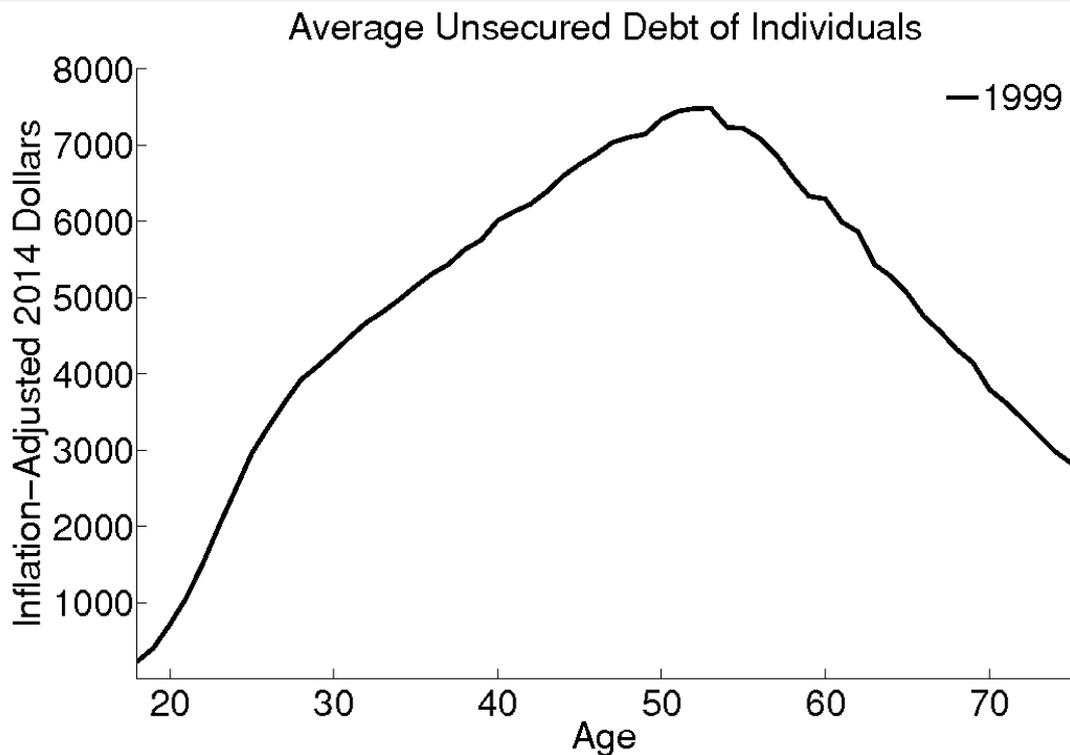
SOURCE: Survey of Consumer Finances.

The Message from this Framework for Borrowing

1. **Life-cycle motive:** Borrow to go to school and repay when in the labor force.
2. **Smoothing motive:** Maintain stable consumption pattern when income fluctuates.
3. **Insurance motive:** Mitigate the negative/positive effect of shocks (i.e., market and self-insurance).
4. **Purchase of large ‘ticket’ items:** These items provide service for many years.

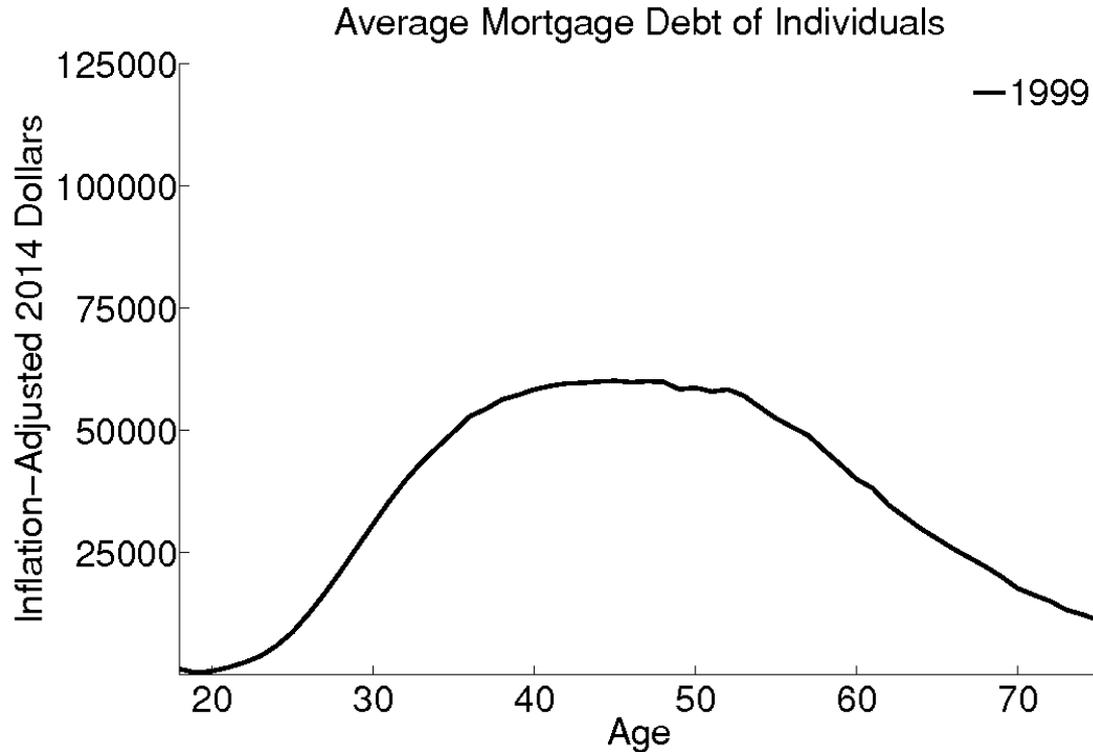
What Are Households Doing With All This Debt?

Evidence: Unsecured Credit (Credit Cards)



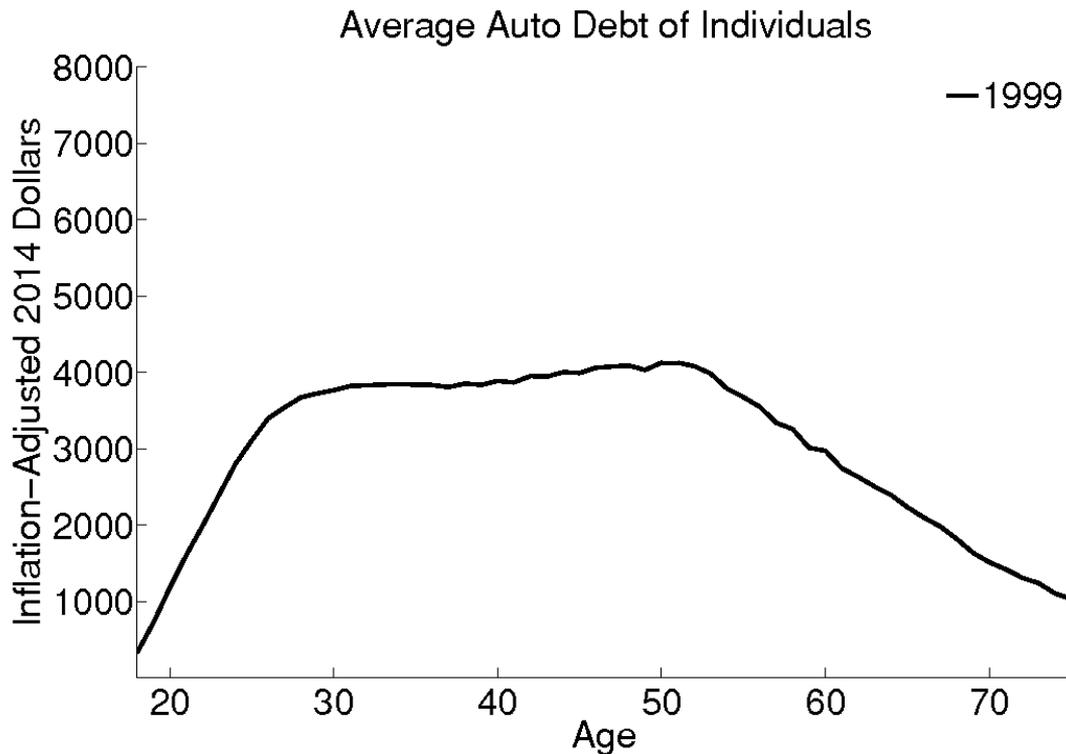
SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

Evidence: Mortgages



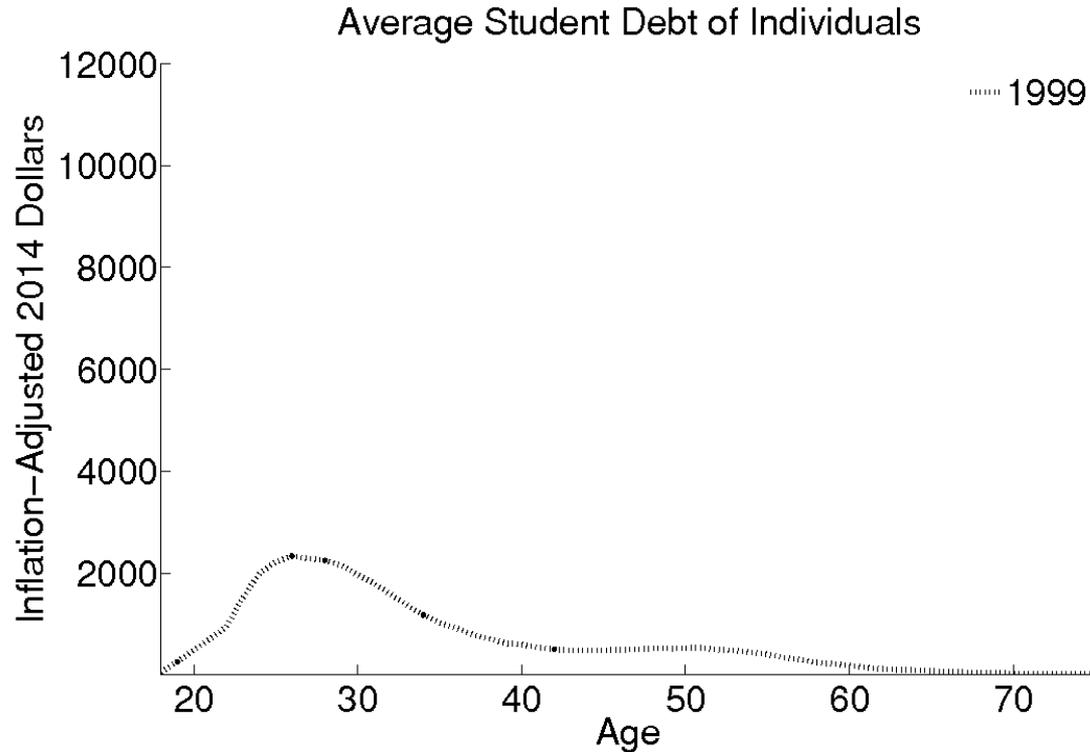
SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

Evidence: Auto Loans



SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

Evidence: Student Loans



SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

Note: Data prior to 2003 are not consistent

Borrowing and the Life Cycle

- ❑ Some of these forms of borrowing happen at different ages over the life cycle
 - Young individuals finance college
 - Newly formed households purchase homes
 - Middle-aged households tend to use credit more frequently
 - All households finance auto purchases



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Changes in Borrowing Behavior during the Great Recession

Why Is the Great Recession Recovery Different?

- ❑ The Great Recession had a significant (negative) impact on households'
 - **Earnings** - rewards to all types of labor, including entrepreneurial labor.

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- ❑ The Great Recession had a significant (negative) impact on households'
 - **Earnings** - rewards to all types of labor, including entrepreneurial labor.
 - **Income** - earnings plus capital income plus government transfers.
 - **Net Worth** - the value of all assets net of debt.

Income Distribution in Large Postwar Recessions

1980-1982 Recession					
Income Group	1979	1982	1985	Δ 79-82	Δ 82-85
95th Percentile	\$191.8	\$189.6	\$209.5	-1%	11%
Median	\$71.9	\$65.0	\$71.1	-10%	9%
20th Percentile	\$33.1	\$26.3	\$29.1	-20%	11%

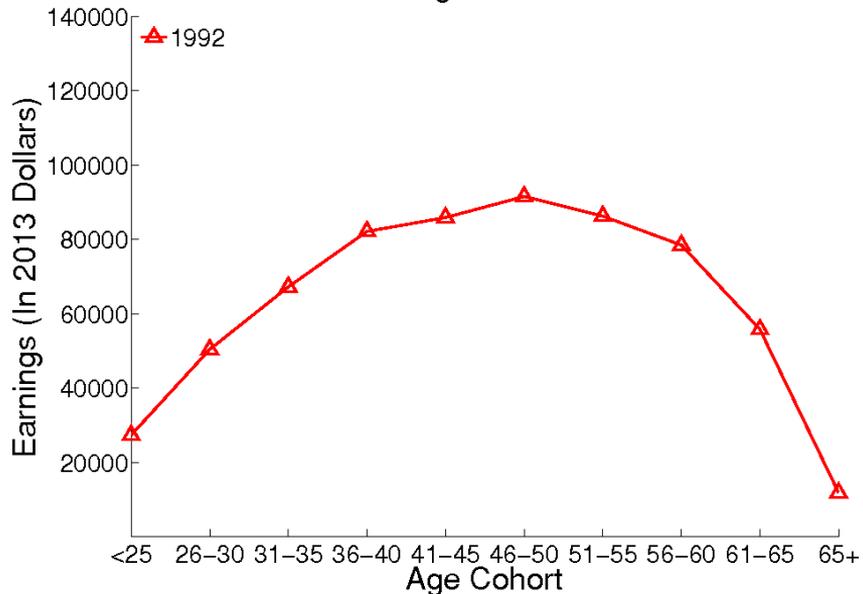
2007-2009 Recession					
Income Group	2006	2009	2012	Δ 06-09	Δ 09-12
95th Percentile	\$289.7	\$277.8	\$270.2	-4%	-3%
Median	\$83.2	\$76.0	\$74.5	-9%	-2%
20th Percentile	\$33.6	\$26.9	\$25.0	-20%	-7%

NOTE: All values are in thousands of 2012 dollars.

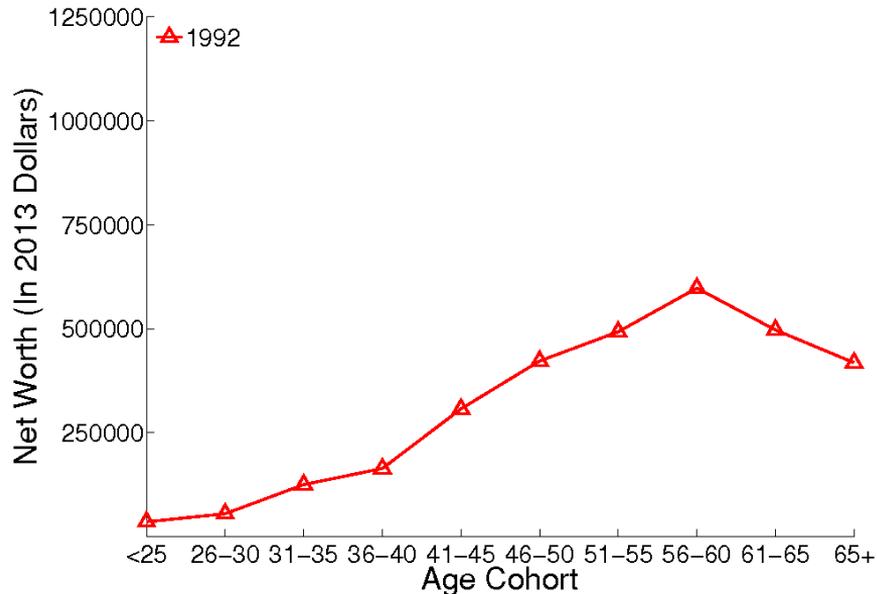
SOURCE: Federal Reserve Bank of Minneapolis 2013 Annual Report.

Average Earnings and Net Worth by Age

Earnings of Families



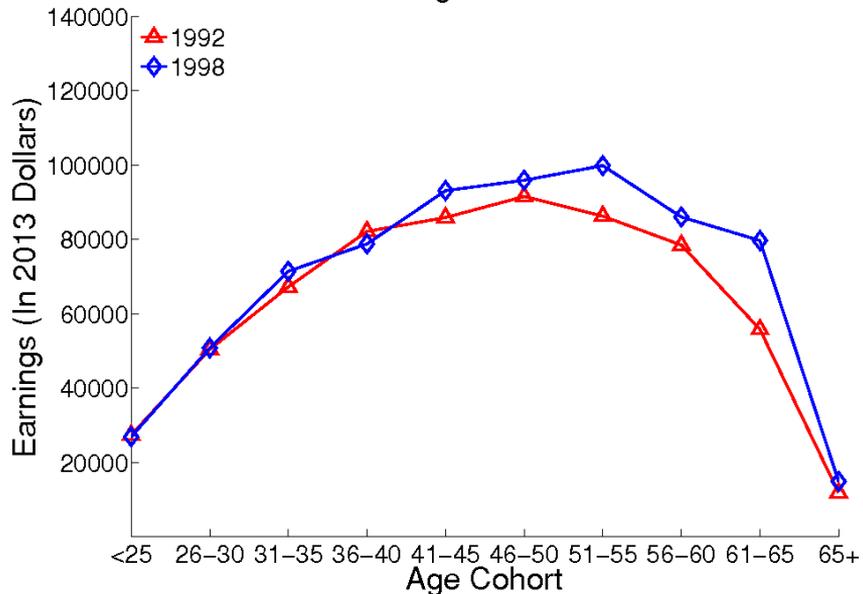
Net Worth of Families



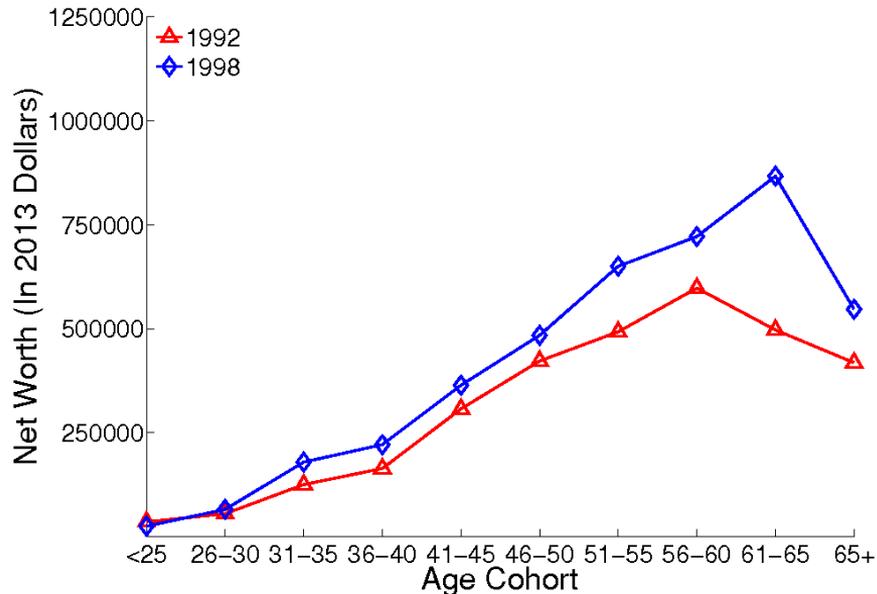
SOURCE: Survey of Consumer Finances.

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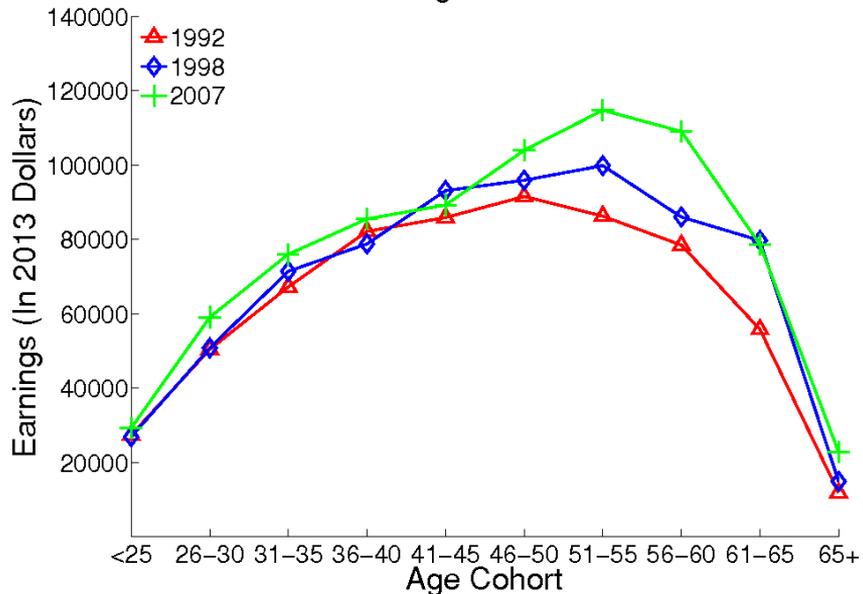
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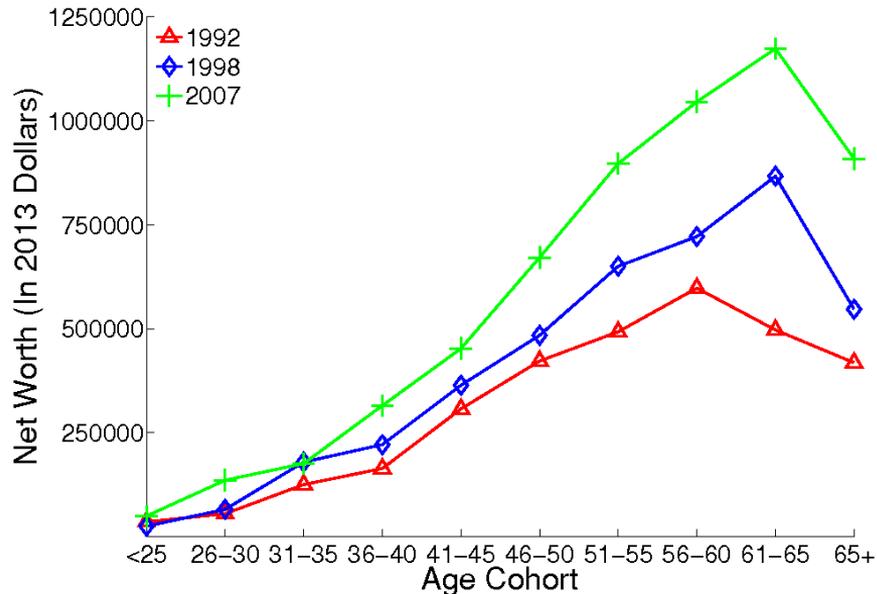
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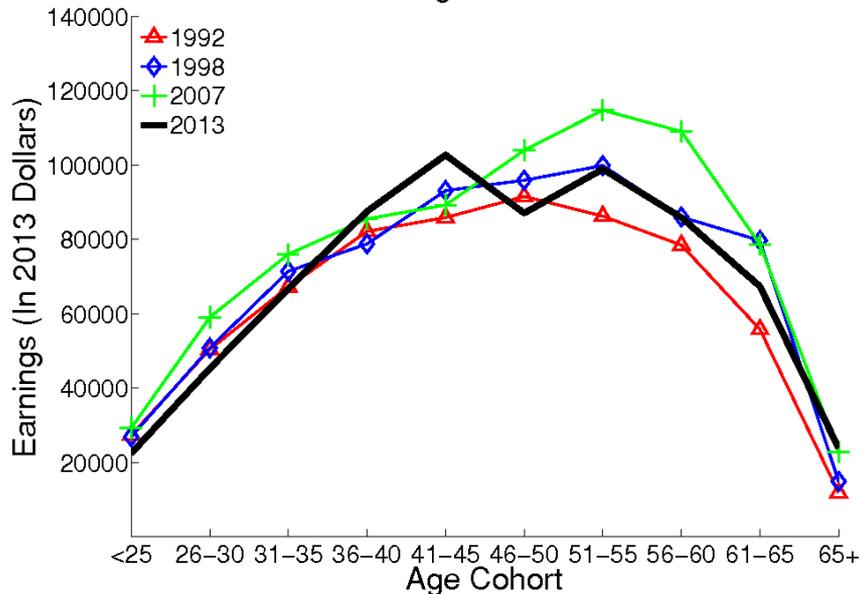
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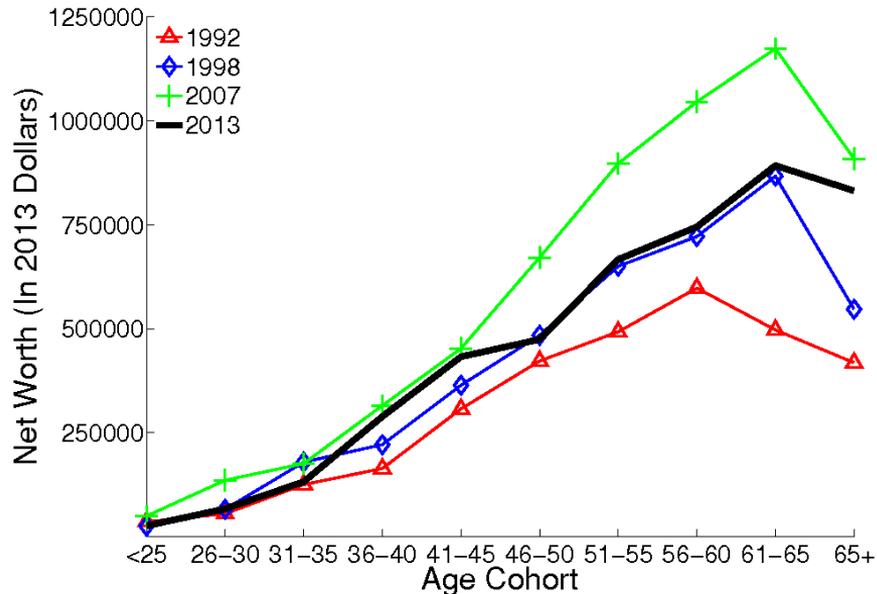
SOURCE: Survey of Consumer Finances.

Average Earnings and Net Worth by Age

Earnings of Families



Net Worth of Families



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Has the Income Distribution in the United States Actually Changed?

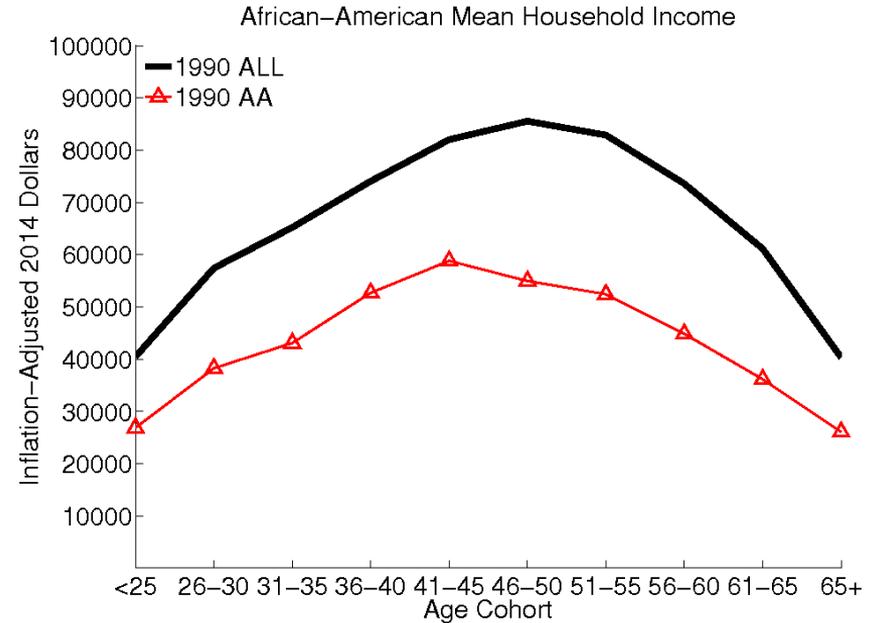
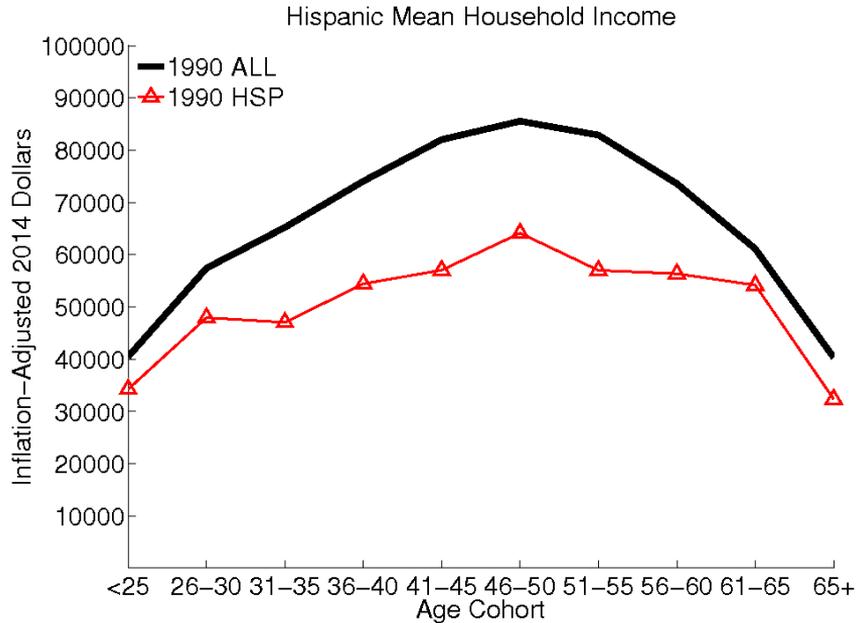
Changes in Income Distribution

Date	30-50 Ratio			50-90 Ratio		
	Earnings	Income	Net Worth	Earnings	Income	Net Worth
1992	3.62	1.69	3.83	3.35	2.94	7.18
1998	2.80	1.67	4.00	3.22	2.78	6.88
2004	2.68	1.69	3.98	3.50	3.00	9.02
2007	2.69	1.64	4.53	3.47	2.98	7.55
2010	3.40	1.62	5.23	3.72	3.11	12.35
2013	3.30	1.64	5.49	4.07	3.31	11.58

SOURCE: Survey of Consumer Finances.

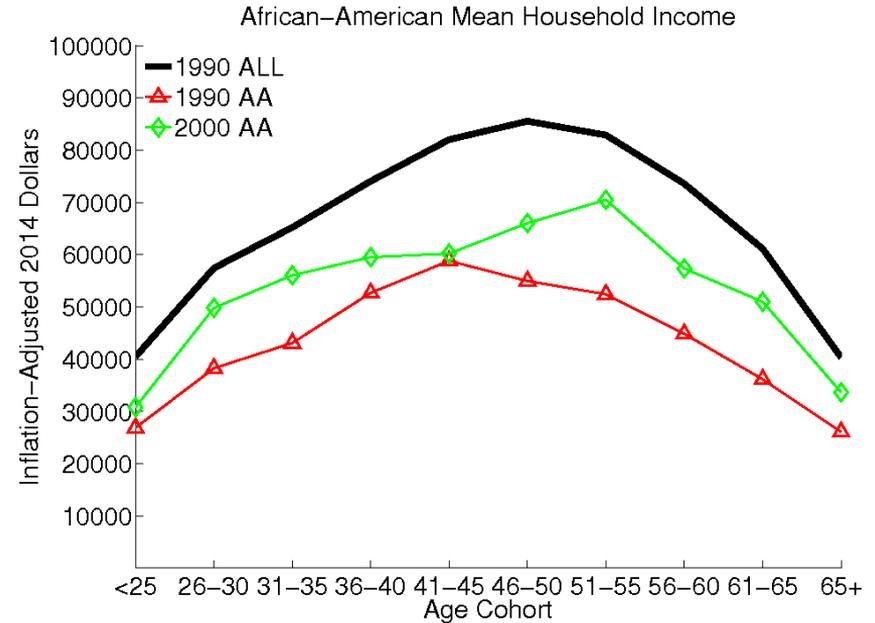
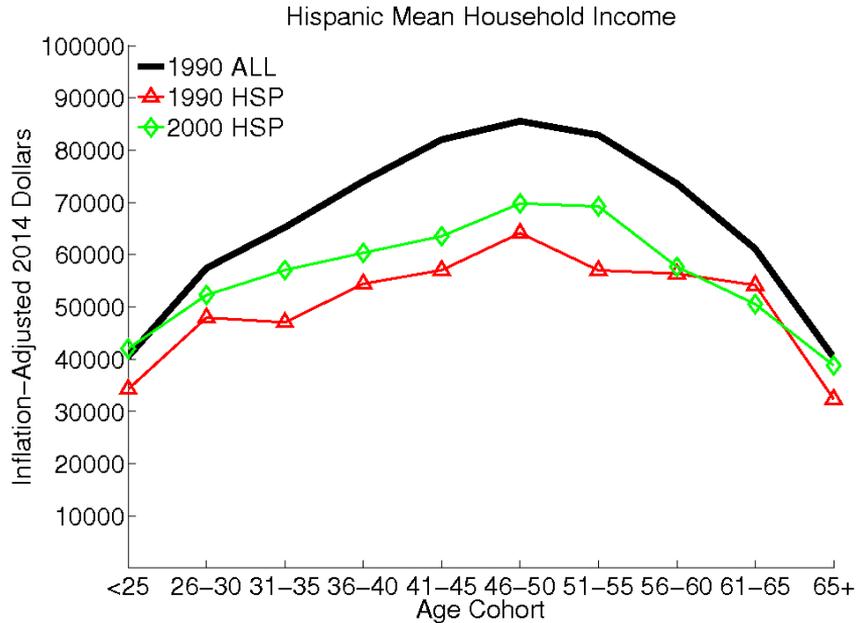
NOTE: Median earnings for 1992-2013 respectively are \$36,584, \$40,585, \$42,046, \$41,567, \$37,039, and \$33,479 in 2013 dollars.

How Has the Great Recession Impacted Minorities?



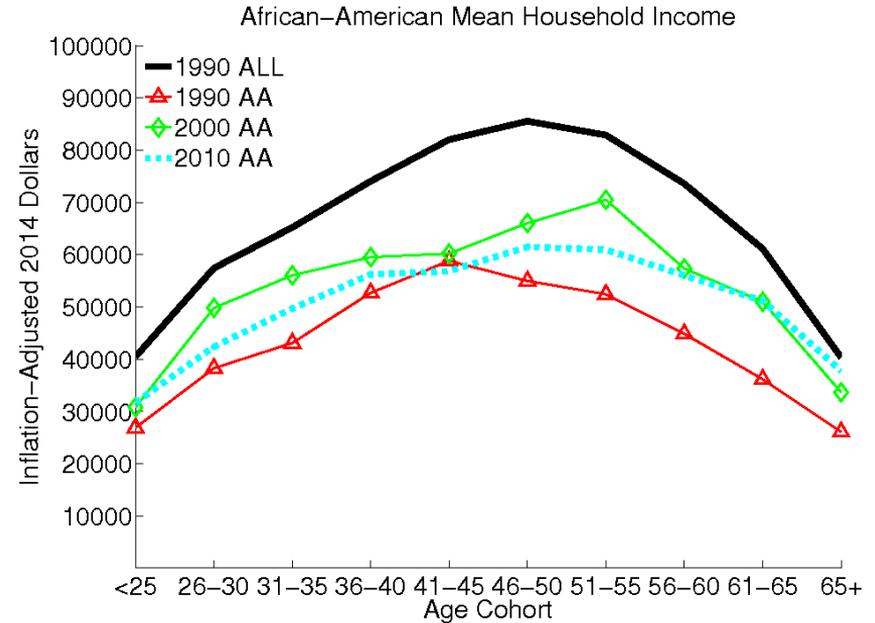
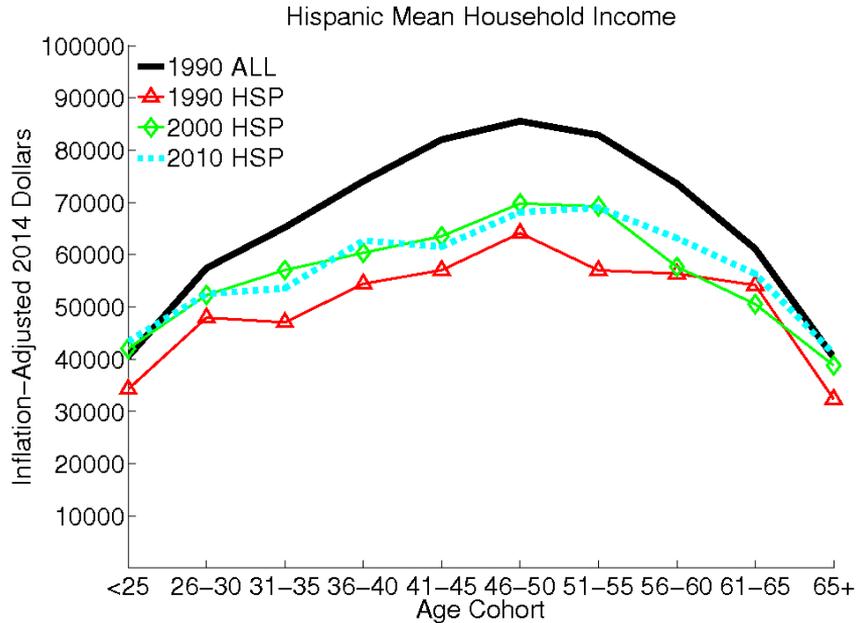
SOURCES: Current Population Survey Annual Social and Economic Supplement.

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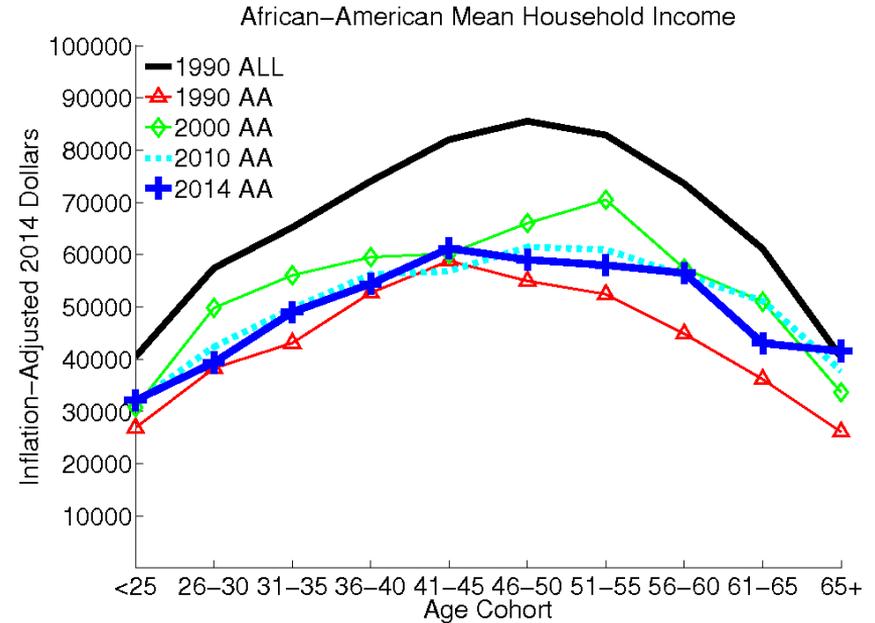
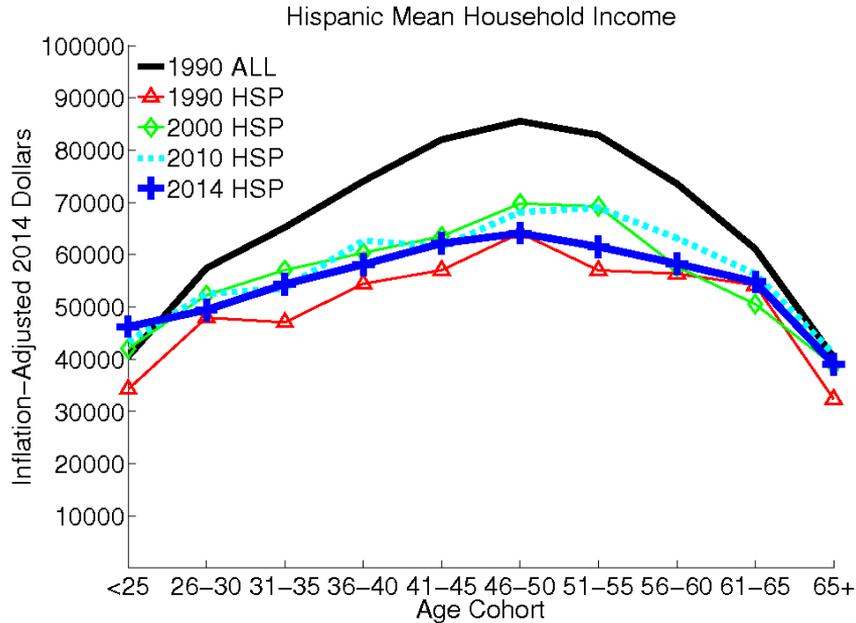
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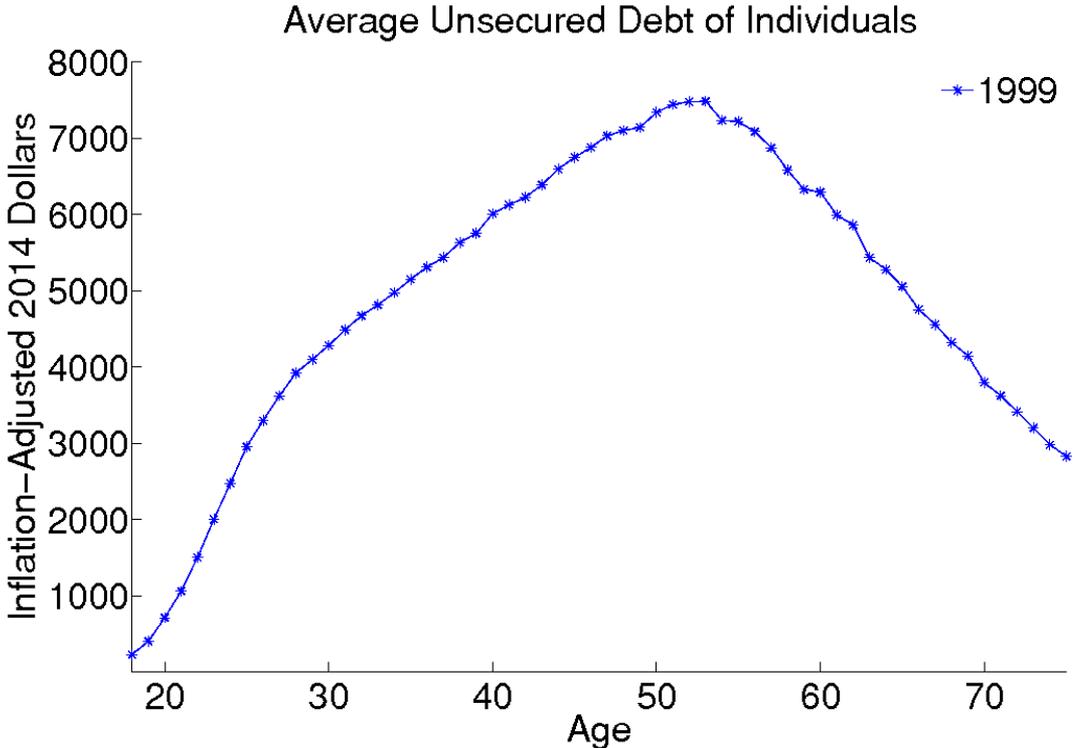
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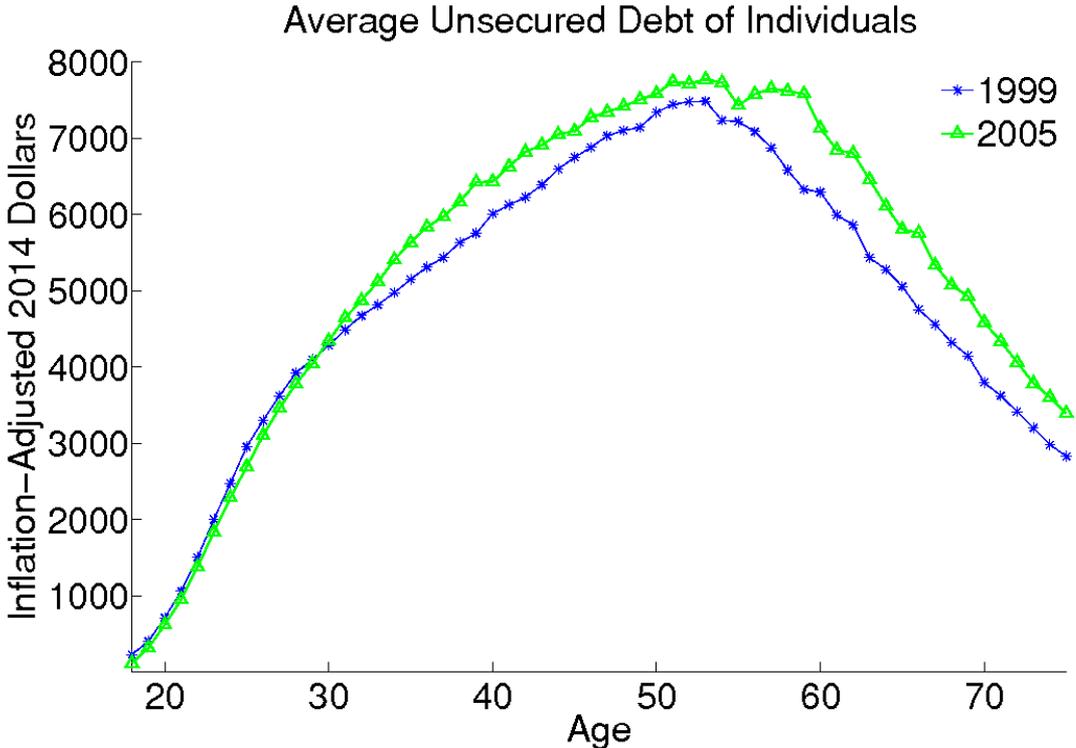
Changes in Four Major Consumer Debt Categories

Unsecured Consumer Credit (Credit Cards)



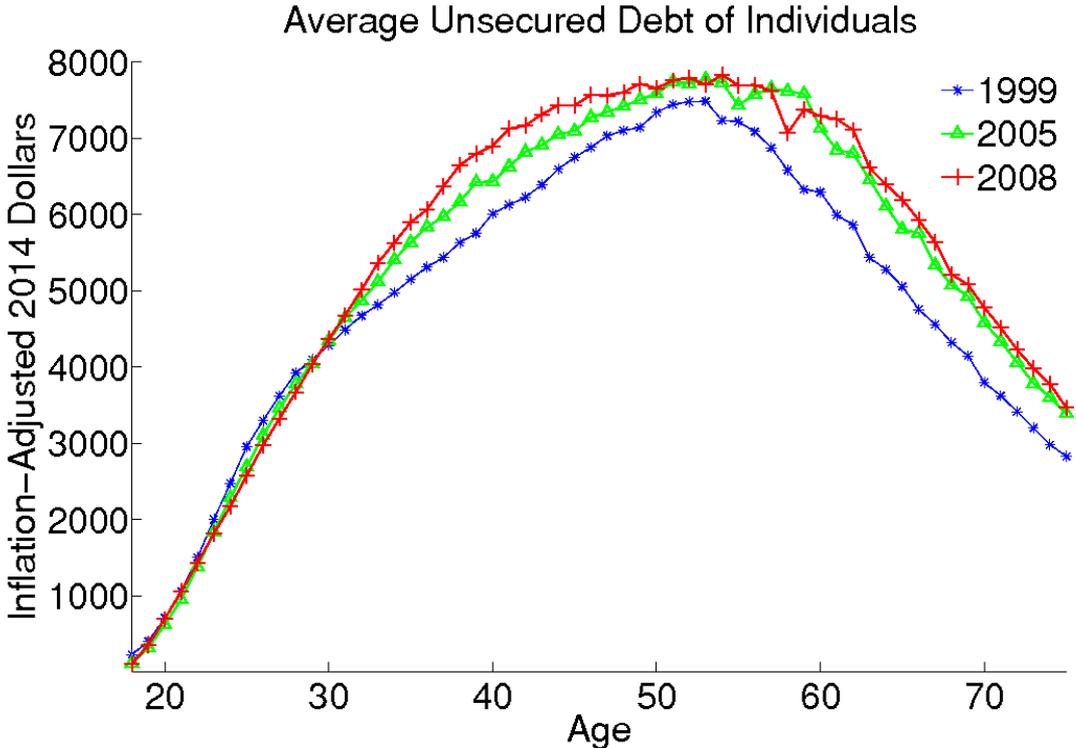
SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

Unsecured Consumer Credit (Credit Cards)



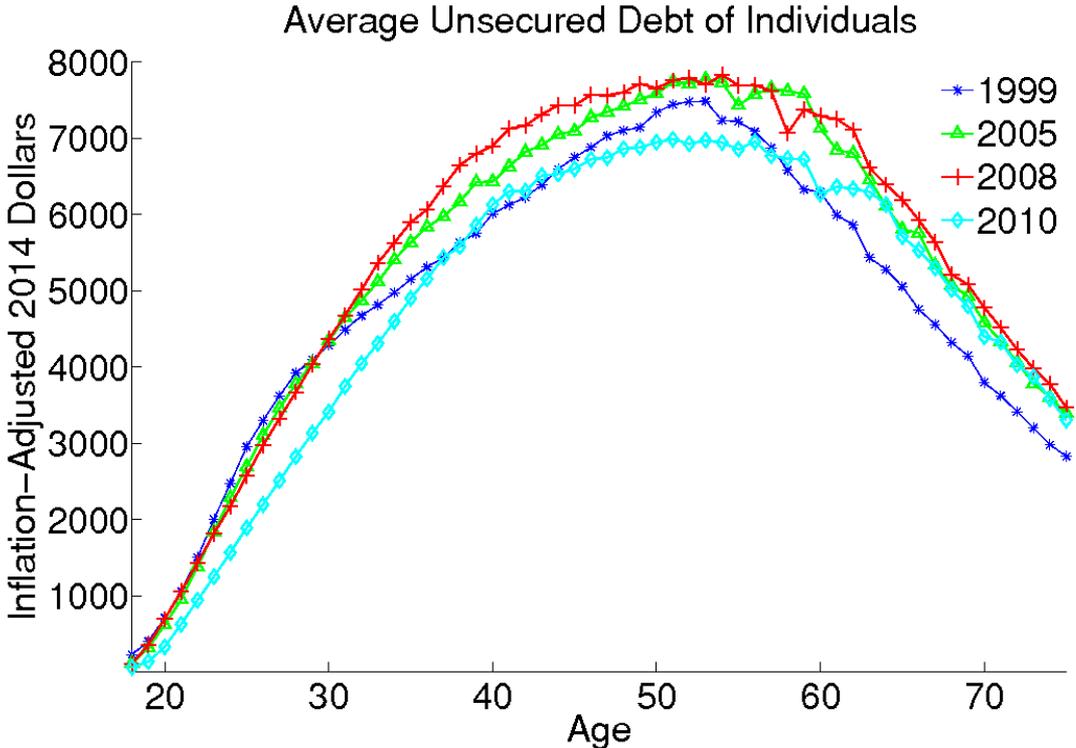
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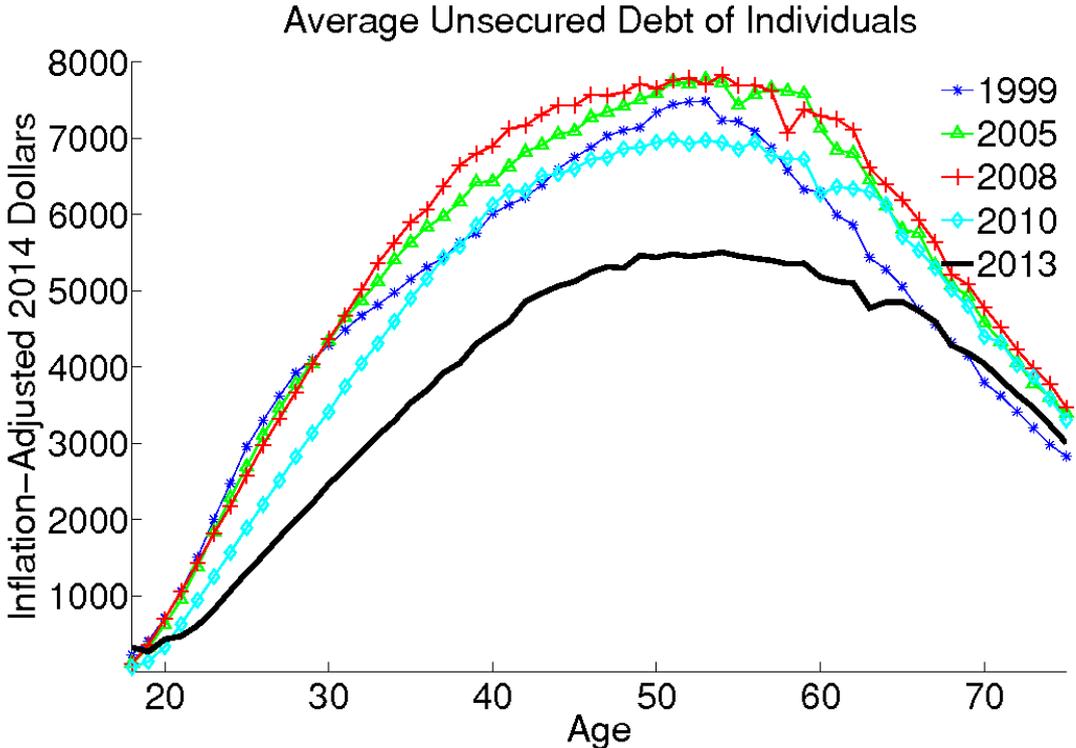
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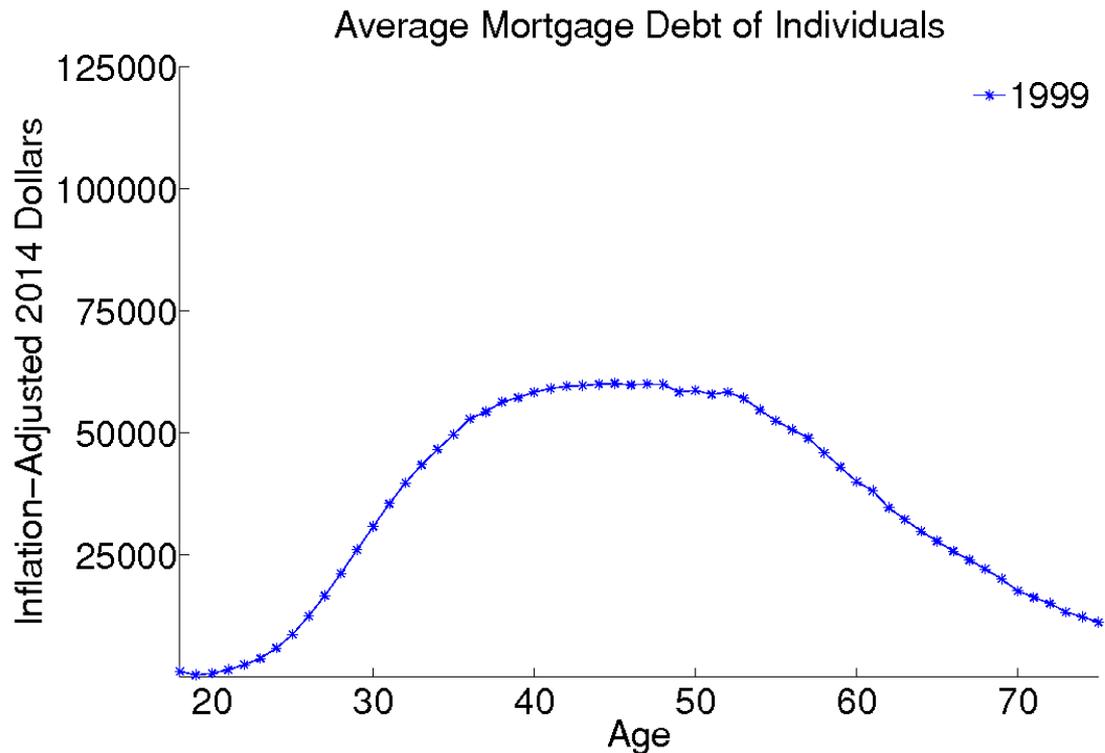
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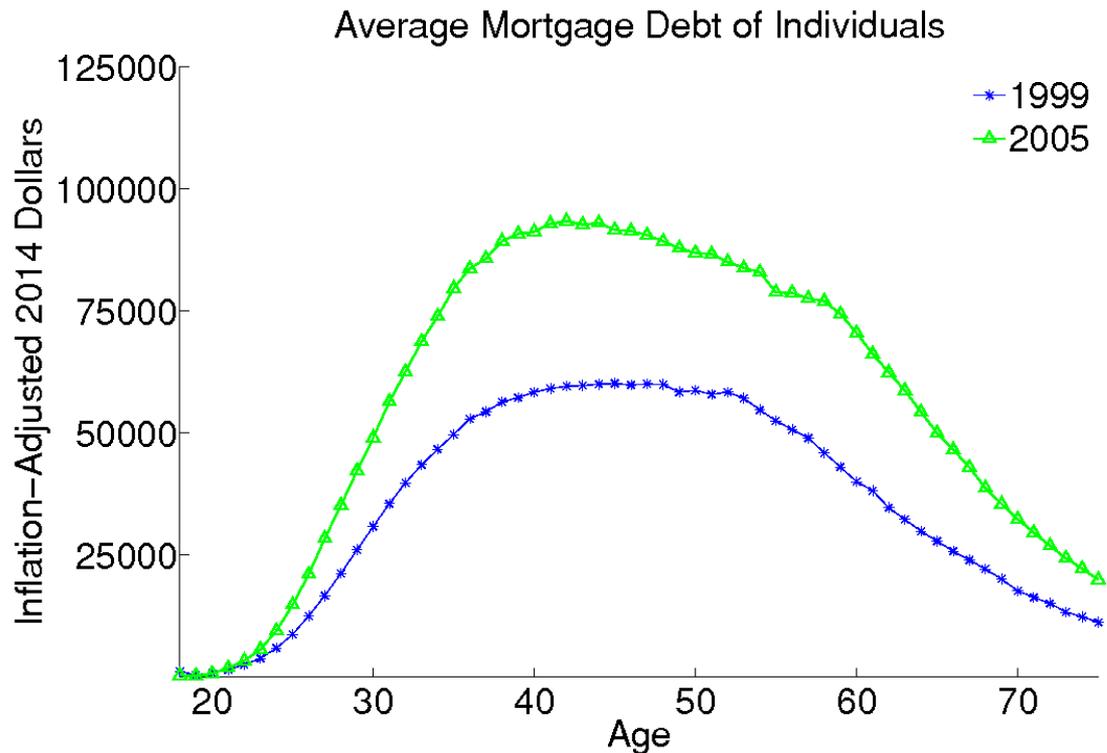
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Mortgages



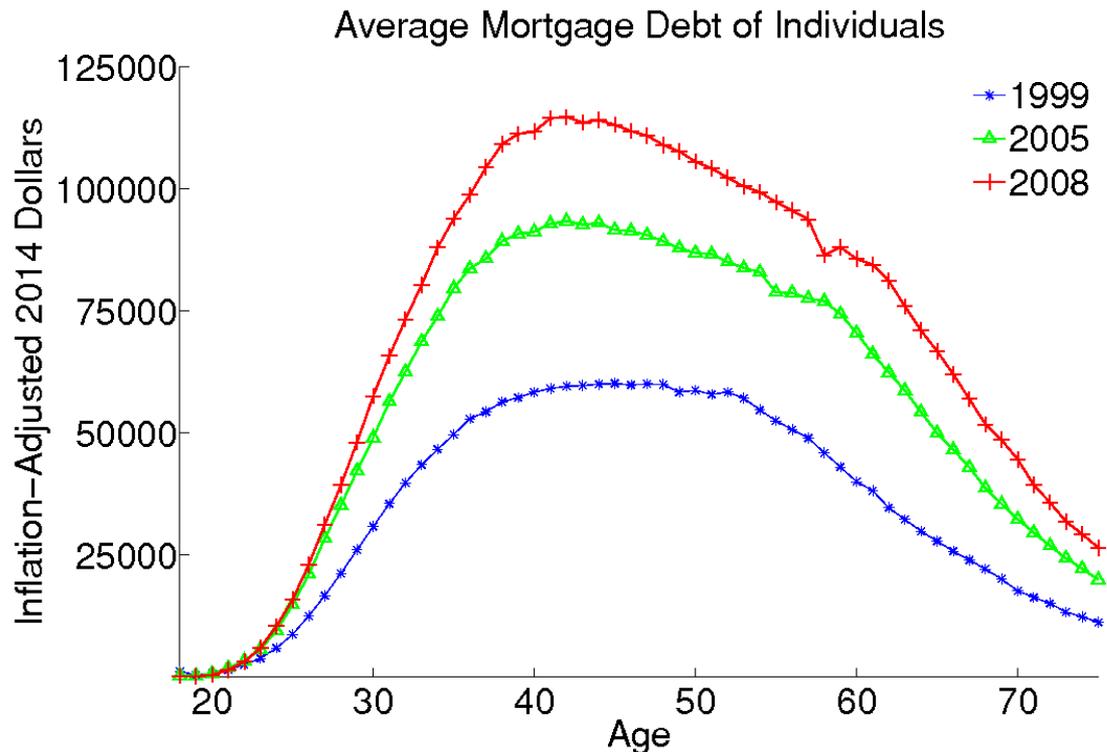
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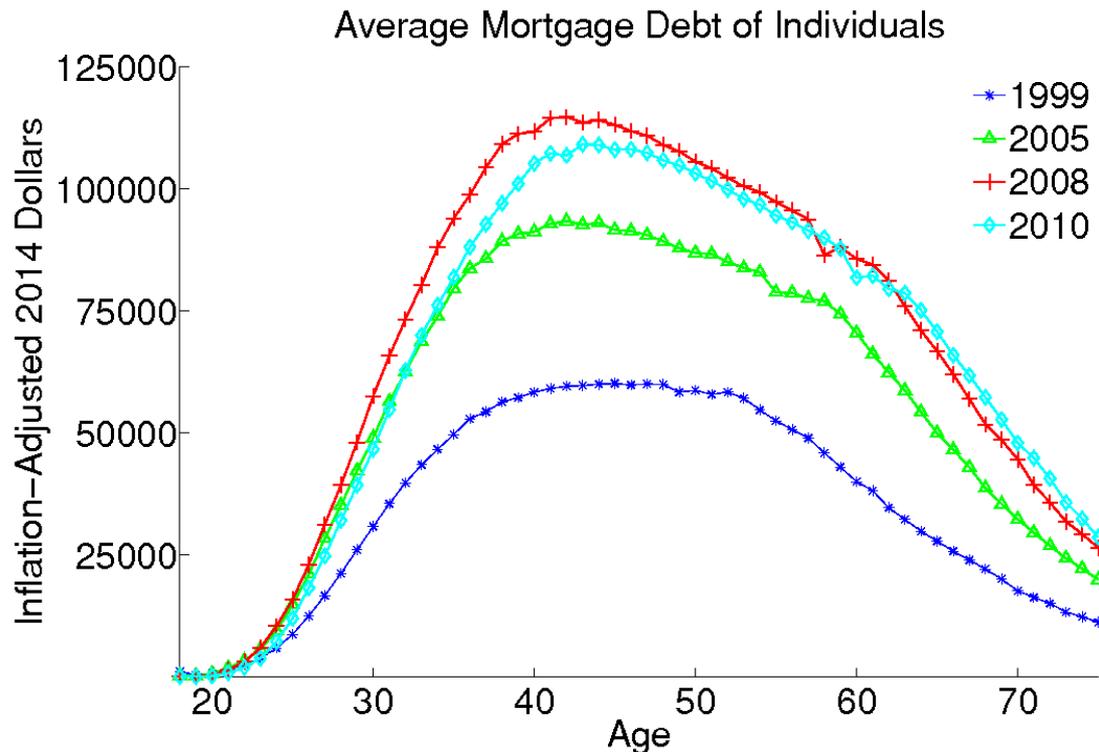
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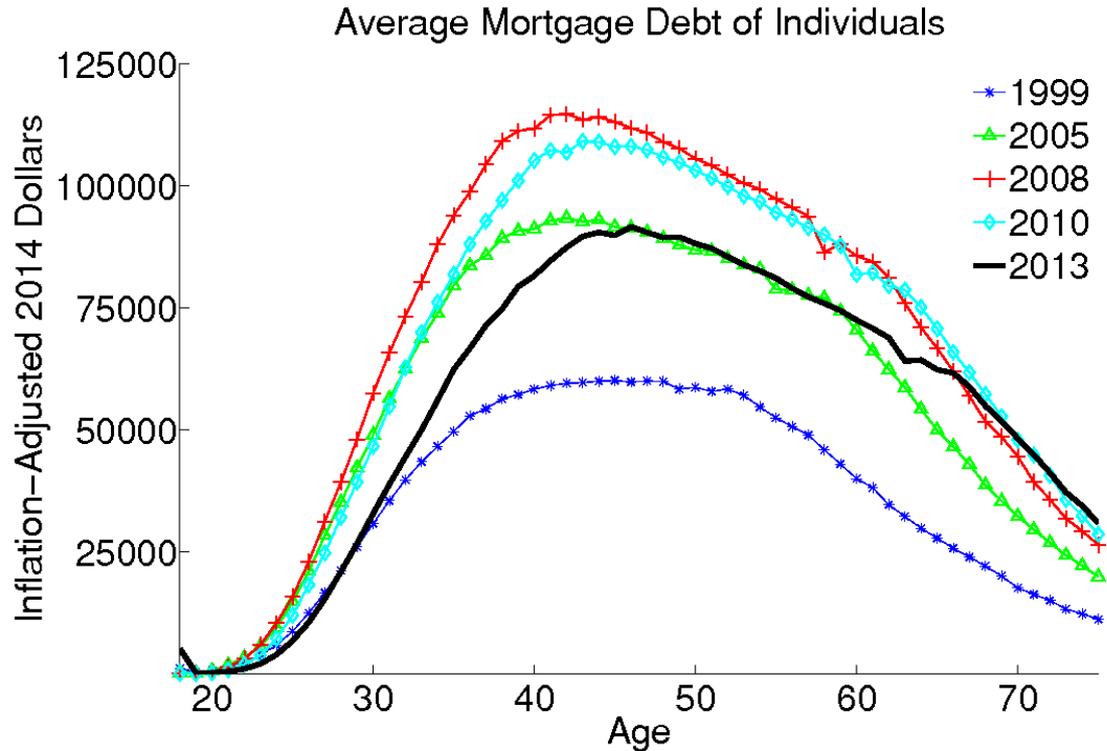
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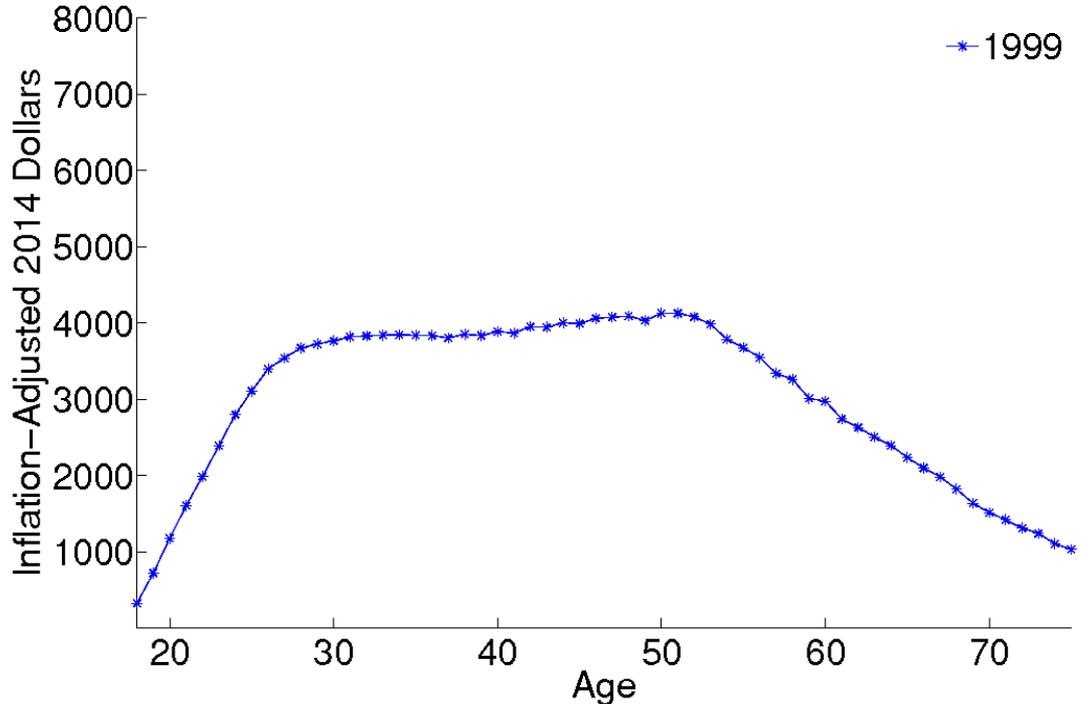
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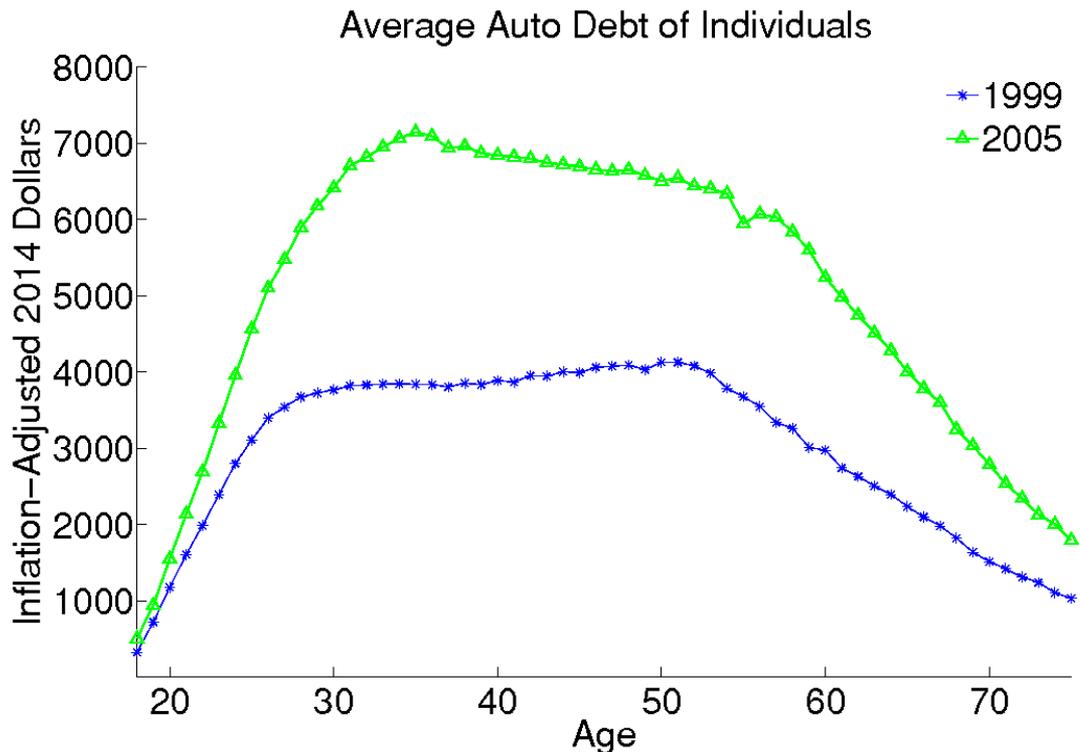
Auto Loans

Average Auto Debt of Individuals



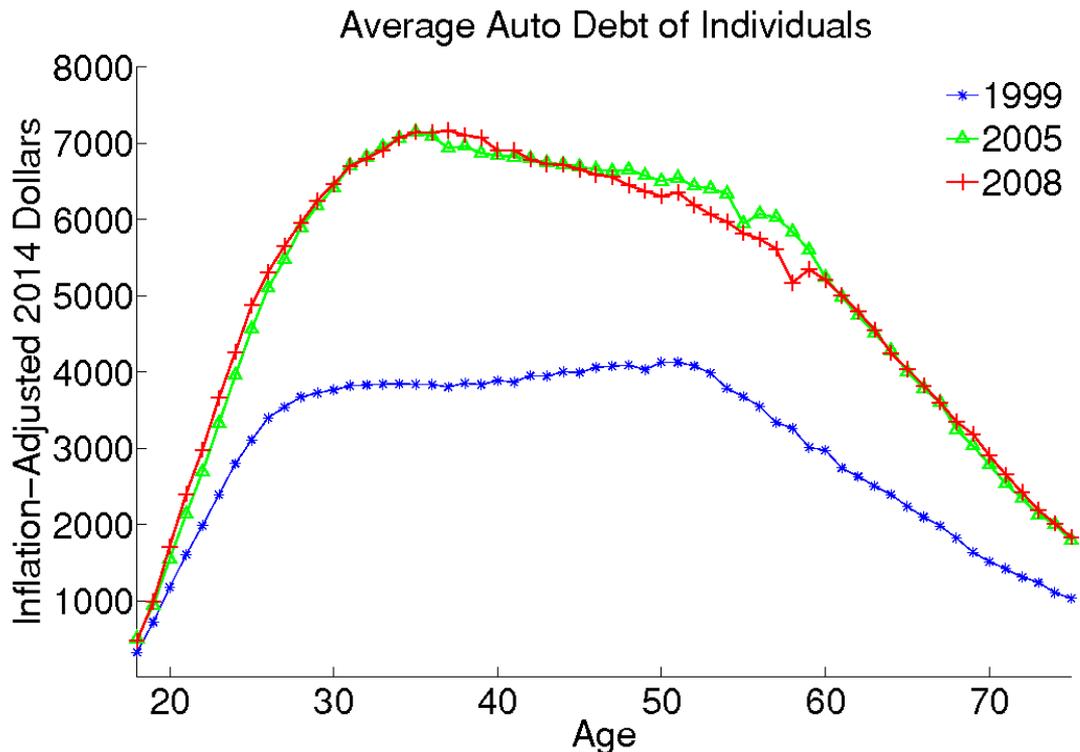
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Auto Loans



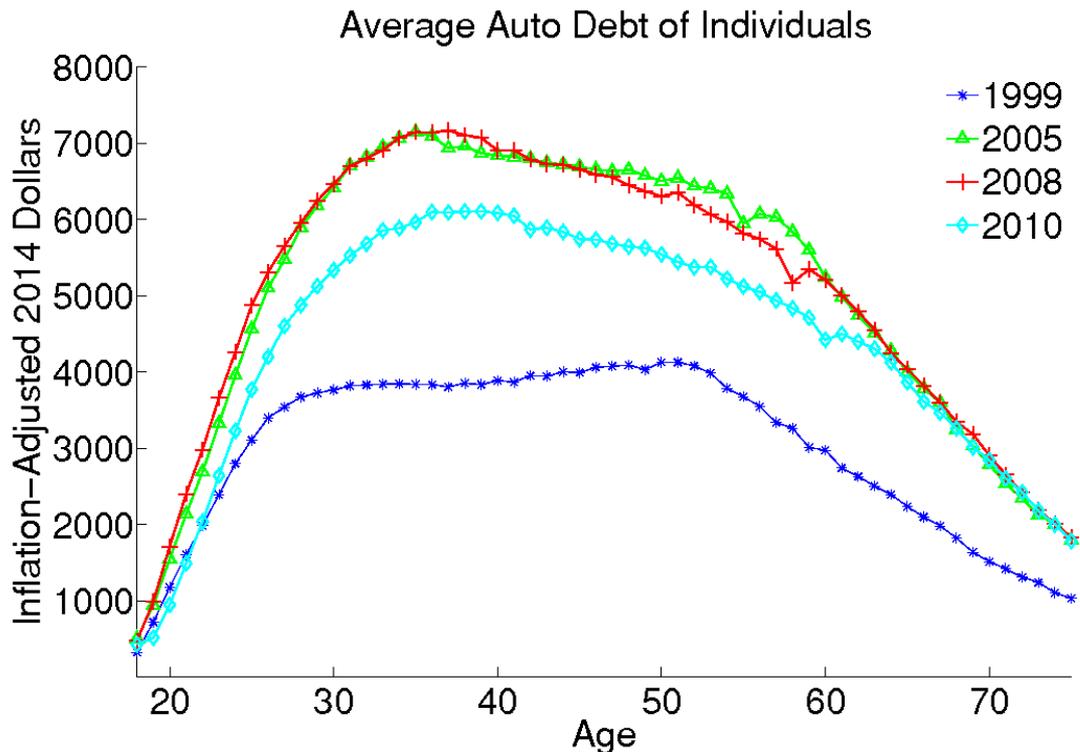
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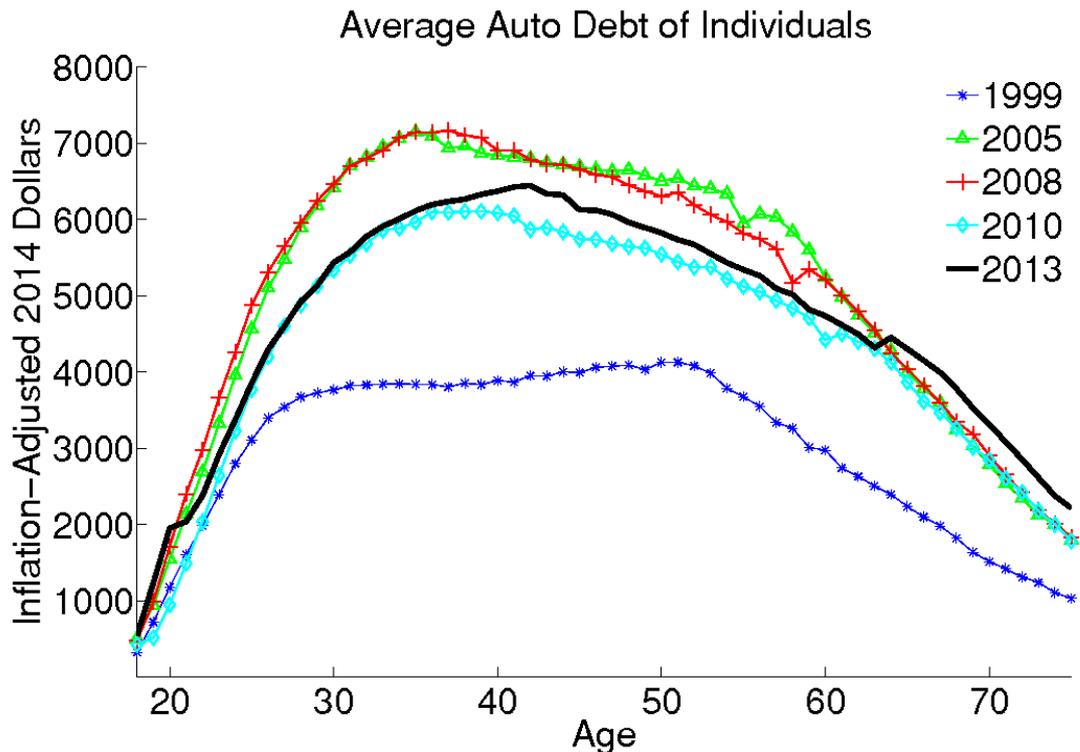
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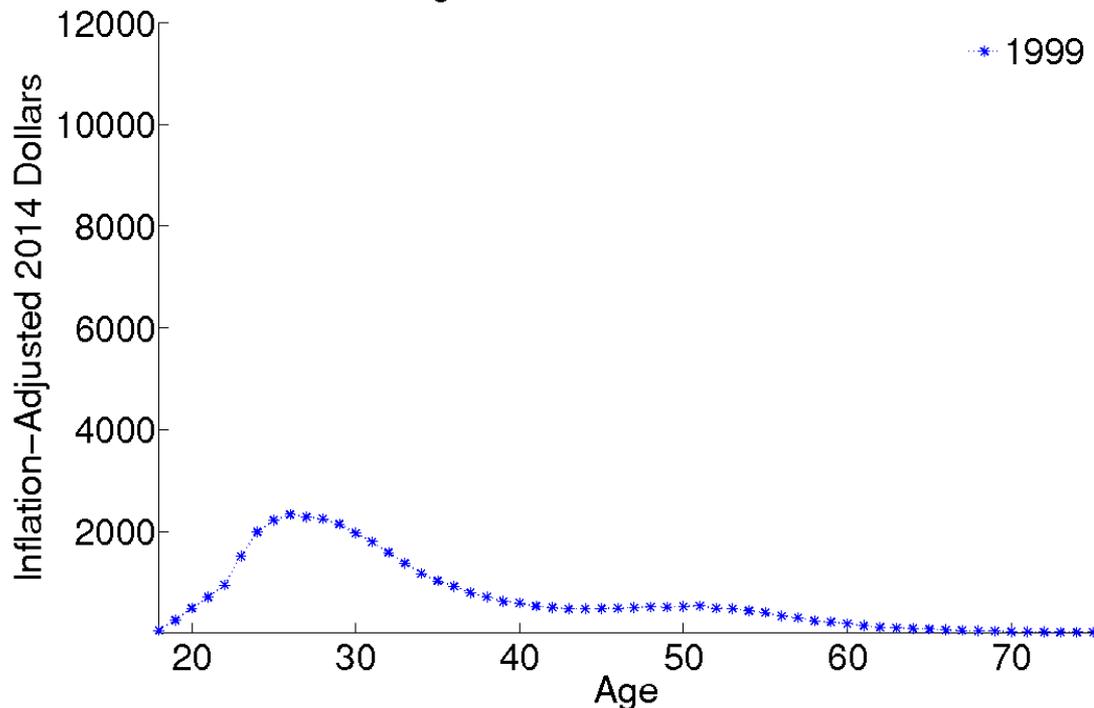
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SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

Student Debt

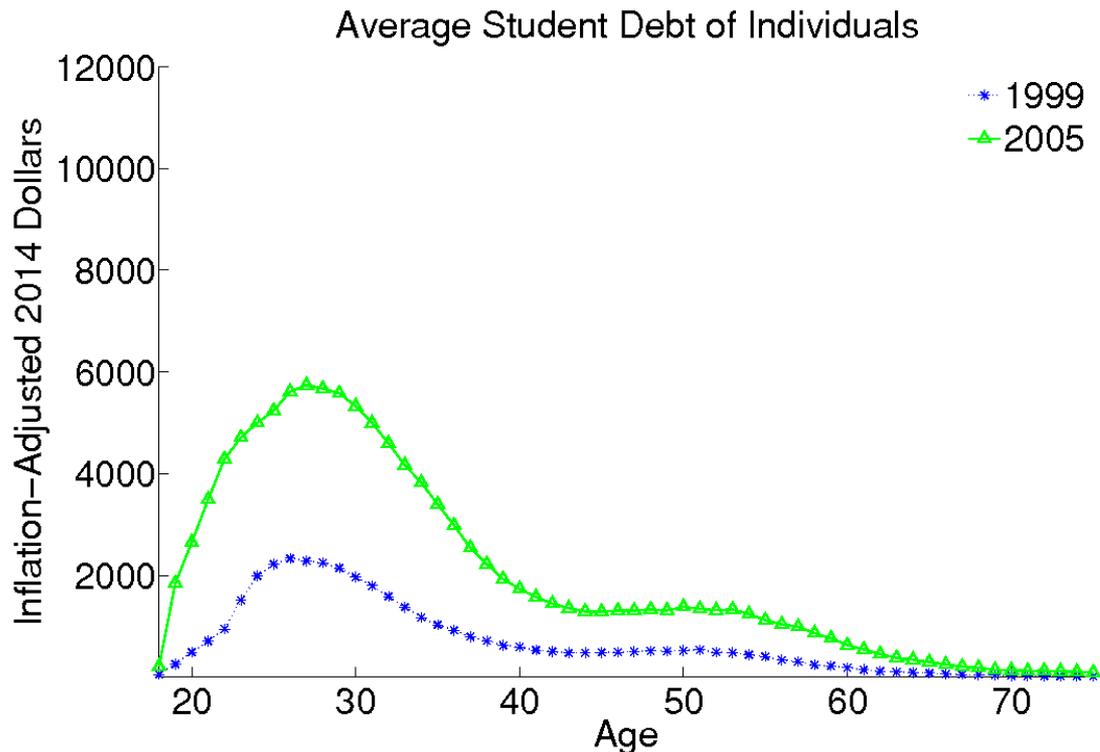
Average Student Debt of Individuals



SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

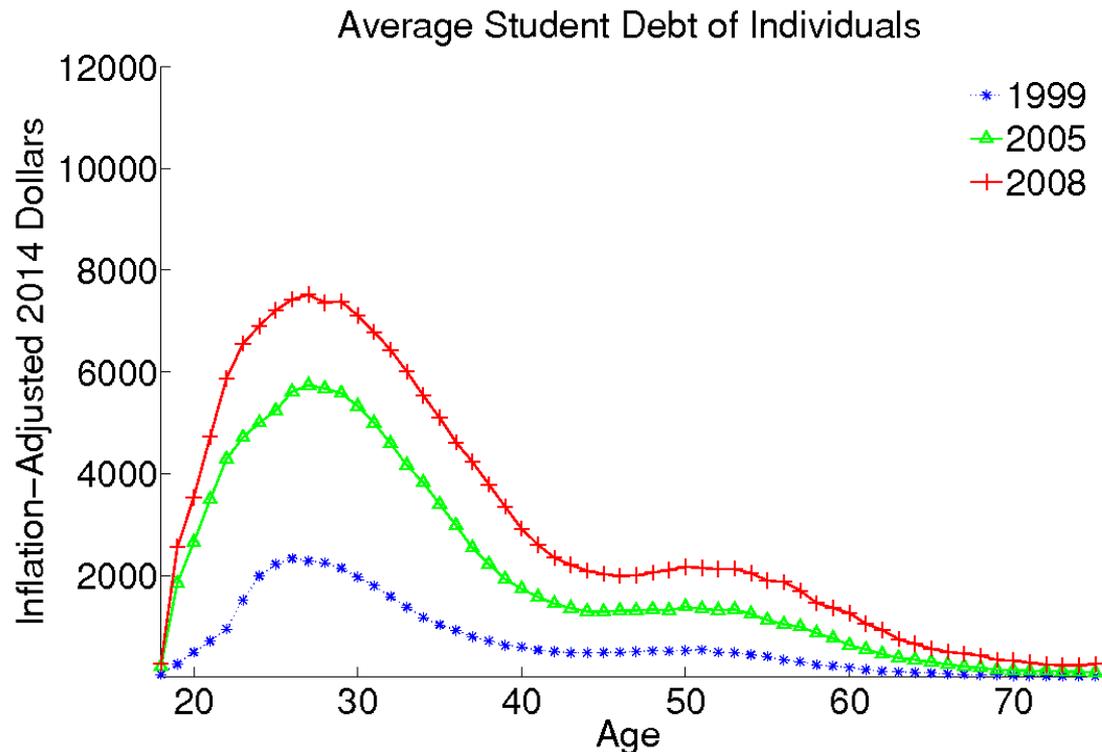
Note: Data prior to 2003 is not consistent

Student Debt



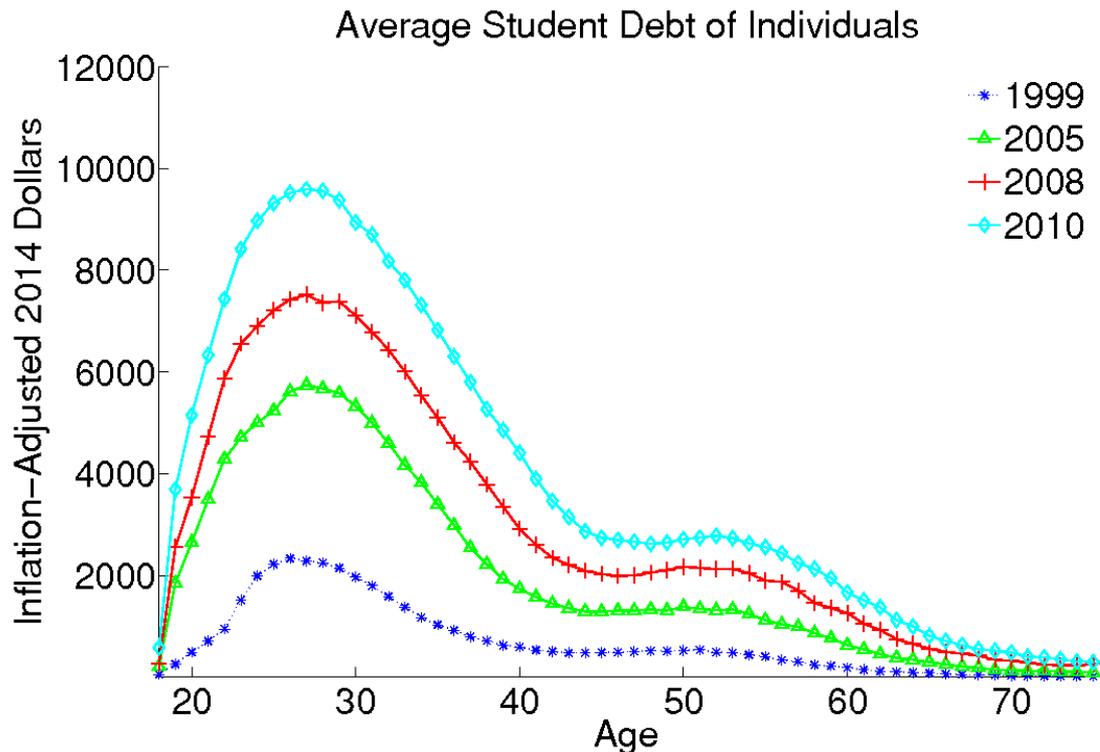
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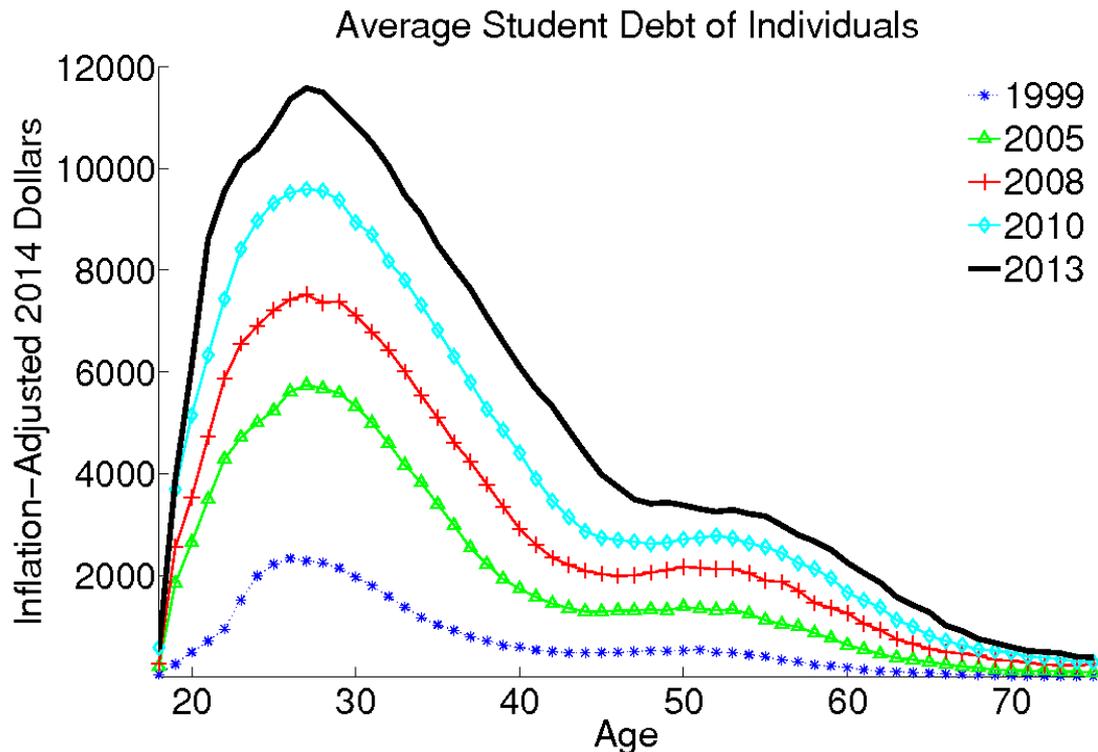
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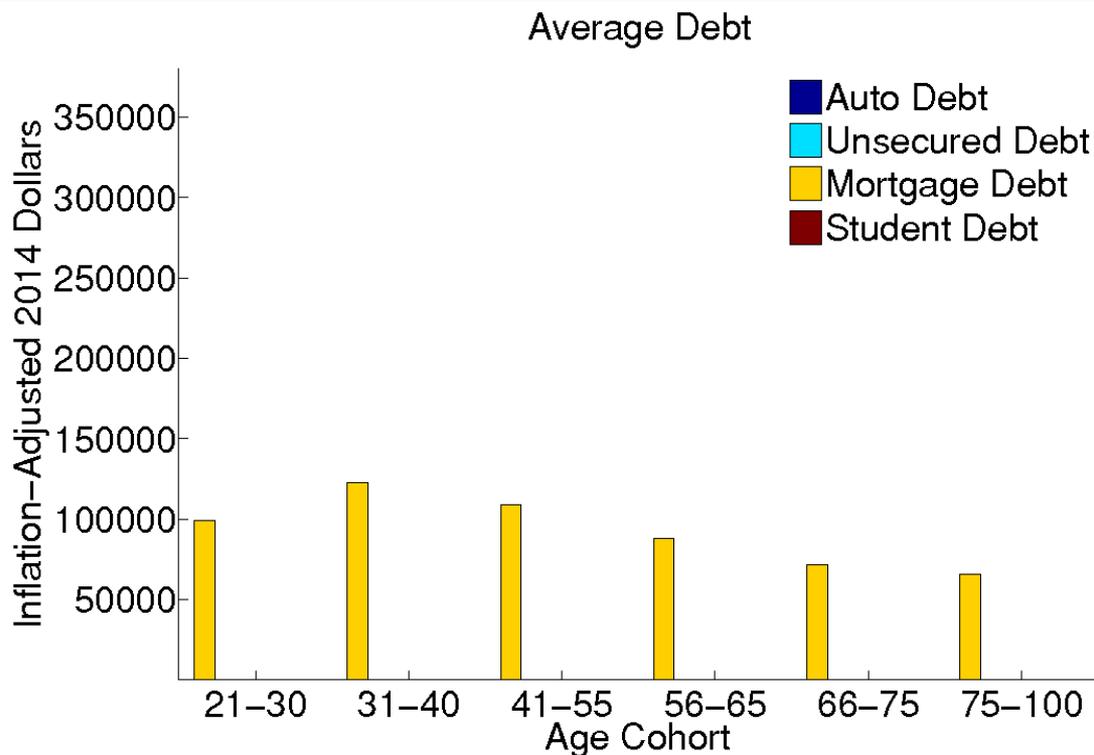


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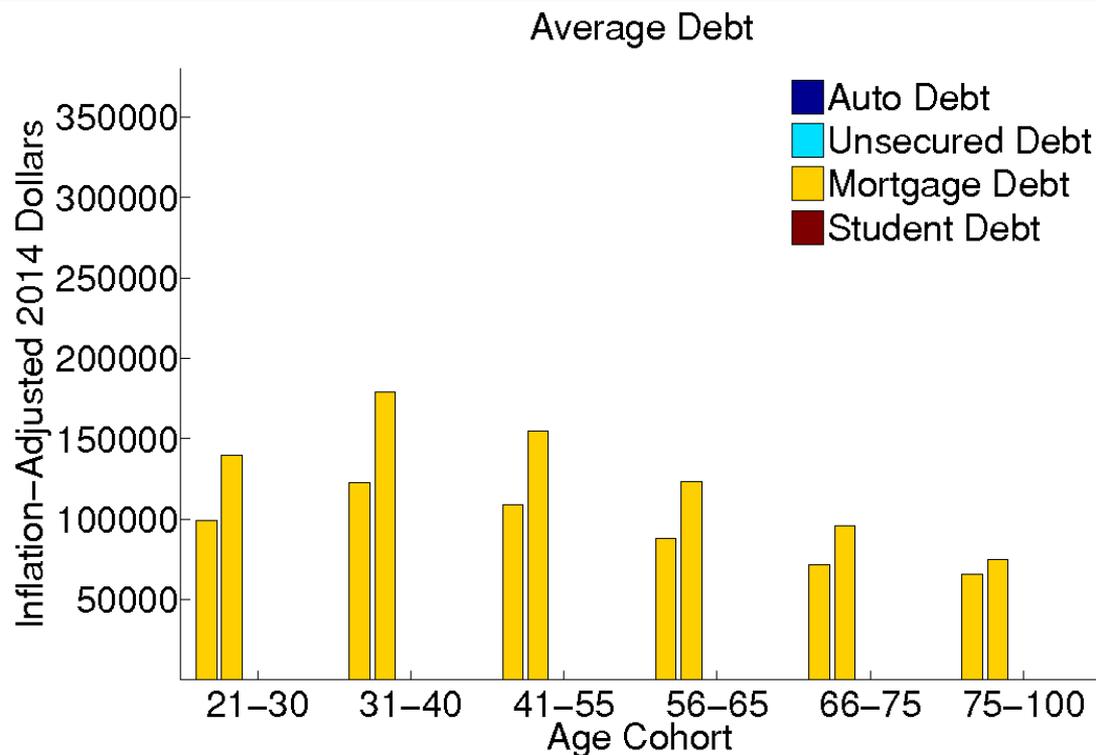
Combining All Forms of Debt

Holding Only Mortgage Debt: 1999



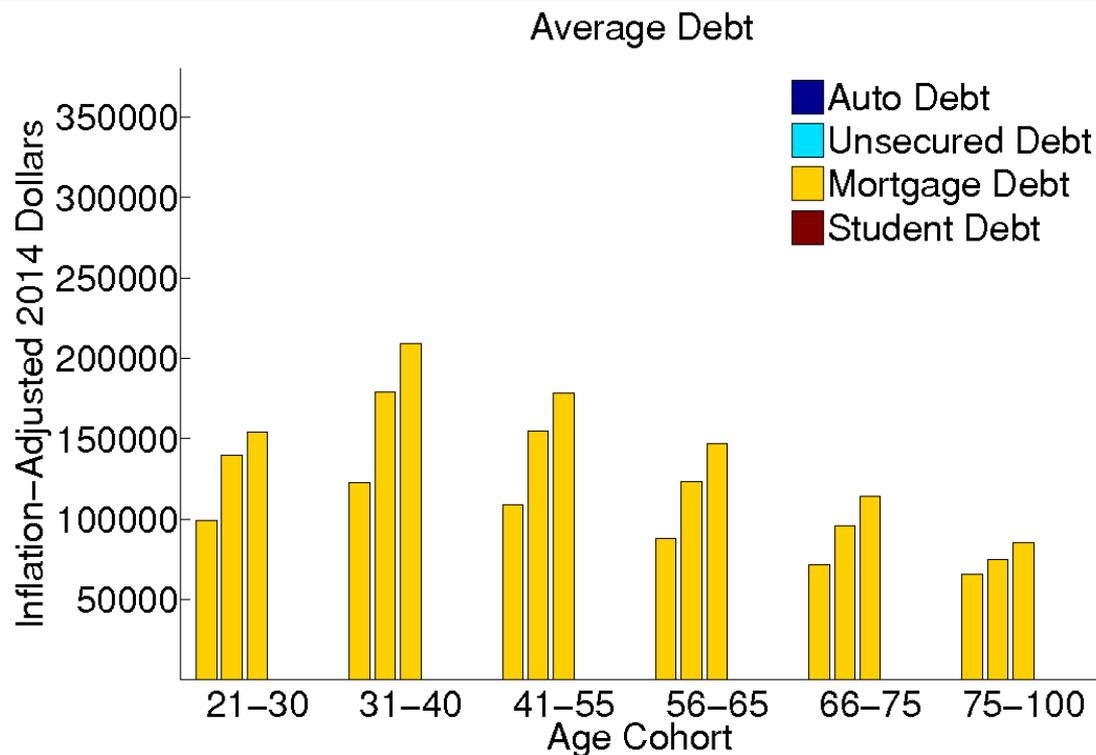
SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

Holding Only Mortgage Debt: 2005



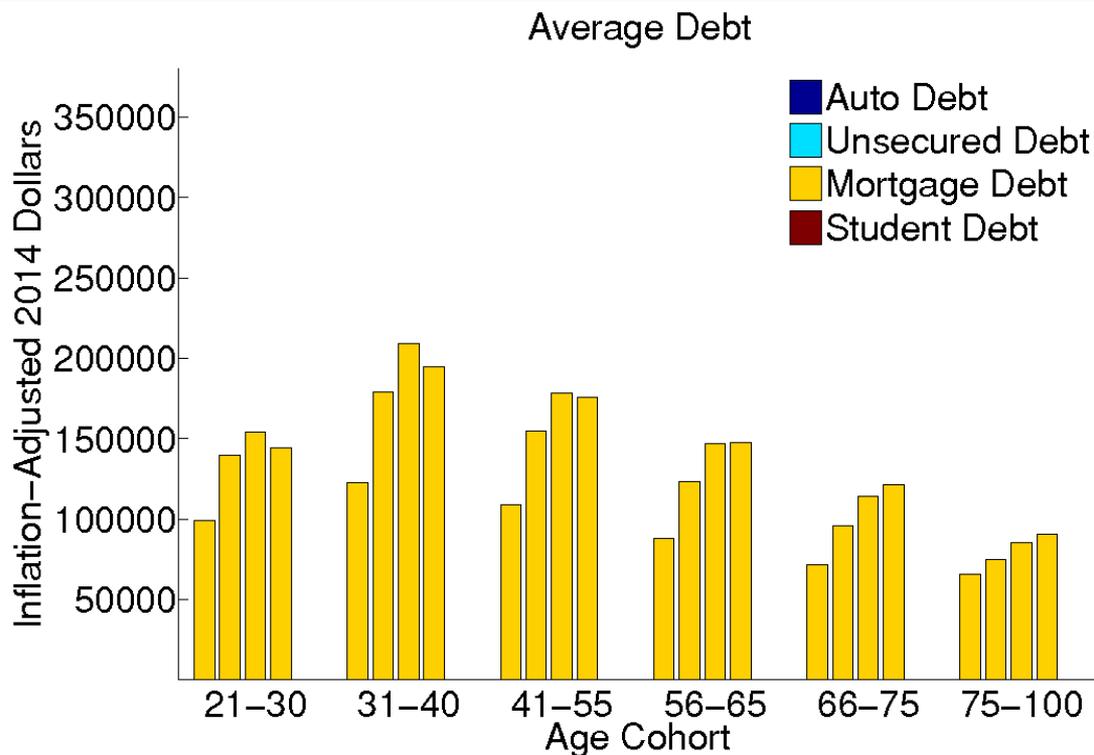
SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

Holding Only Mortgage Debt: 2008



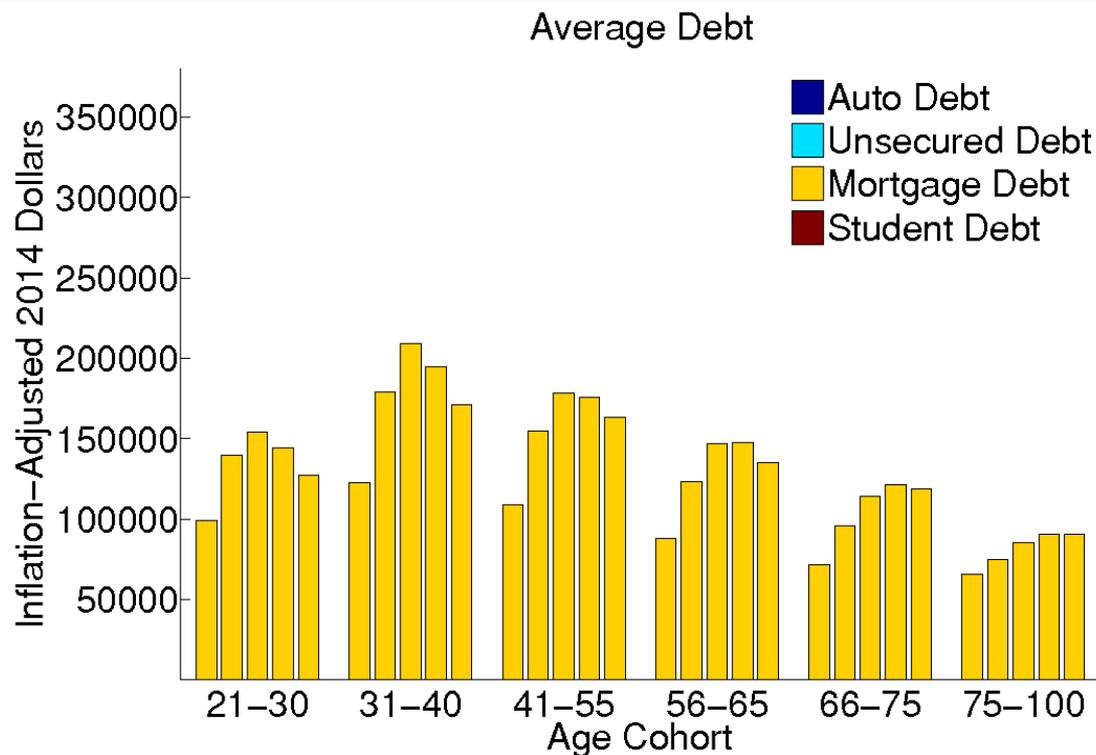
SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

Holding Only Mortgage Debt: 2010



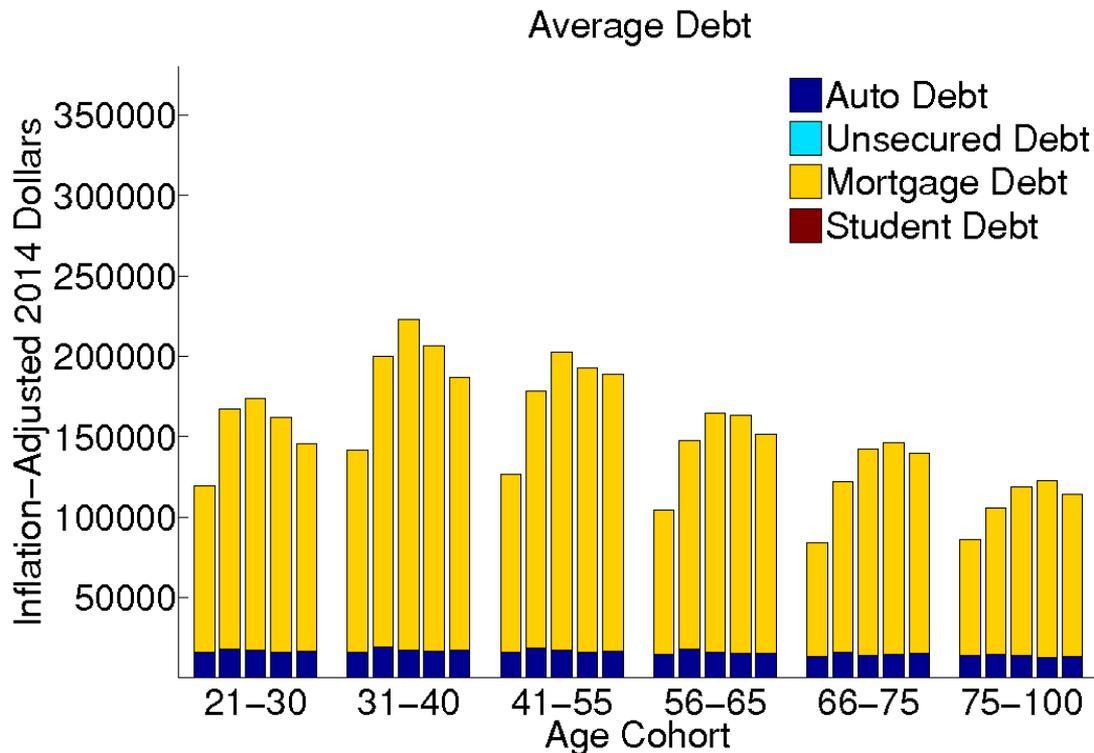
SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

Holding Only Mortgage Debt: 2013



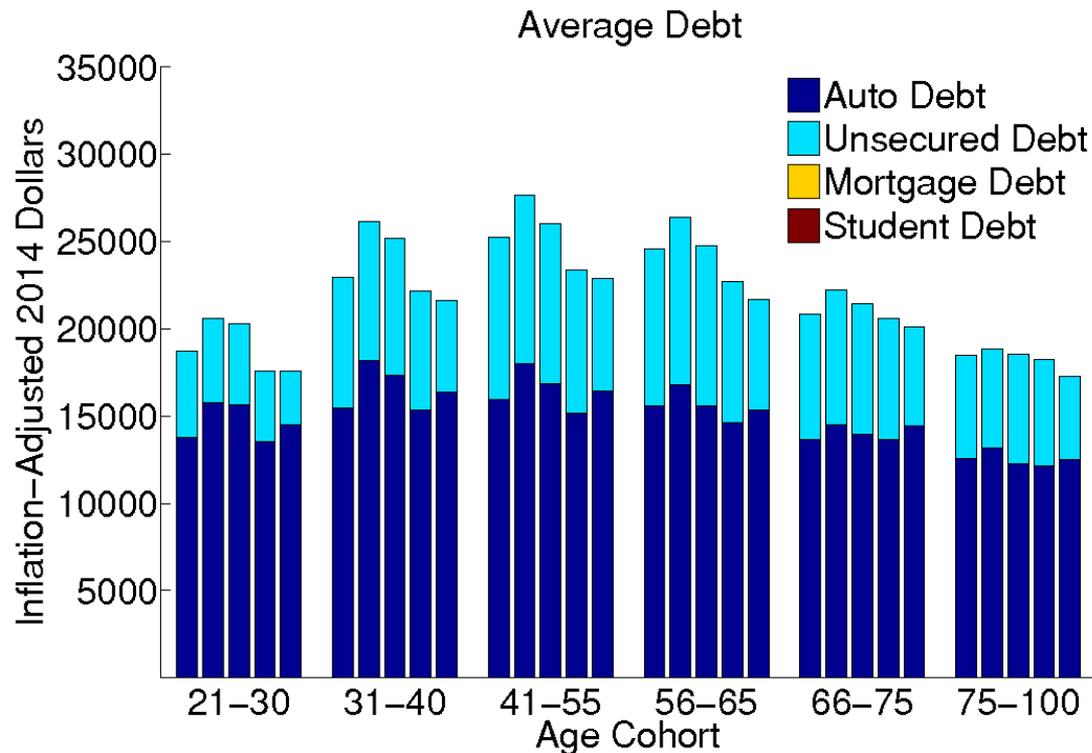
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Holding Mortgage and Auto Debt



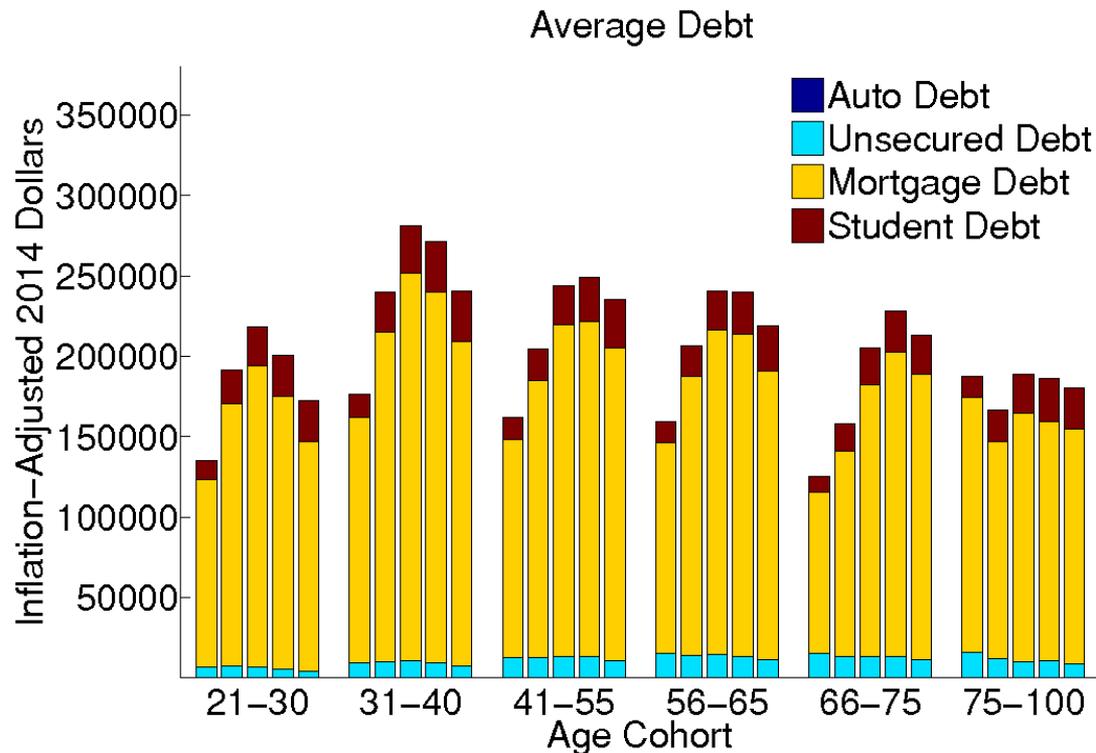
SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

Holding Unsecured Credit and Auto Debt



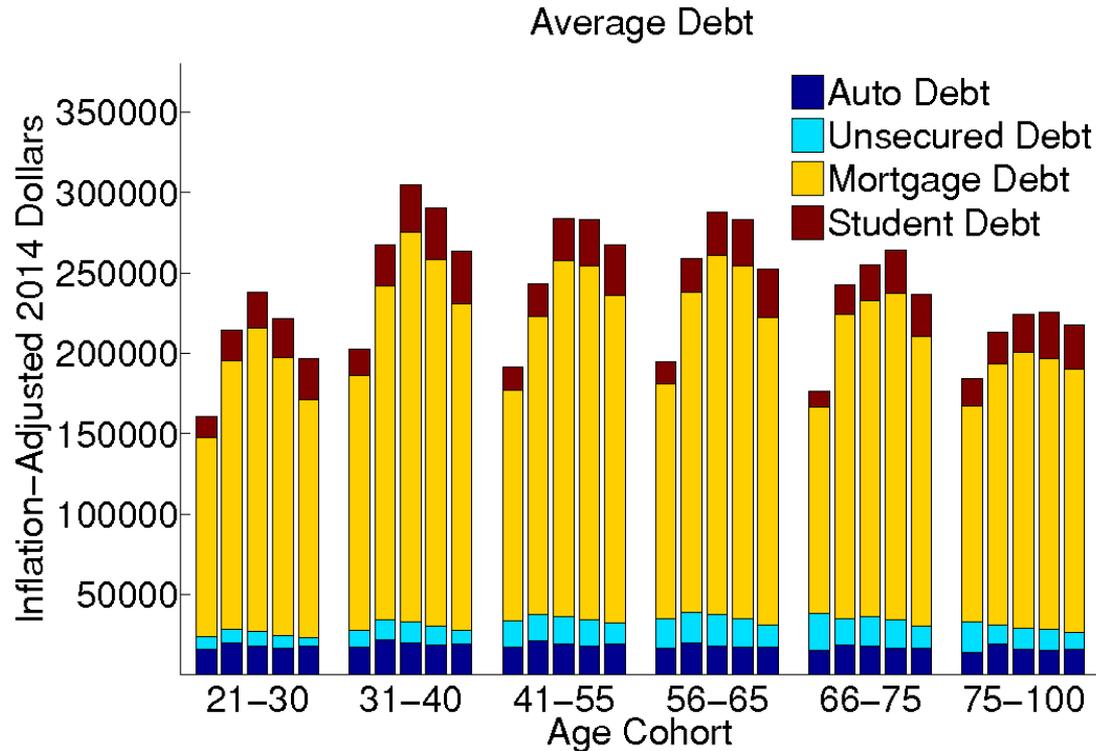
SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

Holding Mortgage, Unsecured, and Student Debt



SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

Holding All Four Types of Debt



SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

Borrowing Behavior: Pre- and Post-Crisis

- ❑ The Great Recession brought sizable changes in borrowing behavior.
 - Boom and a bust in credit cards, mortgages and auto loans.
 - Significant deleverage in three debt categories.
 - The only exception is college debt, which has been increasing since 1999.

Households' Balance Sheets, the Economy and Monetary Policy

Household Balance Sheets and the Great Recession

□ Prior to 2005

- Interest rates and mortgage rates were low.
- House prices were increasing, and the economy was growing.
- Households had wealth and could spend.

Household Balance Sheets and the Great Recession

❑ Prior to 2005

- Interest rates and mortgage rates were low.
- House prices were increasing, and the economy was growing.
- Households had wealth and could spend.

❑ After 2005

- Interest rates and mortgage rates were still low, but...
- House prices were decreasing, and growth was weak.
- Households wealth **declined**, and spending was **reduced**.
- The lack of spending and the decline in construction **magnified** the recession.

What Has Been the Fed's Response?

- ❑ The Fed has the mission to be the lender of last resort.
- ❑ By providing liquidity and keeping rates low, it provides a scenario conducive for stable growth.
- ❑ These policies are effective in a low-inflation environment.
- ❑ The role of quantitative easing (QE).

St. Louis Fed Initiatives

- Why is the Fed interested in microeconomic data?

St. Louis Fed Initiatives

- ❑ Why is the Fed interested in microeconomic data?
 - ❑ Two important programs:
1. The Center for Household Financial Stability: This is a new research initiative of the Federal Reserve Bank of St. Louis focused on rebuilding the household balance sheets of struggling American families.

<http://www.stlouisfed.org/household-financial-stability>



2. Econ Ed: Promote economic literacy for students (elementary, middle, HS, and college), and consumers.

http://www.stlouisfed.org/education_resources/

