

DIALOGUE  
WITH THE FED  
*Beyond Today's Financial Headlines*



CENTRAL TO AMERICA'S ECONOMY™  
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# Household Debt in America: A Look Across Generations Over Time

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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.

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

# Household Debt in America



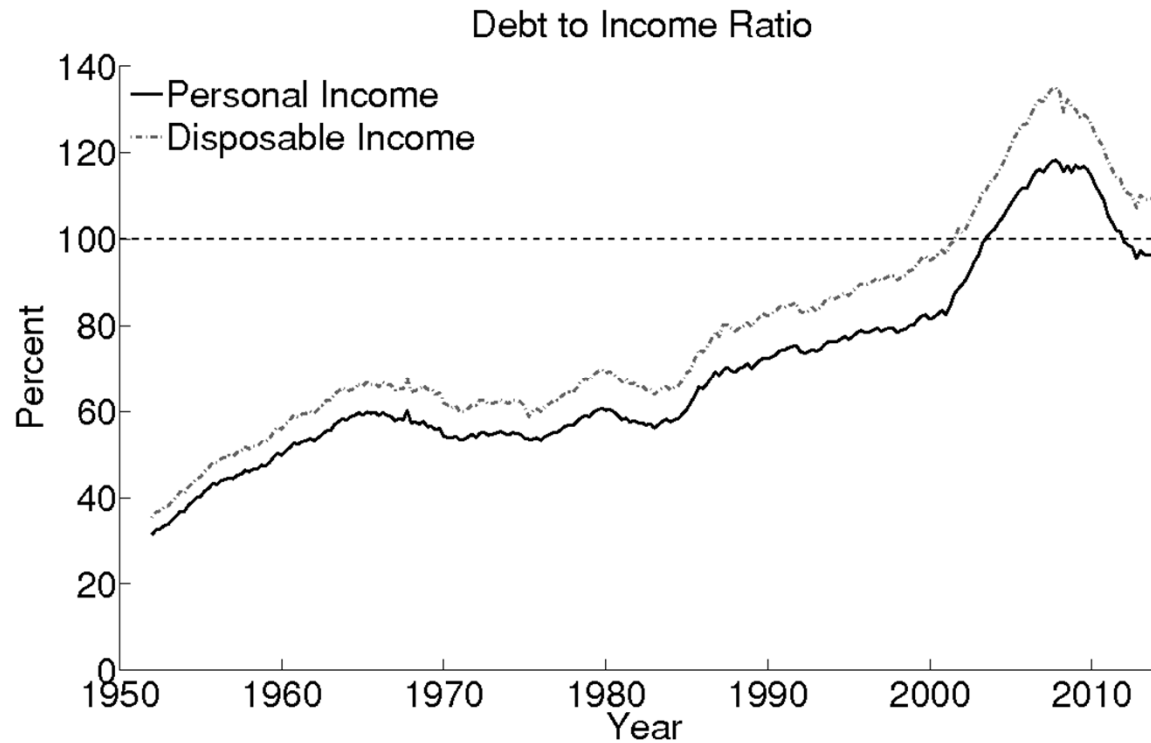
SOURCES: Bureau of Economic Analysis and Federal Reserve Board.

# Household Debt in America



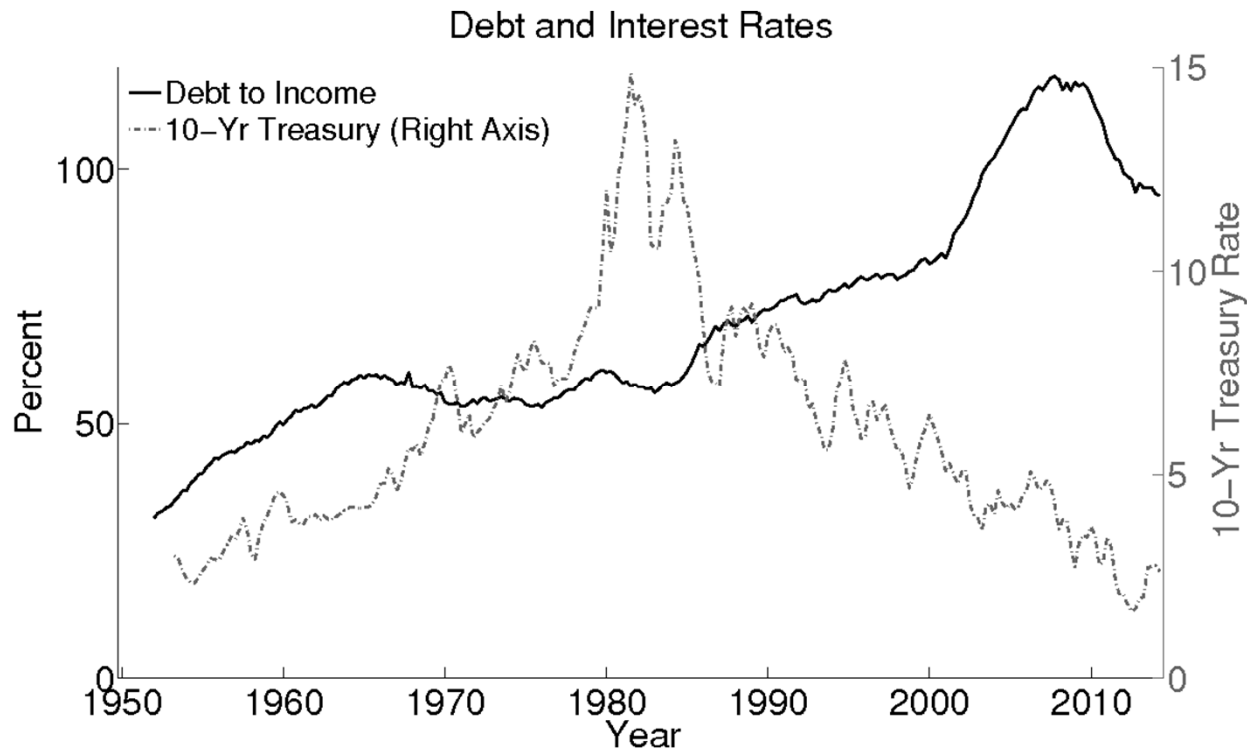
SOURCES: Bureau of Economic Analysis and Federal Reserve Board.

# 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

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

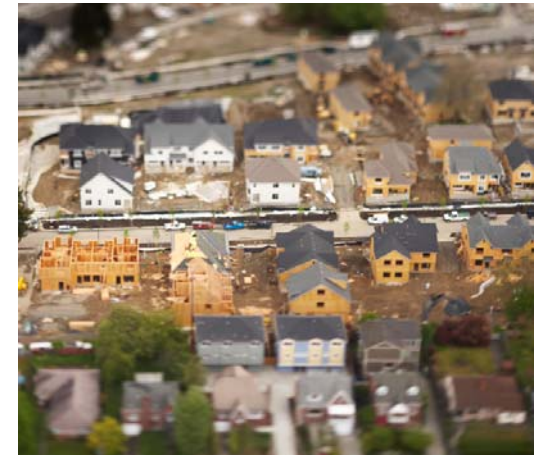


David Pereiras Villagra/iStock/Thinkstock

# Debt and the Great Recession

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- ❑ 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

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- ❑ 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?

# Purpose of Today's Talk

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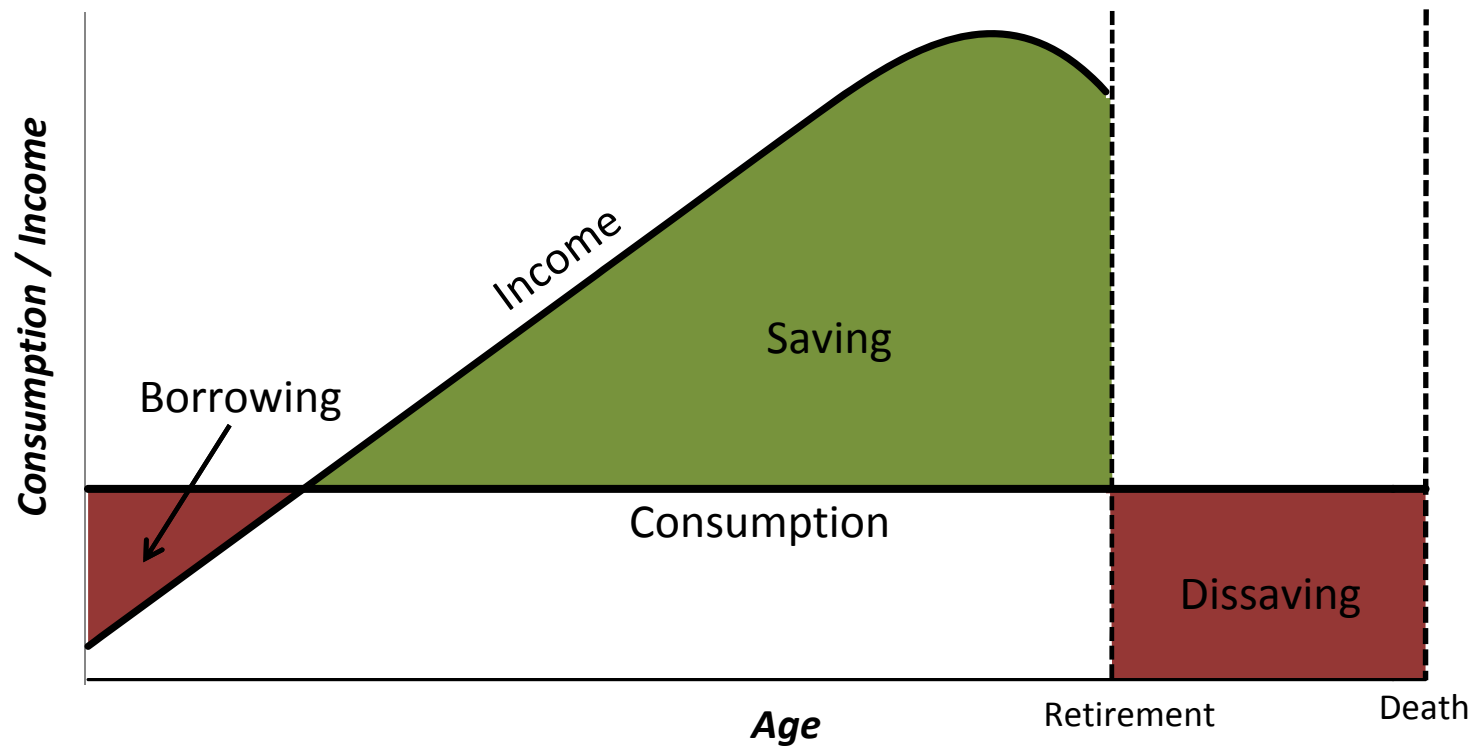
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- ❑ Which are the most important forms of debt over the life cycle?
- ❑ What role did borrowing play in the financial crisis?
- ❑ What has been the response of the Fed?

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

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# Why Do Households Borrow (or Save)?

# Consumption and Income Over the Life Cycle



# The Message from this Framework

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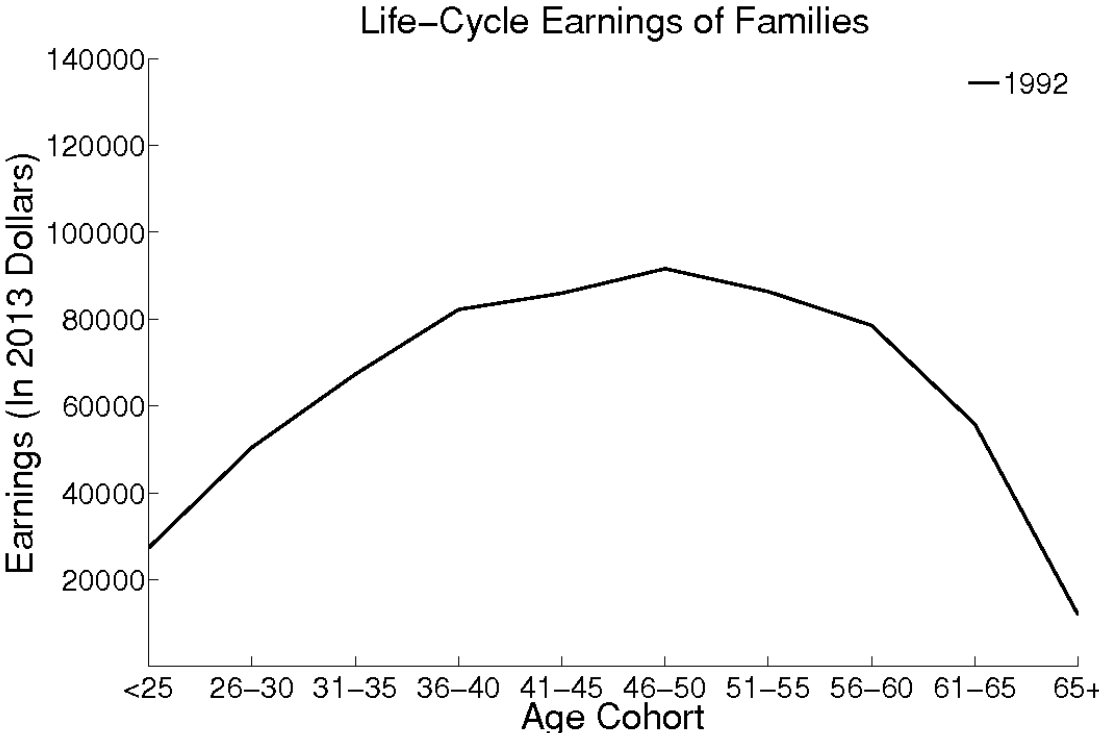
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- ❑ Household debt decisions must be consistent with repayment over the life horizon.
- ❑ What determines consumption?
  - Current income
  - Expected future income
  - Unexpected income variations (e.g., job loss)



# Average Life-Cycle Income in the United States



SOURCE: Survey of Consumer Finances.

# The Message from this Framework for Borrowing

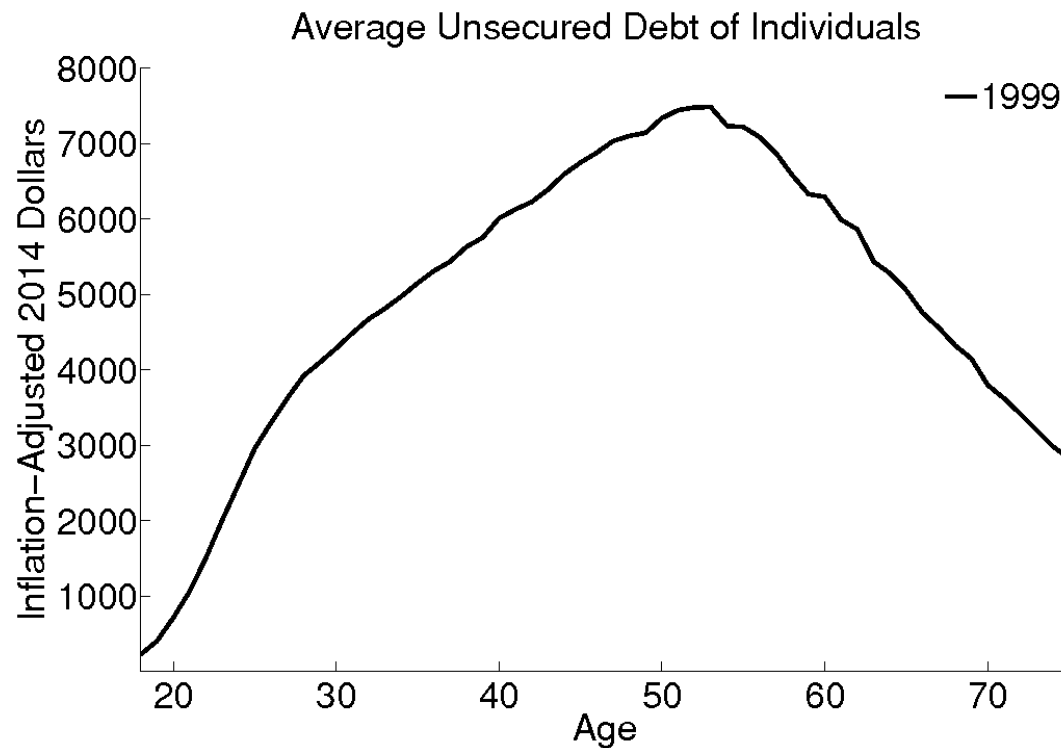
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1. **Life-cycle motive:** Borrow to go to school and repay when in the labor force.
2. **Smoothing motive:** Maintain stable consumption pattern when income fluctuates.
3. **Insurance motive:** Mitigate the negative/positive effect of shocks (i.e.,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

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# What Are Households Doing With All This Debt?

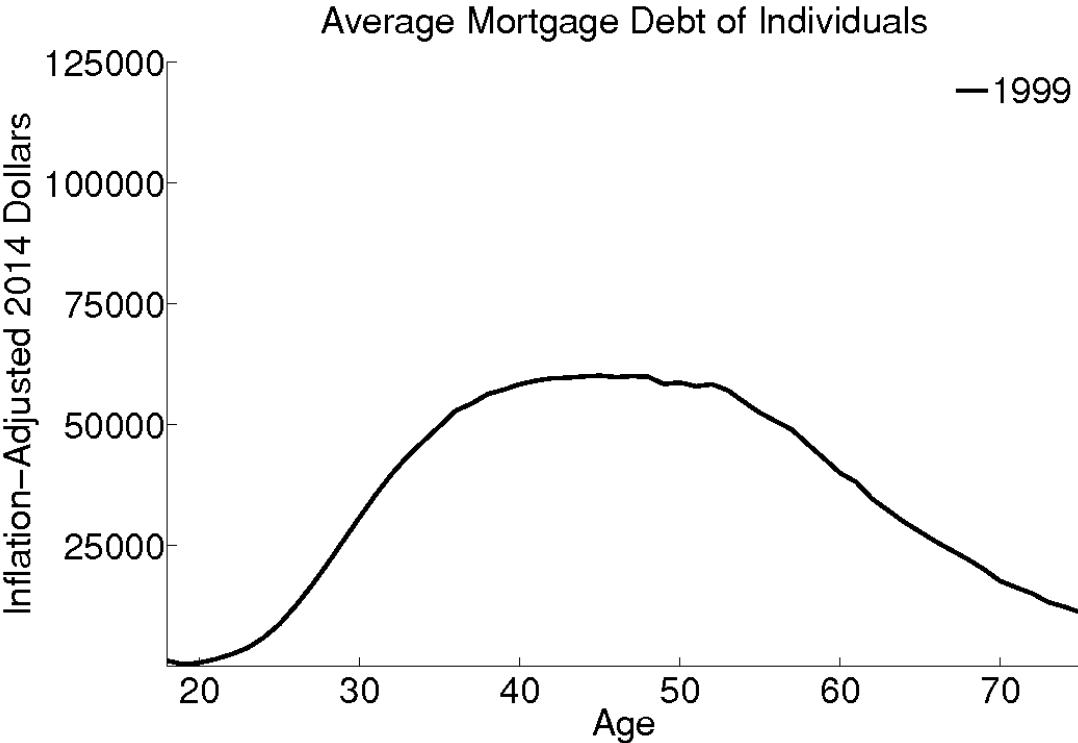
# Evidence: Unsecured Credit (Credit Cards)



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

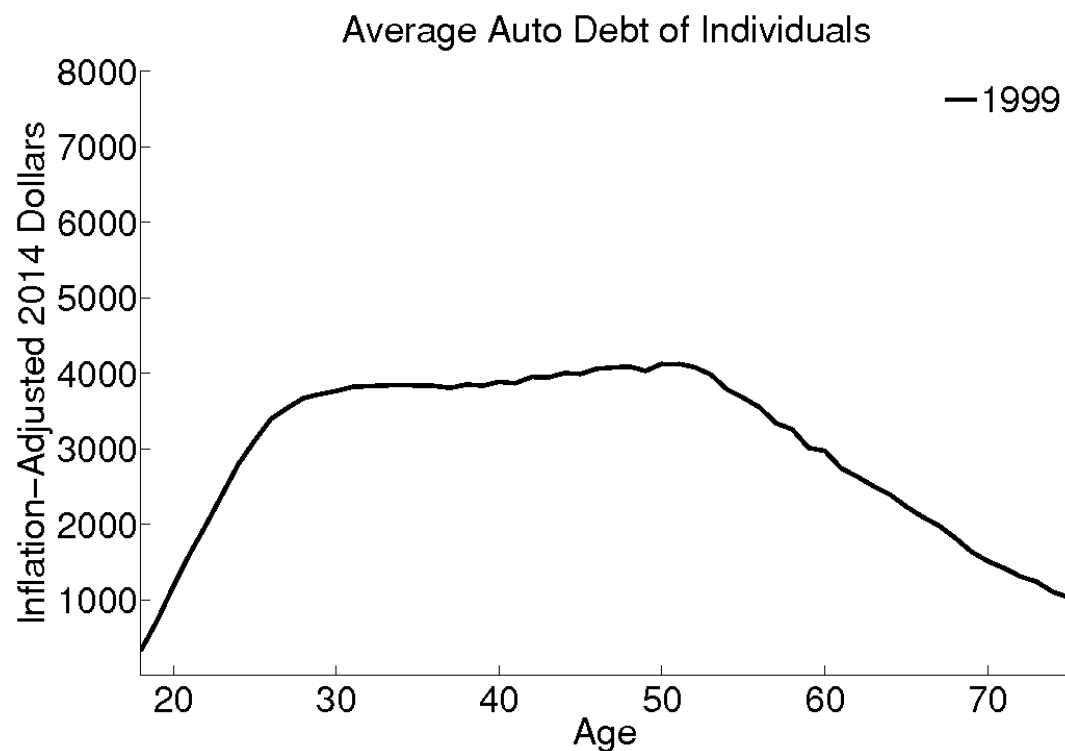
20

# Evidence: Mortgages



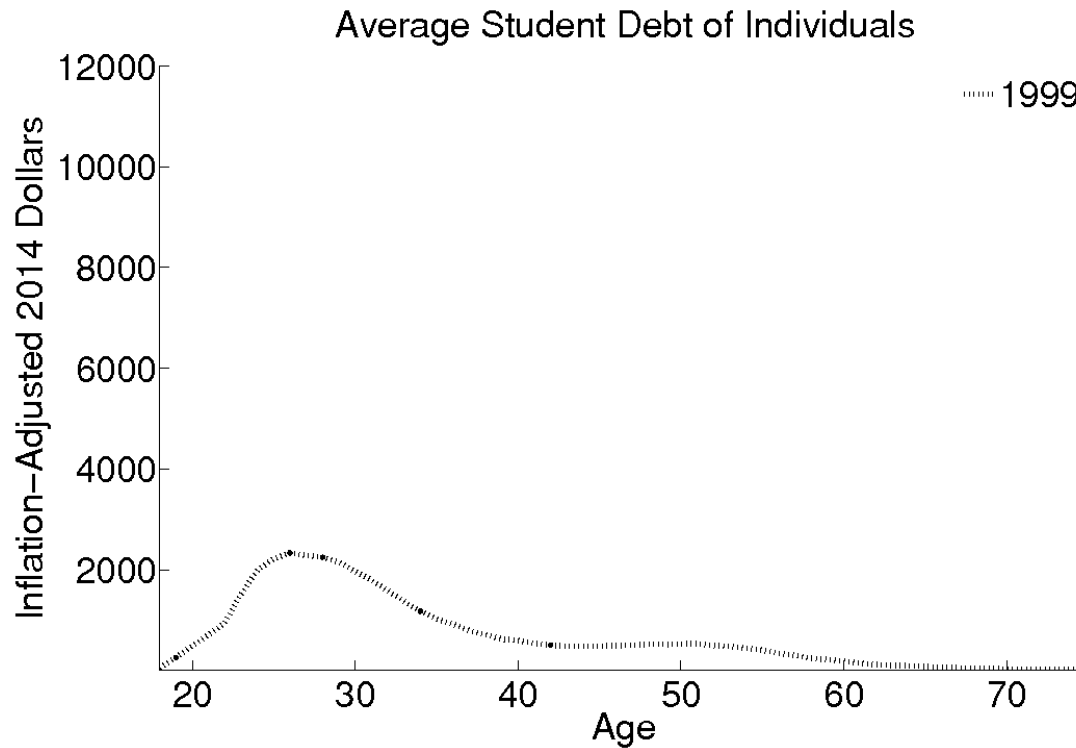
SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

# 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



Pavel Losevsky/iStock/Thinkstock



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# Changes in Borrowing Behavior during the Great Recession

# Why Is the Great Recession Recovery Different?

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

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# Why is the Great Recession Recovery Different?

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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

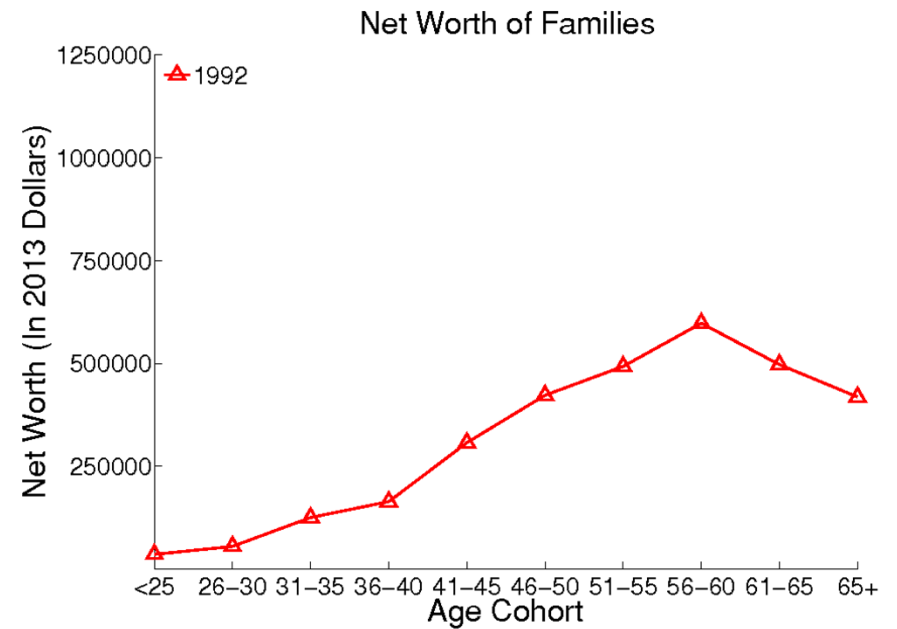
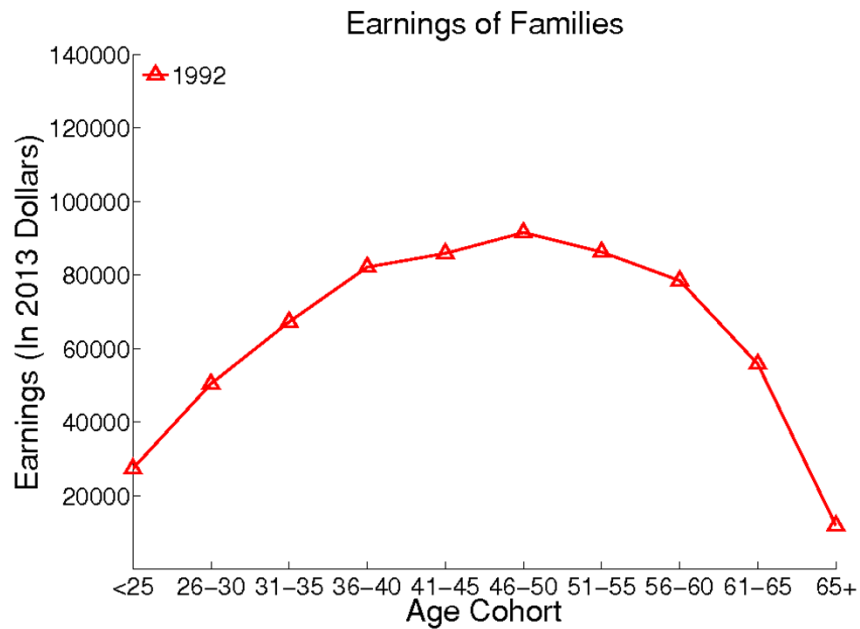
1980-1982 Recession					
Income Group	1979	1982	1985	$\Delta$ 79-82	$\Delta$ 82-85
95th Percentile	\$191.8	\$189.6	\$209.5	-1%	11%
Median	\$71.9	\$65.0	\$71.1	-10%	9%
20th Percentile	\$33.1	\$26.3	\$29.1	-20%	11%

2007-2009 Recession					
Income Group	2006	2009	2012	$\Delta$ 06-09	$\Delta$ 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.

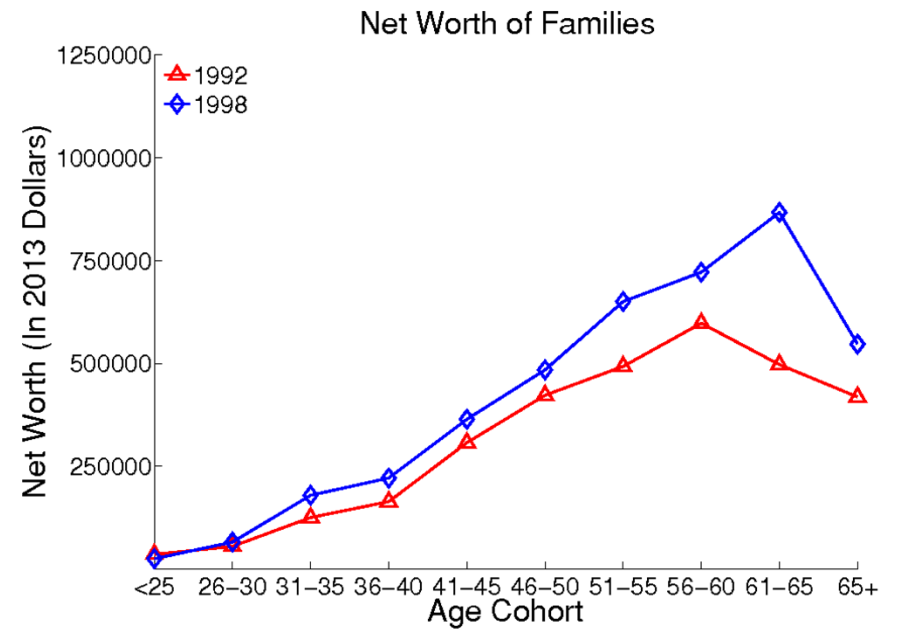
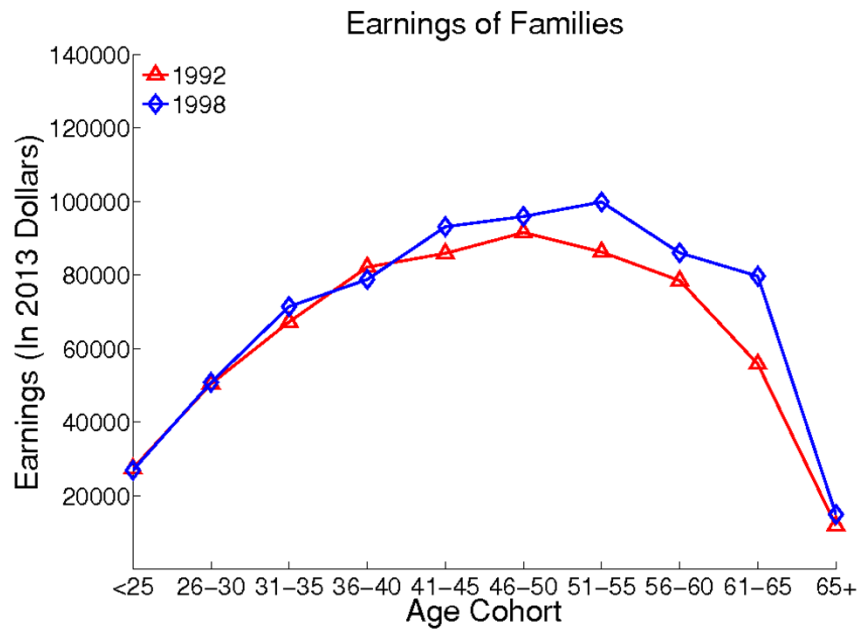
SOURCE: Federal Reserve Bank of Minneapolis 2013 Annual Report.

# Average Earnings and Net Worth by Age



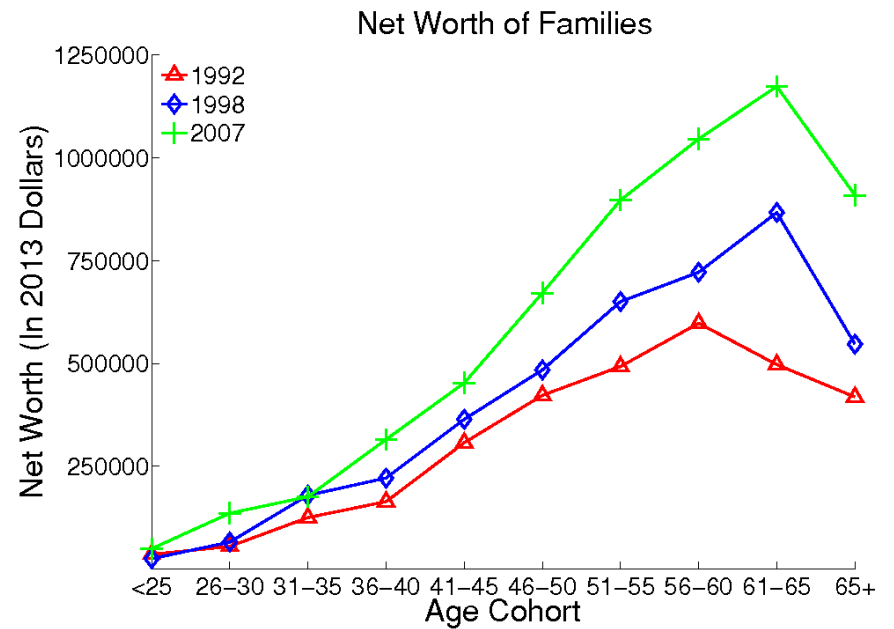
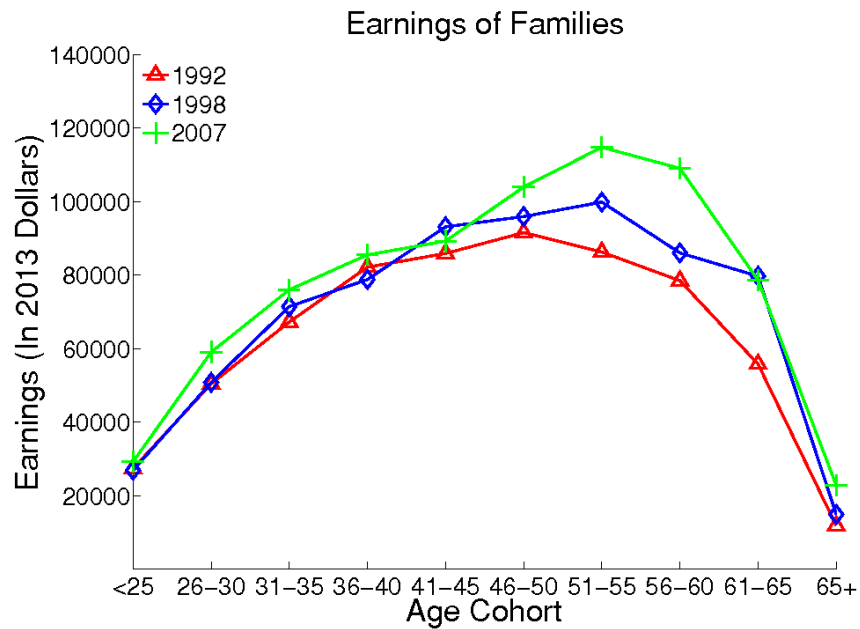
SOURCE: Survey of Consumer Finances.

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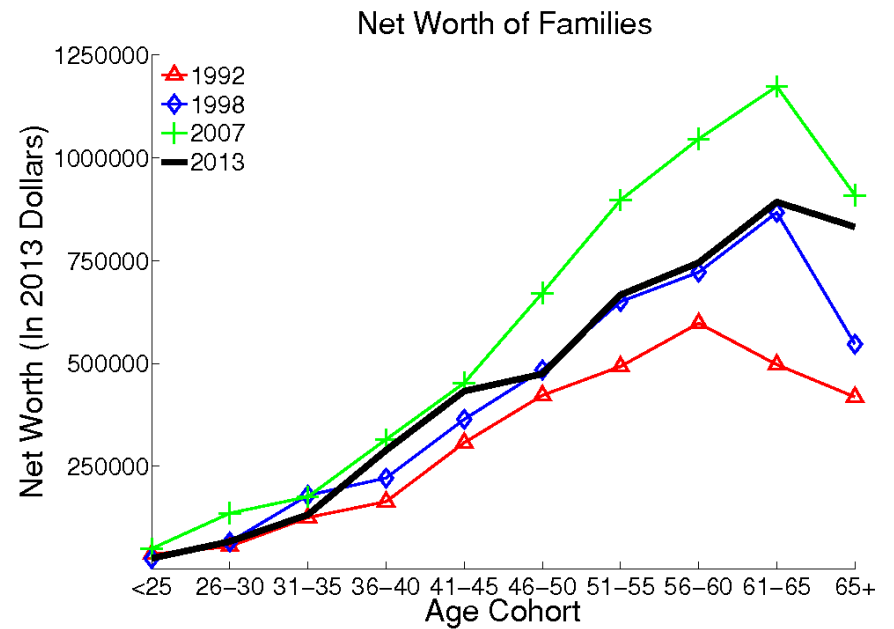
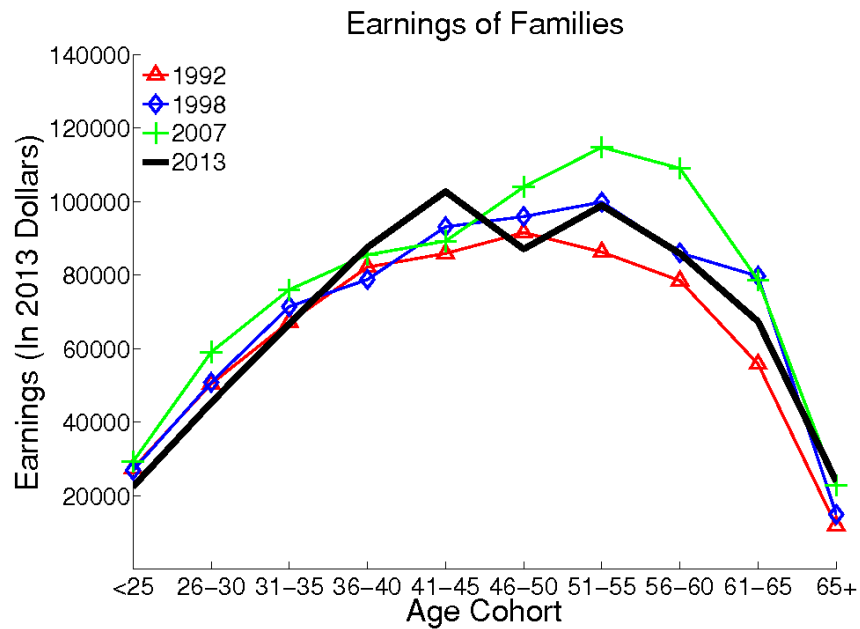
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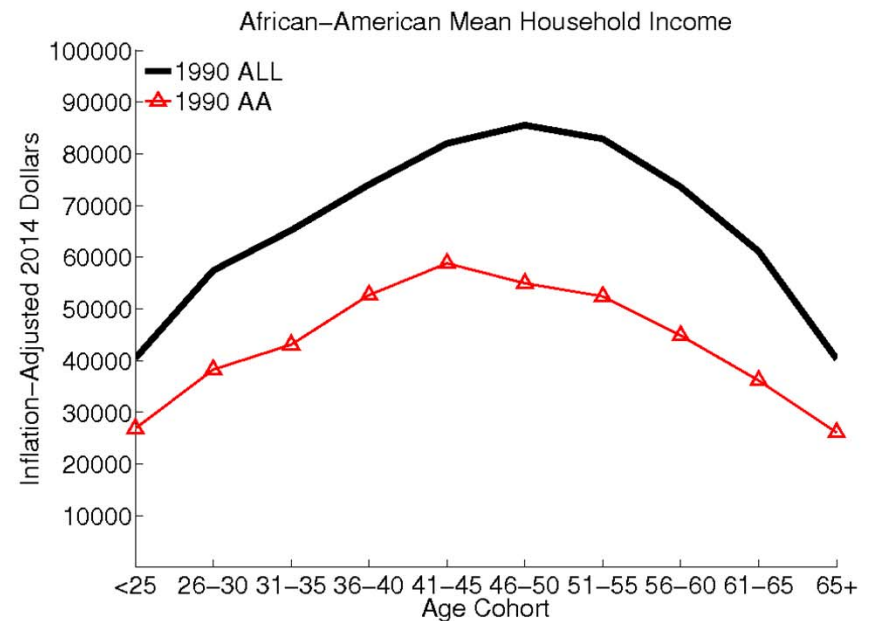
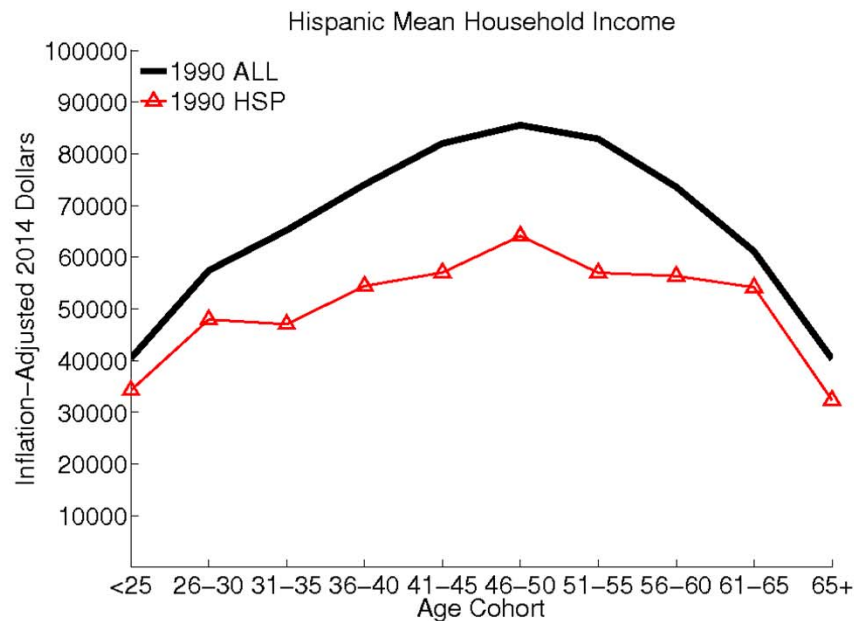
## Has the Income Distribution in the United States Actually Changed?

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

SOURCE: Survey of Consumer Finances.

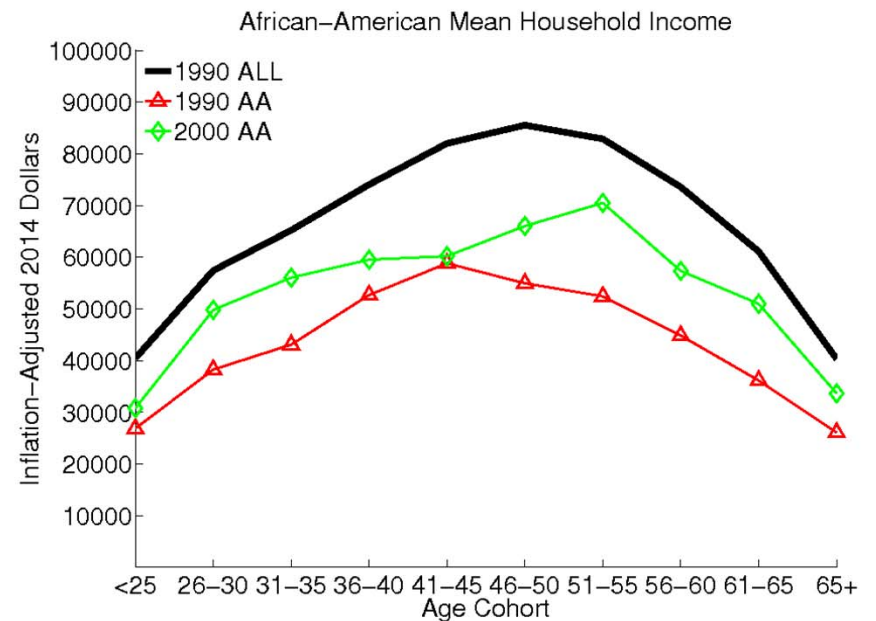
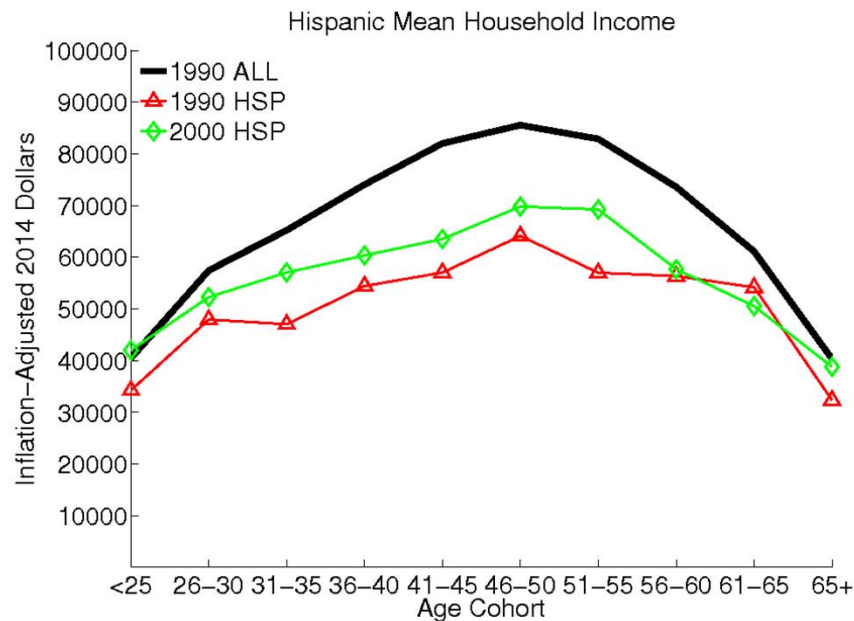
NOTE: Median earnings for 1992-2013 respectively are \$36,584, \$40,585, \$42,046, \$41,567, \$37,039, and \$33,479 in 2013 dollars.

# How Has the Great Recession Impacted Minorities?



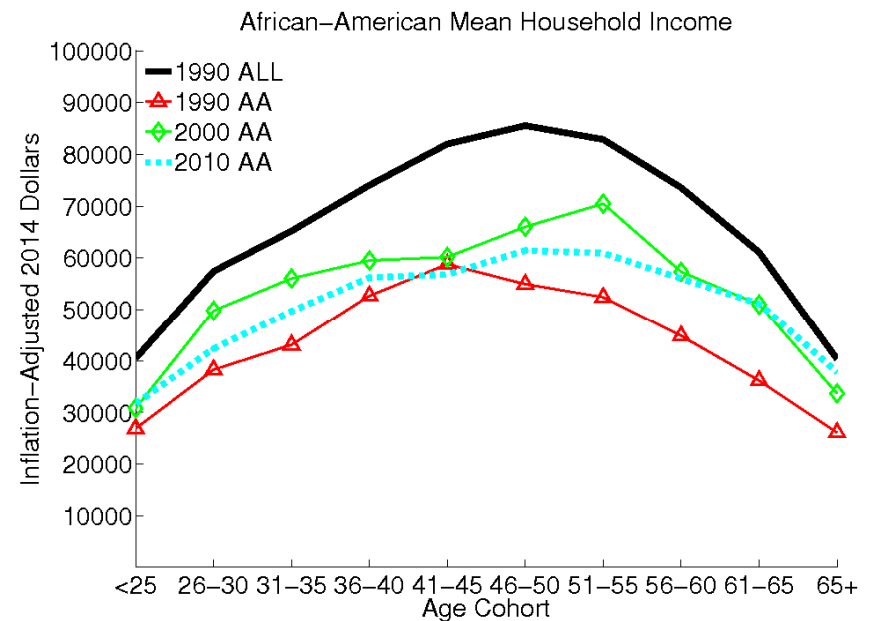
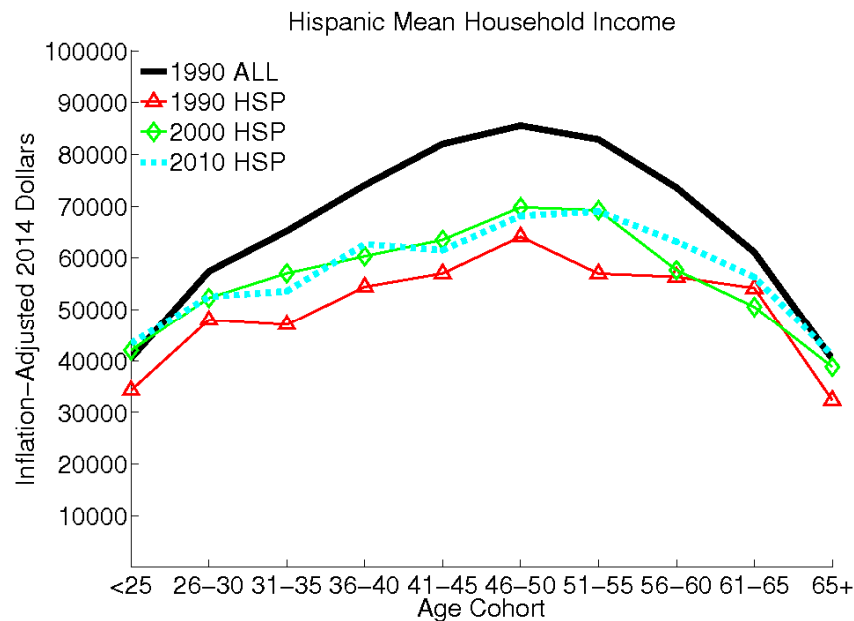
SOURCES: Current Population Survey Annual Social and Economic Supplement.

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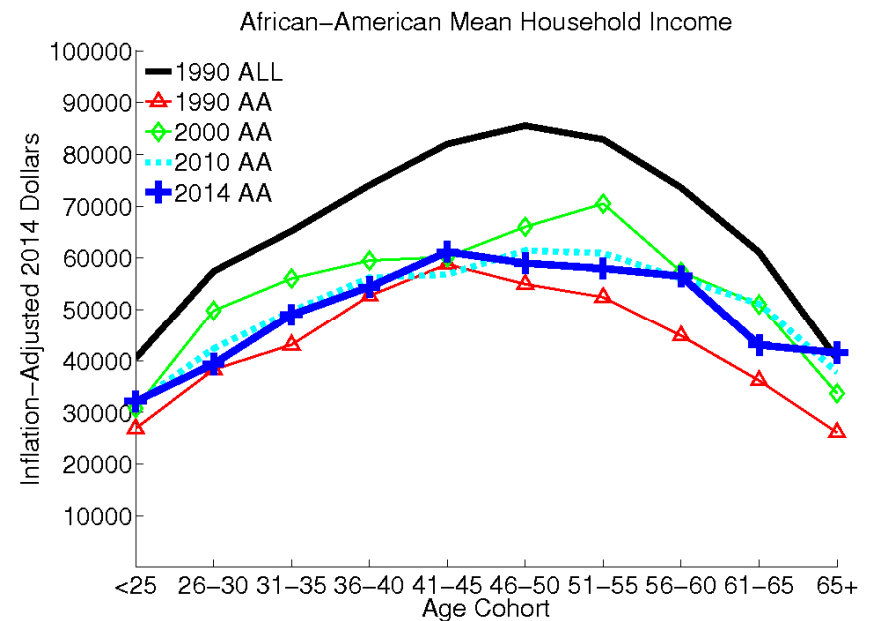
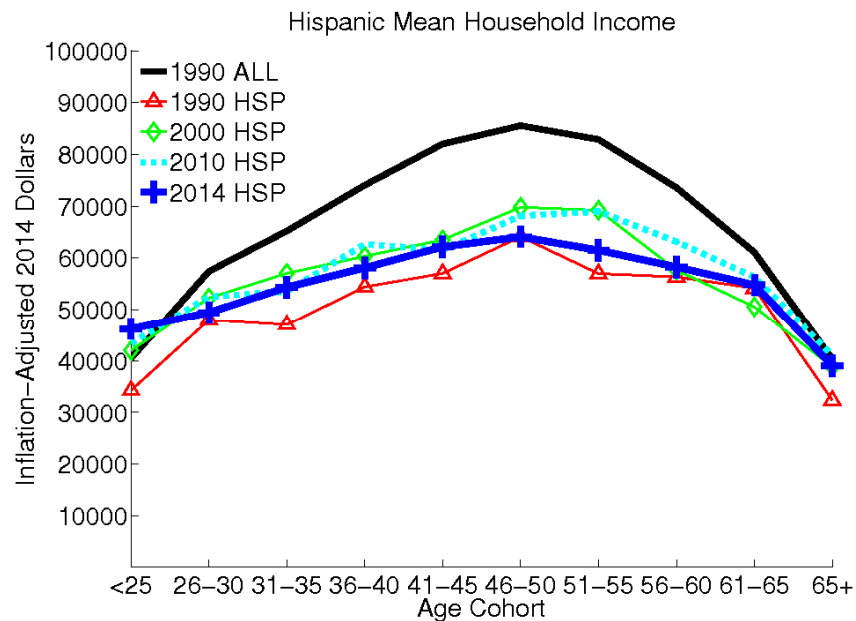
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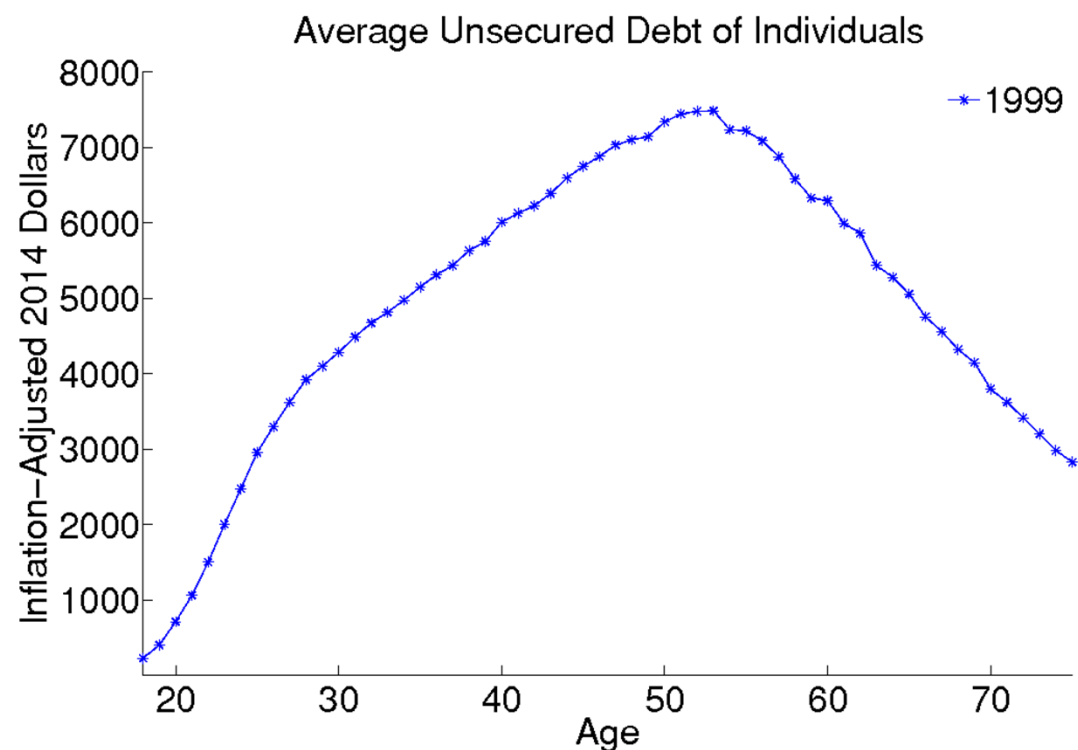


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# Changes in Four Major Consumer Debt Categories

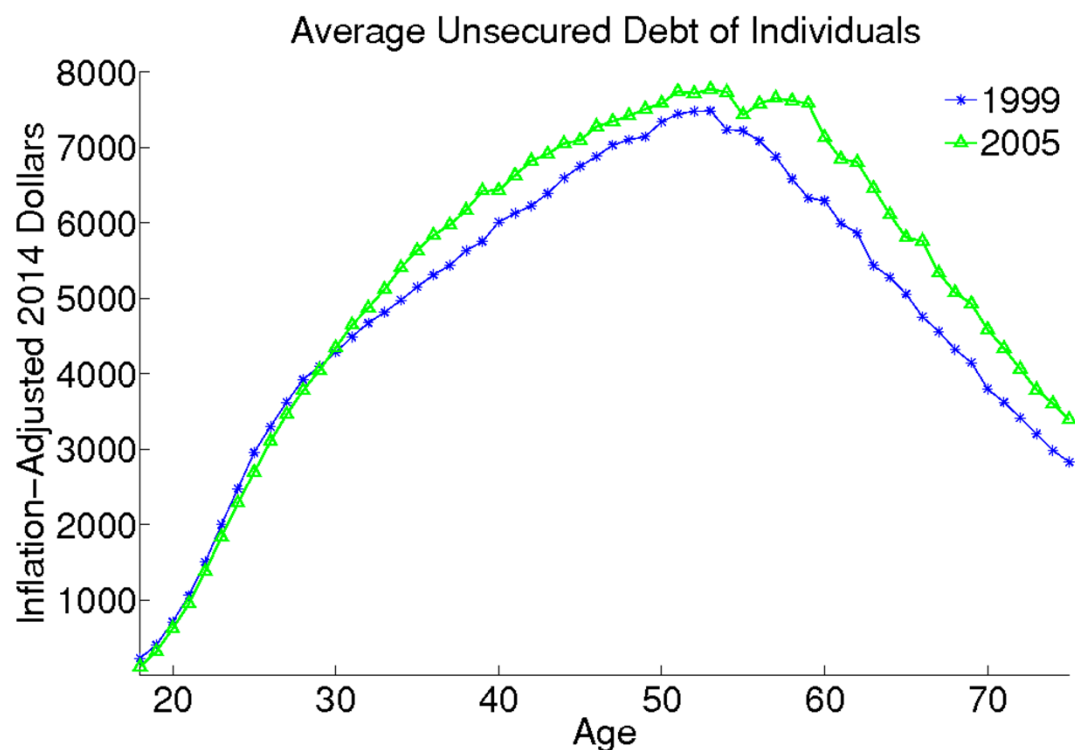
# Unsecured Consumer Credit (Credit Cards)



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

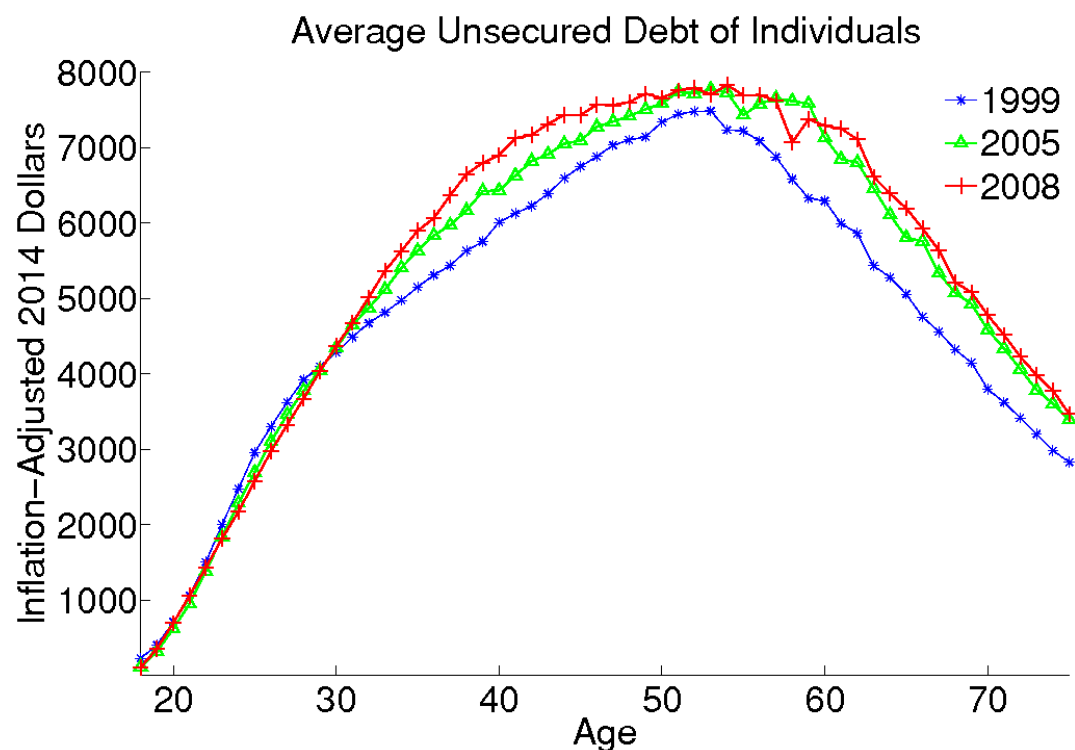


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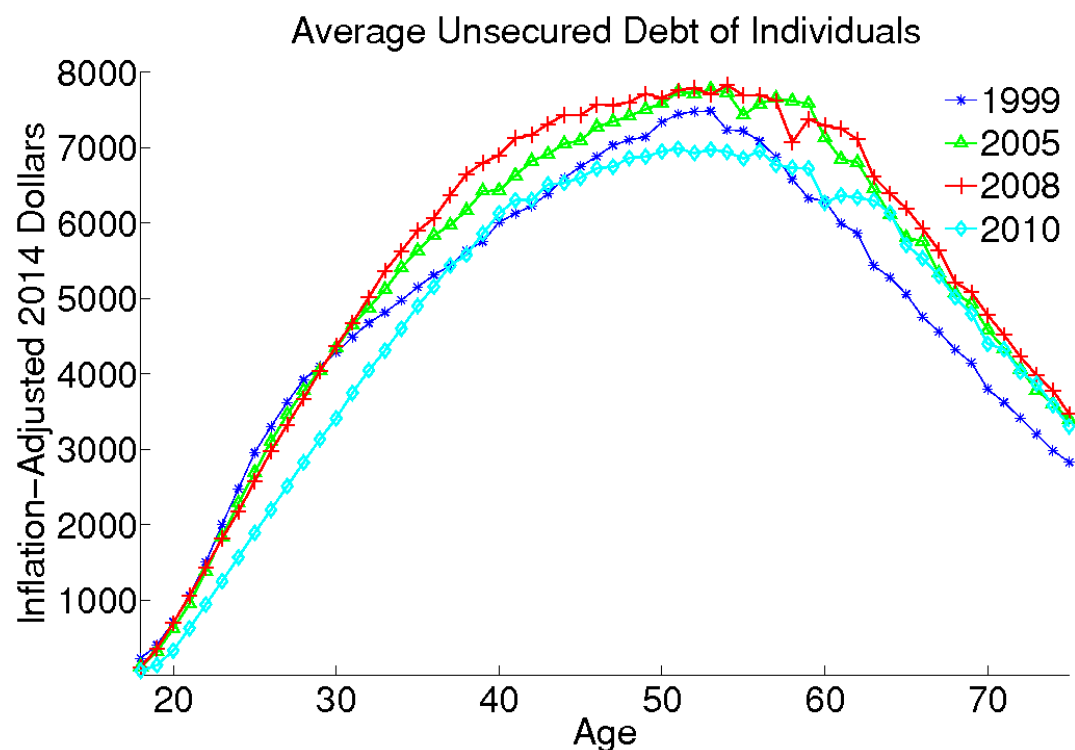
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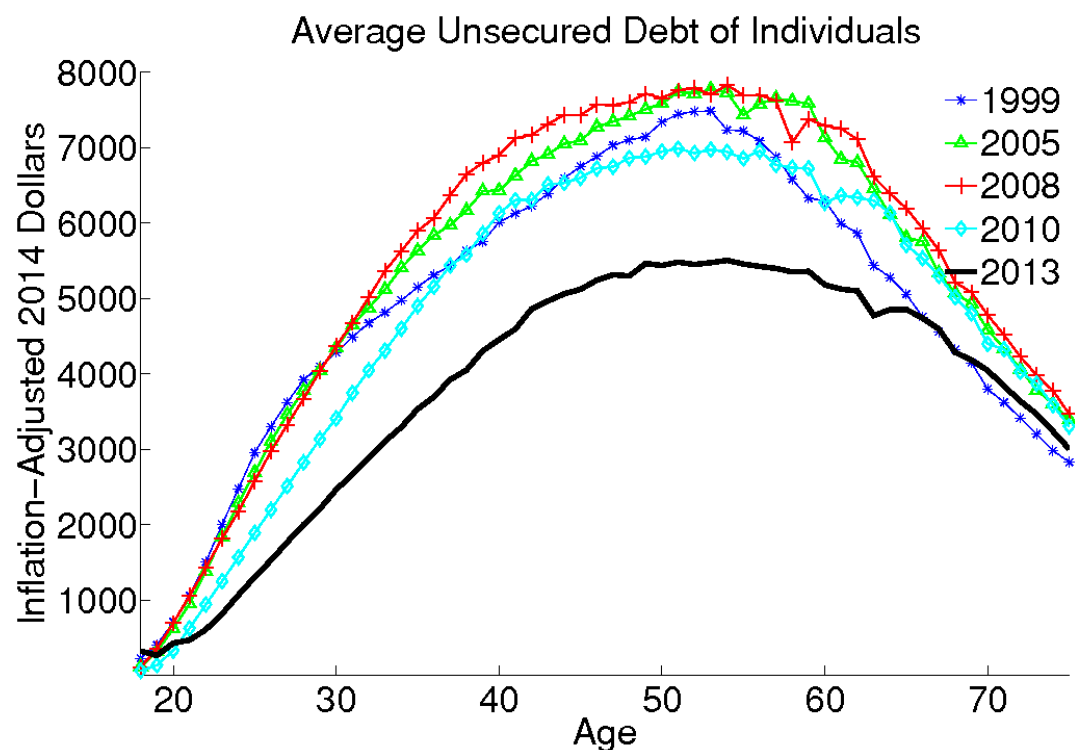
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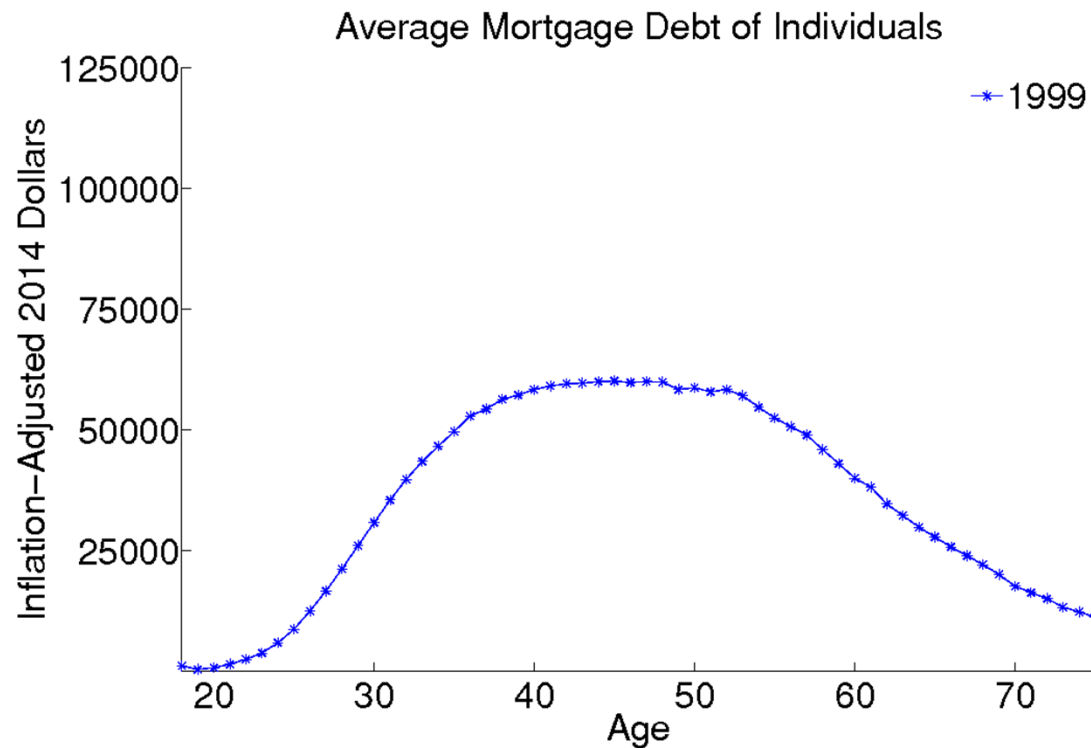
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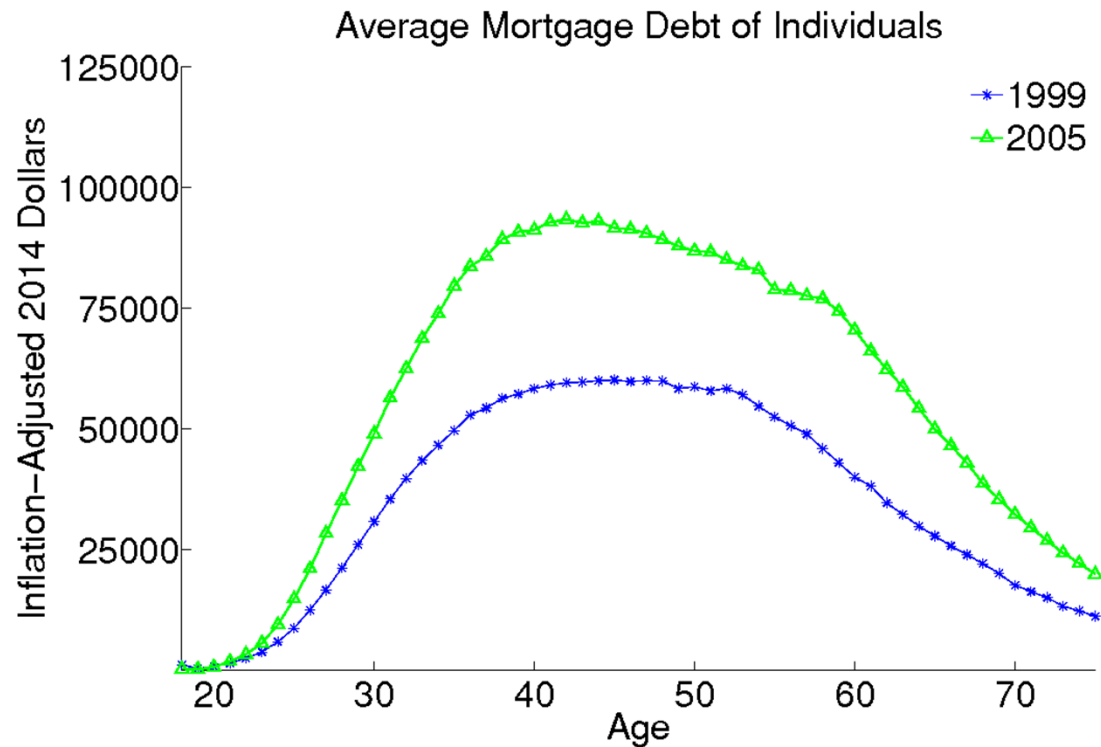
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# Mortgages



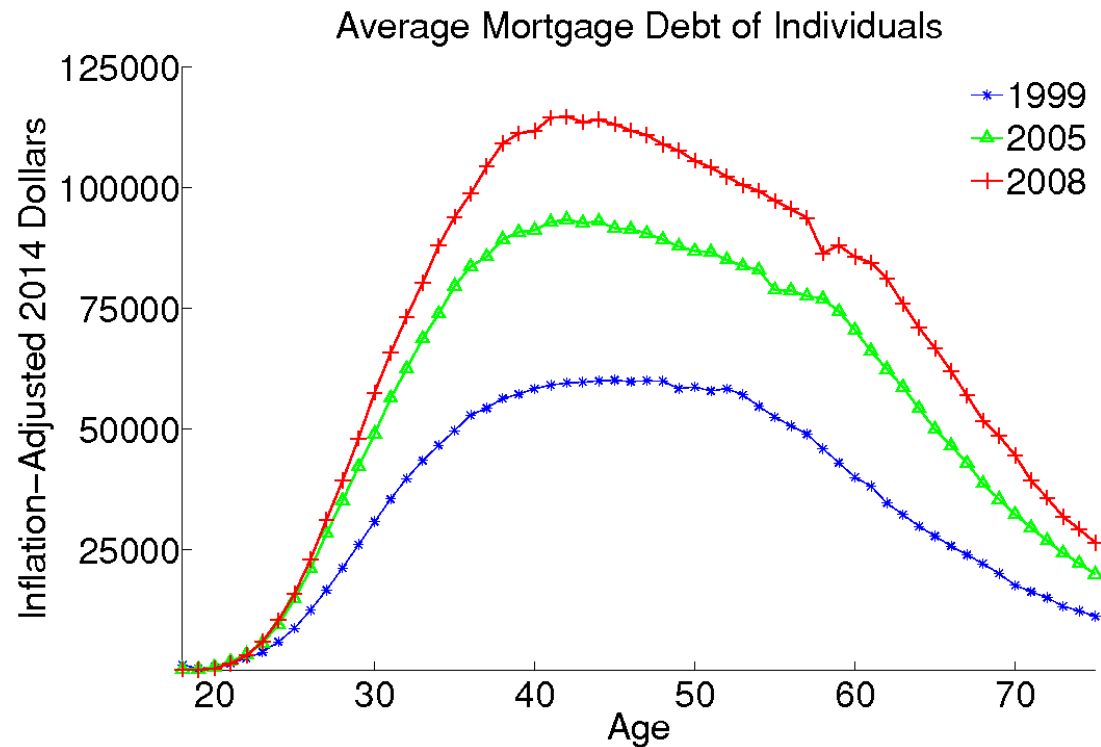
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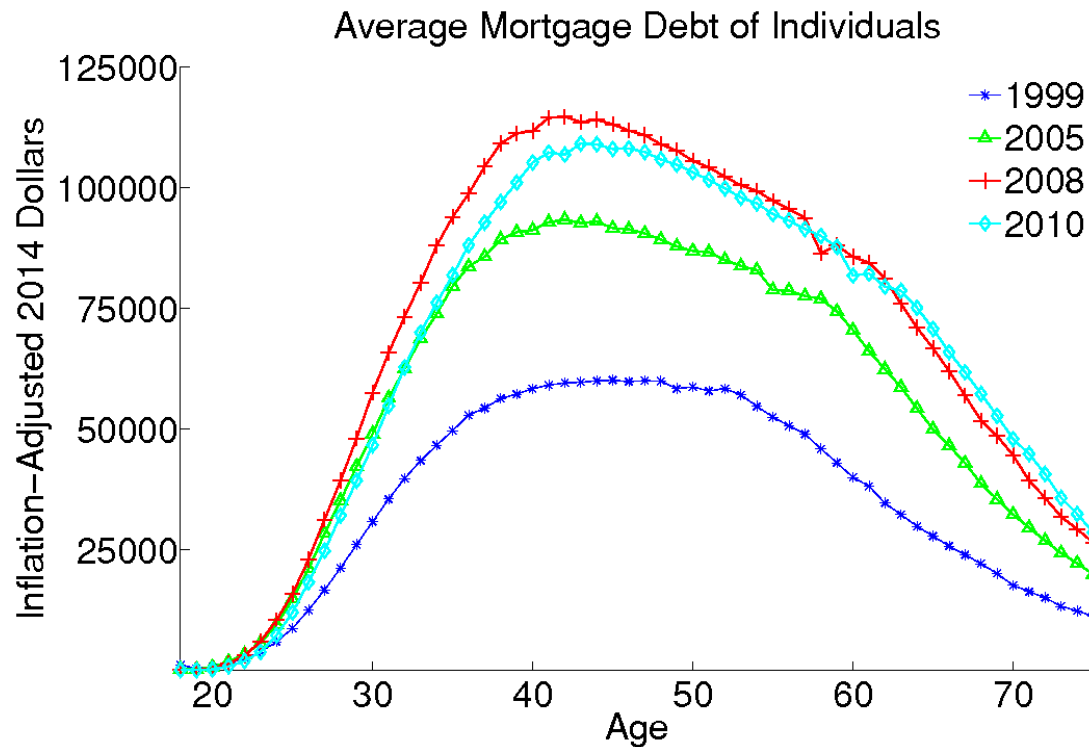
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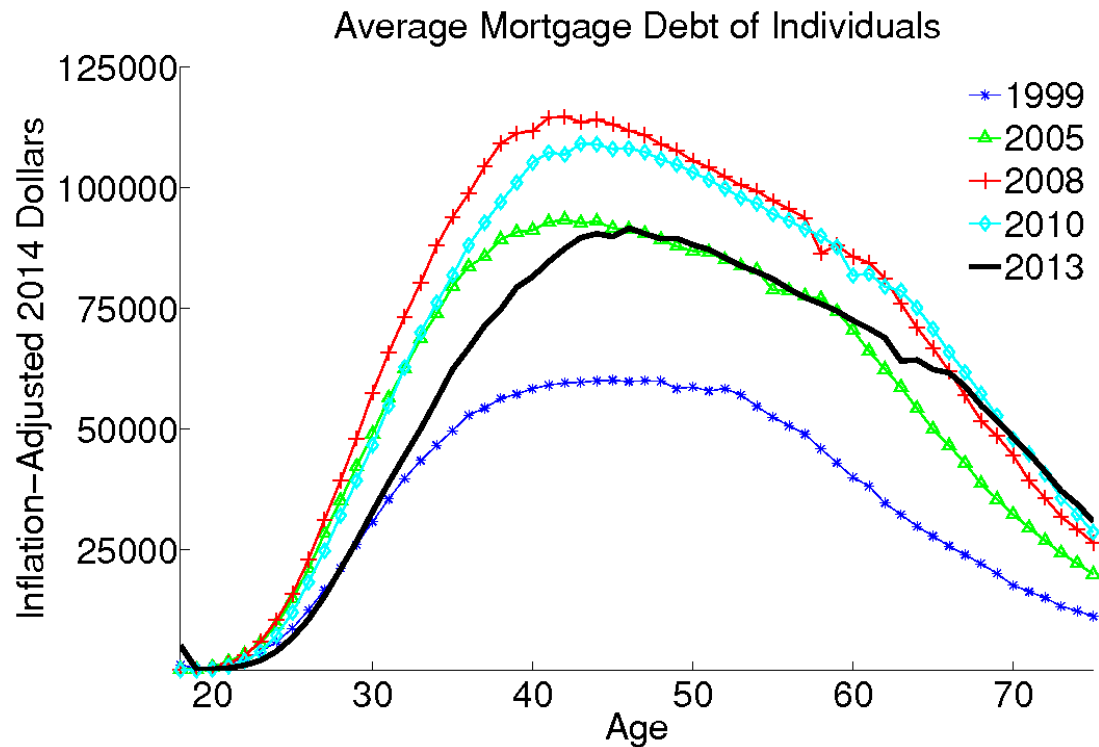
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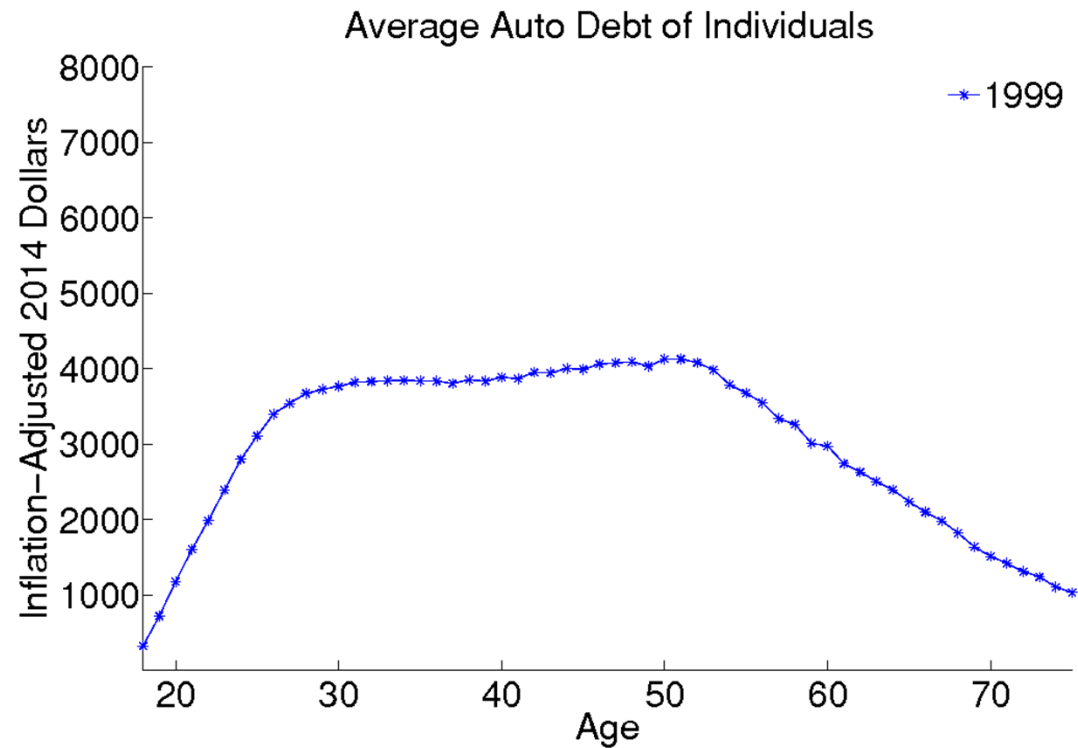


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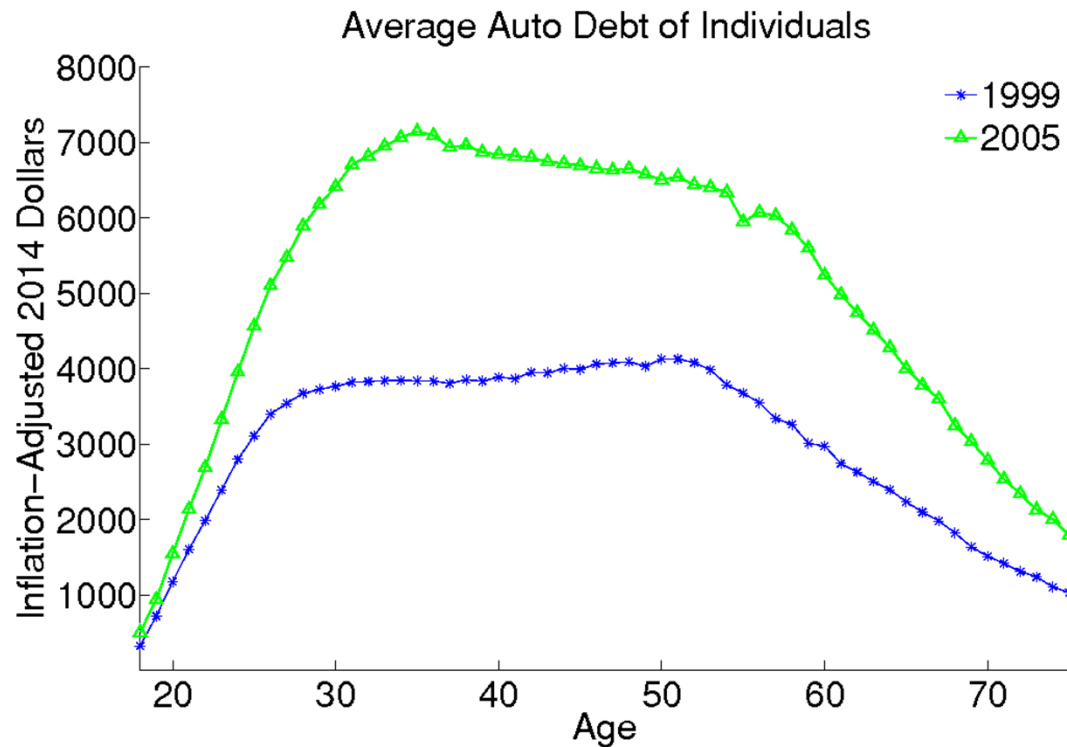
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# Auto Loans



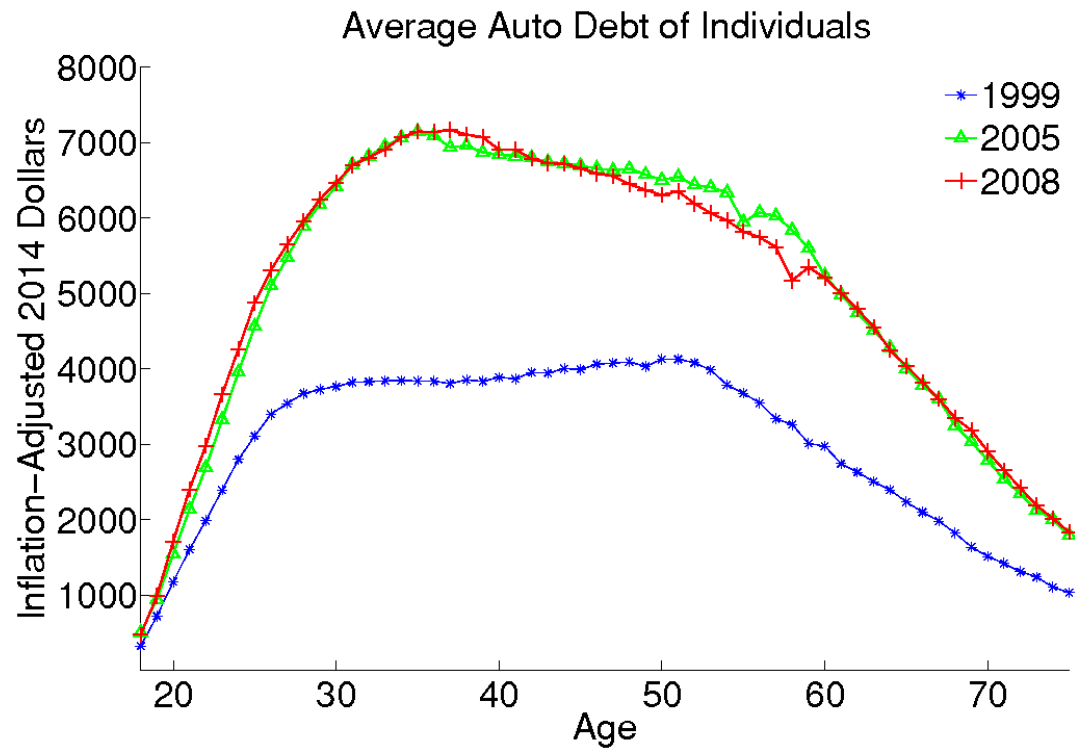
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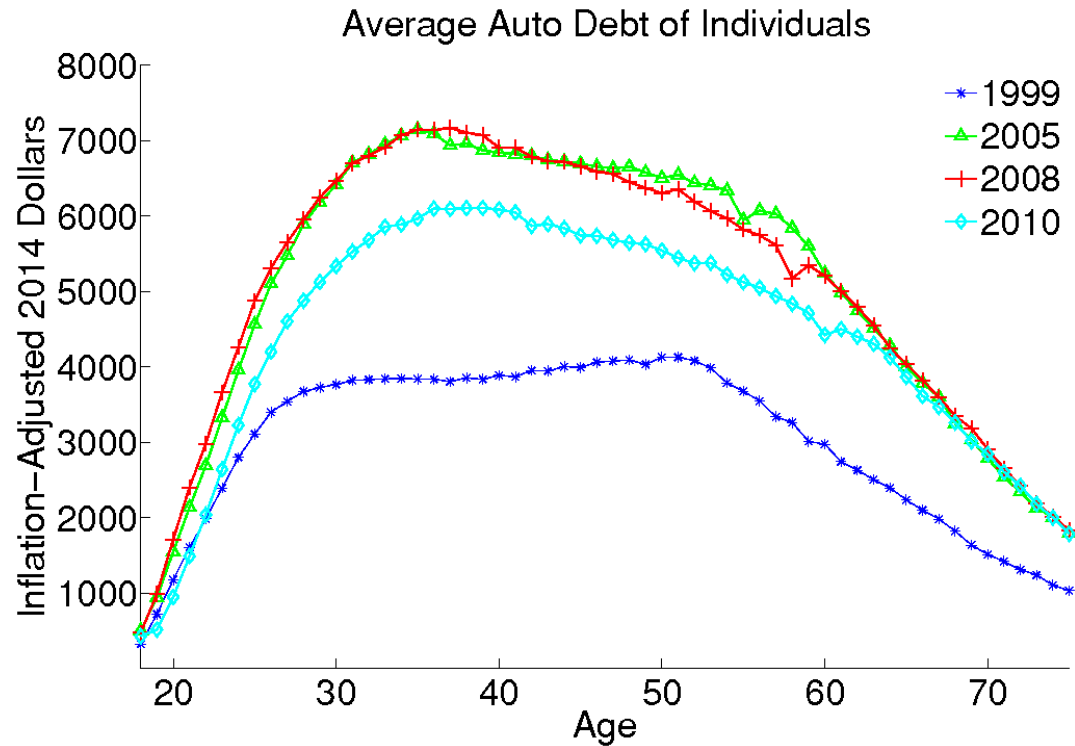
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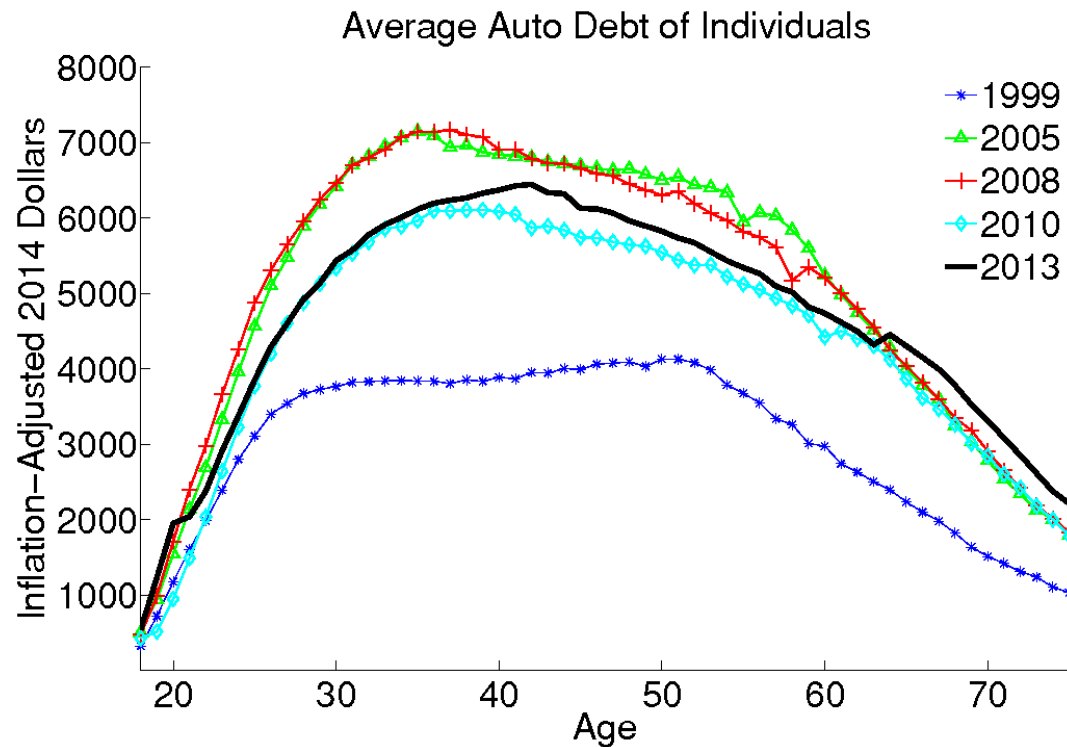
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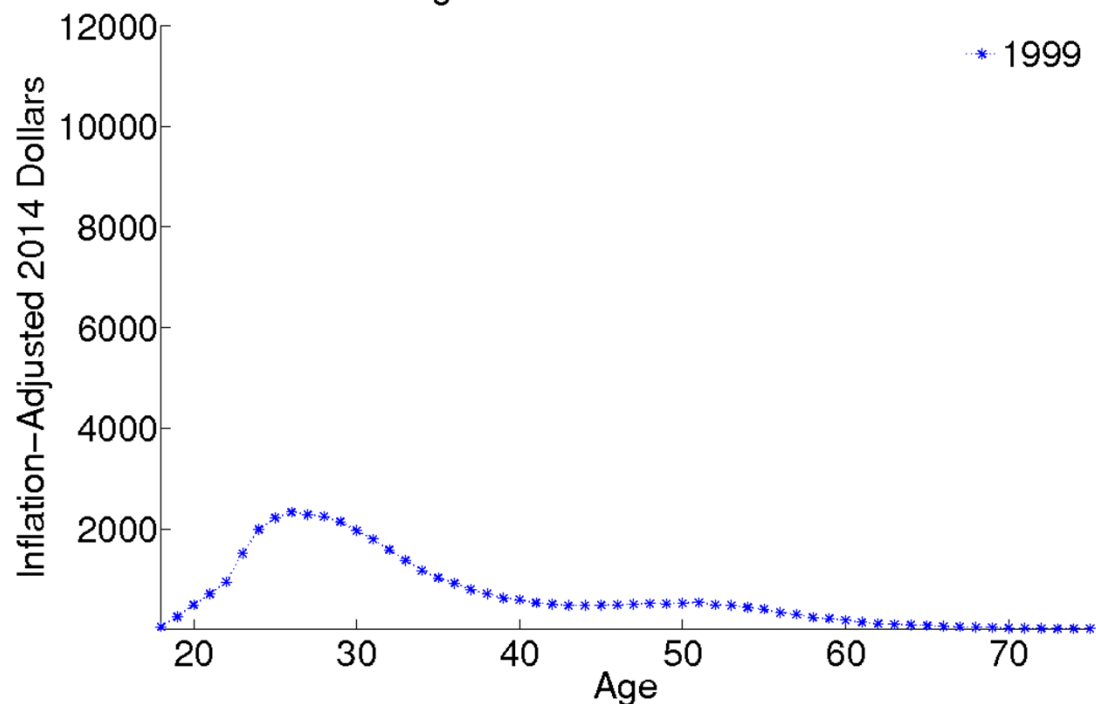
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SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

# Student Debt

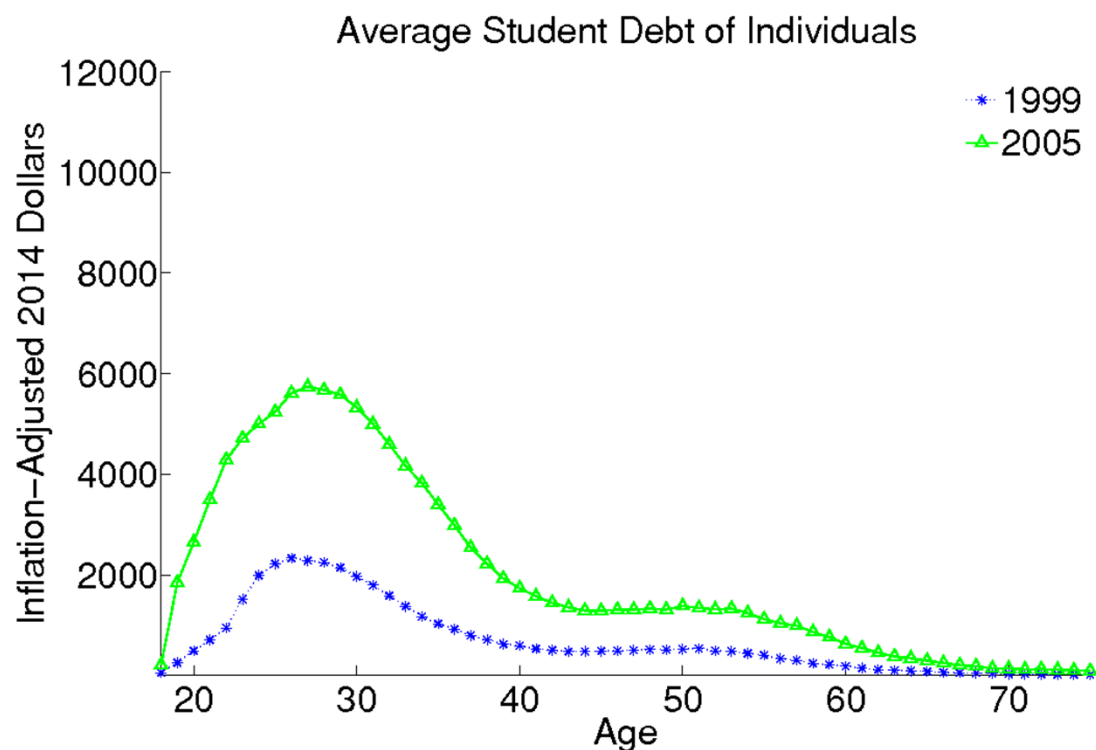
Average Student Debt of Individuals



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

Note: Data prior to 2003 is not consistent

# Student Debt

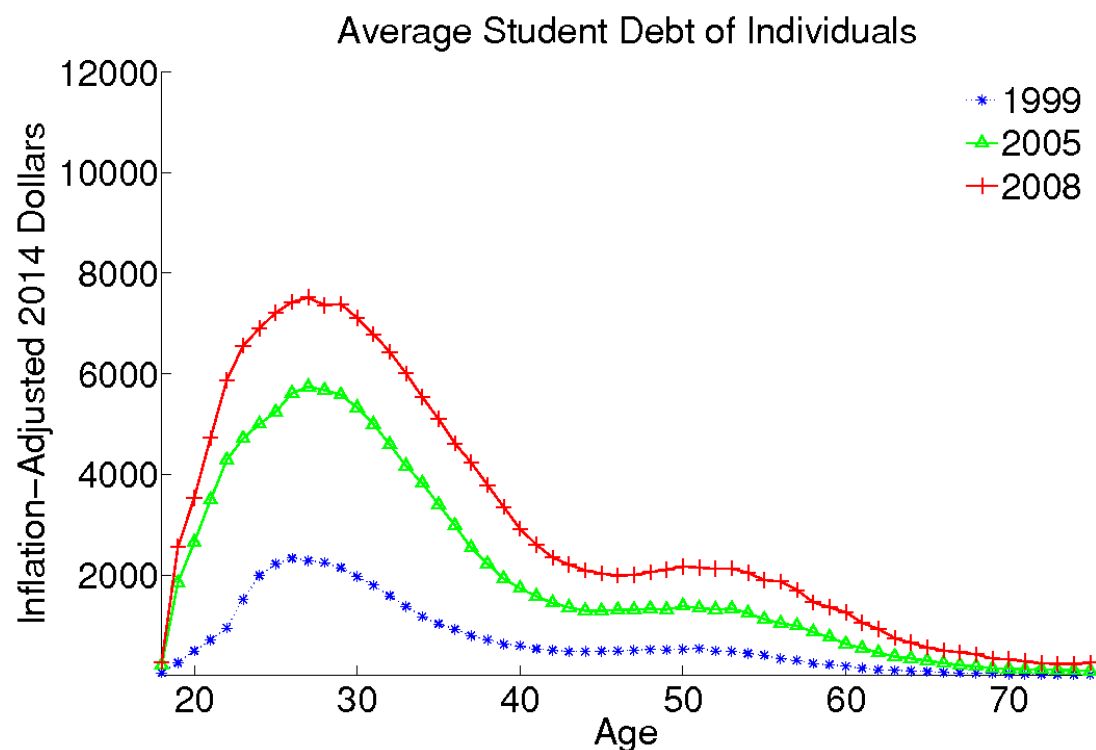


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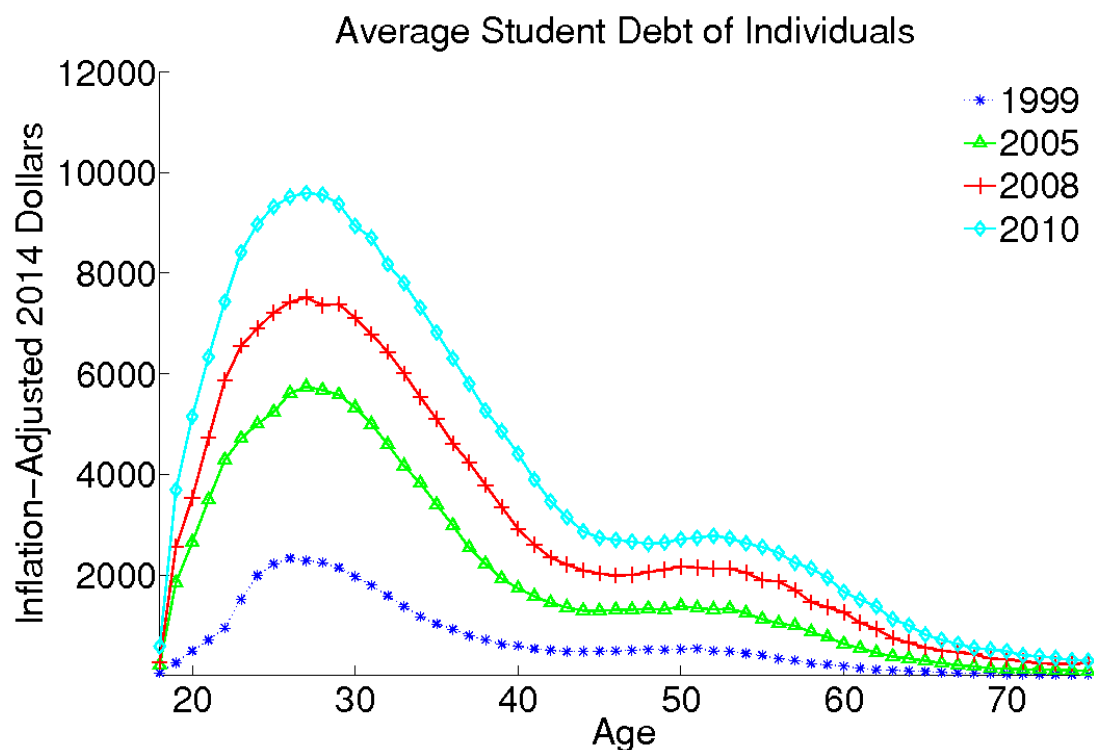
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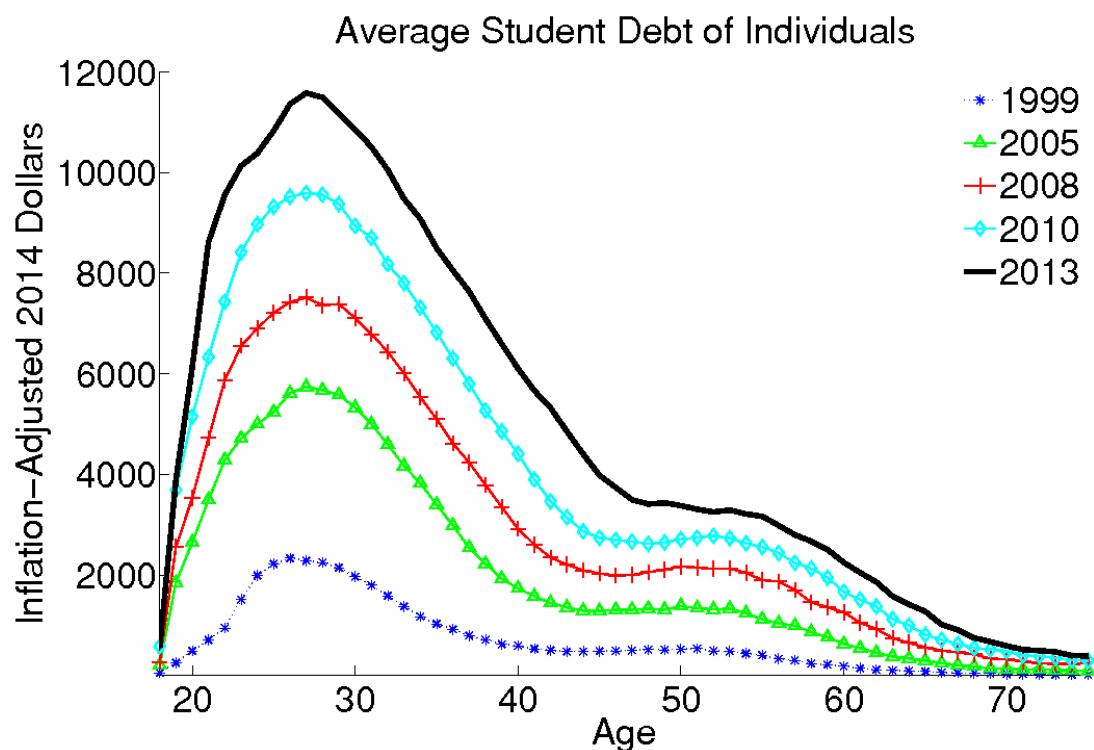
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# Student Debt



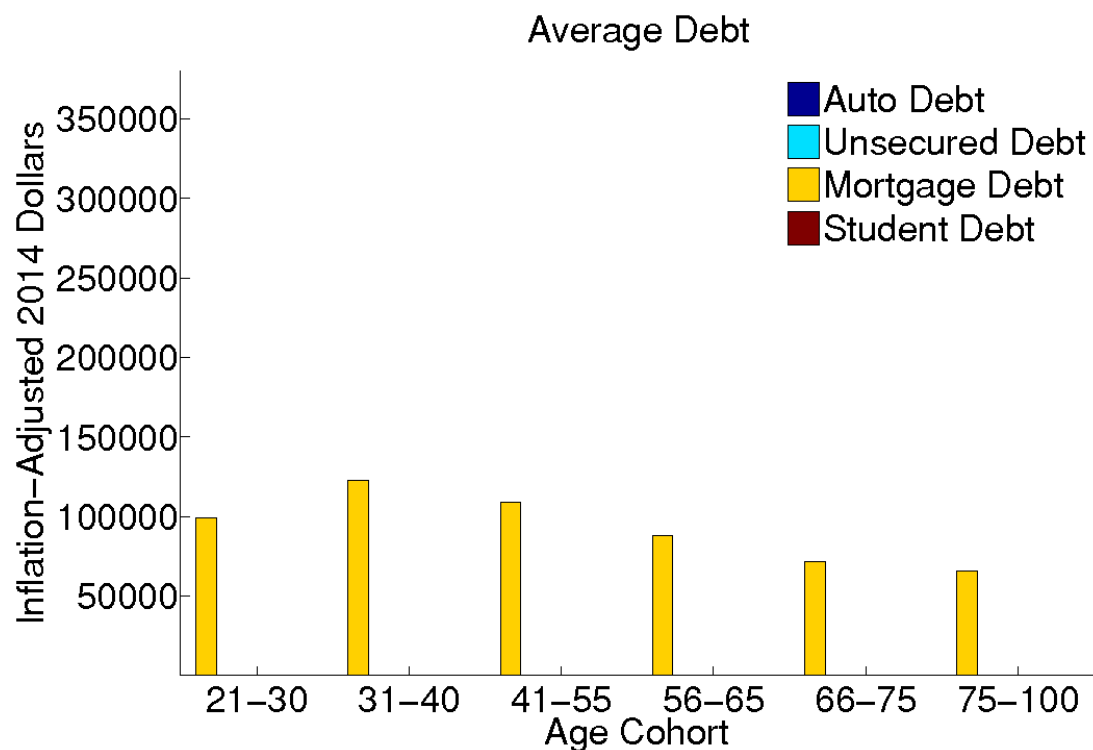
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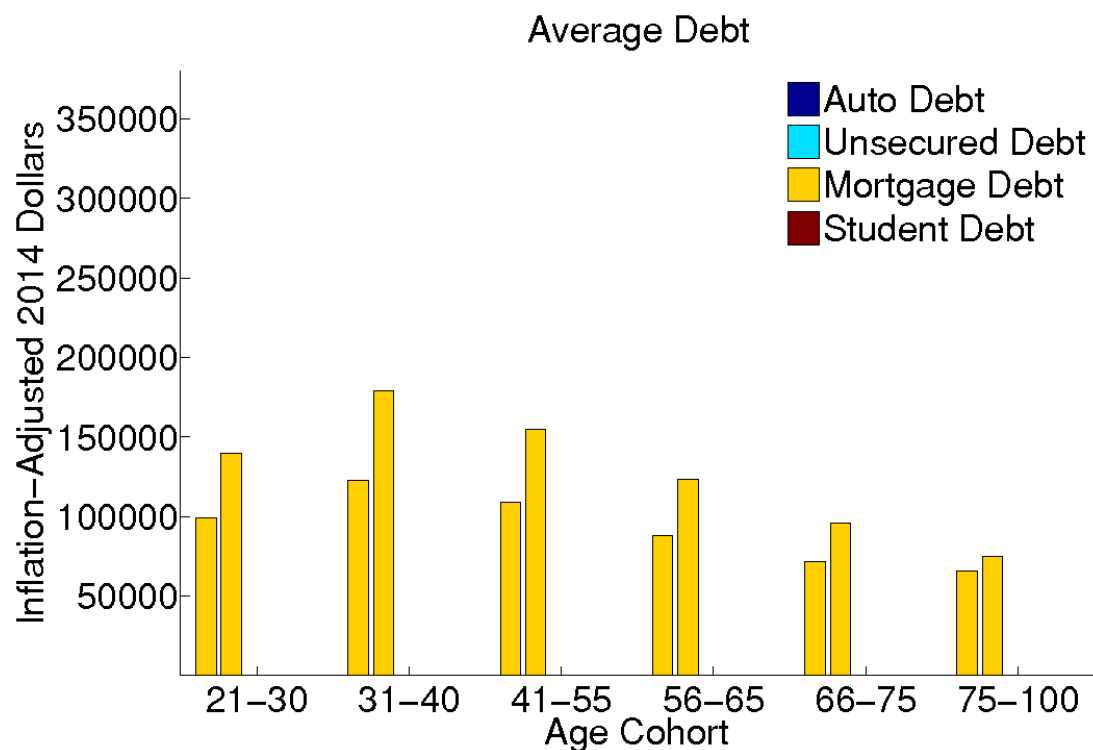
# Combining All Forms of Debt

# Holding Only Mortgage Debt: 1999



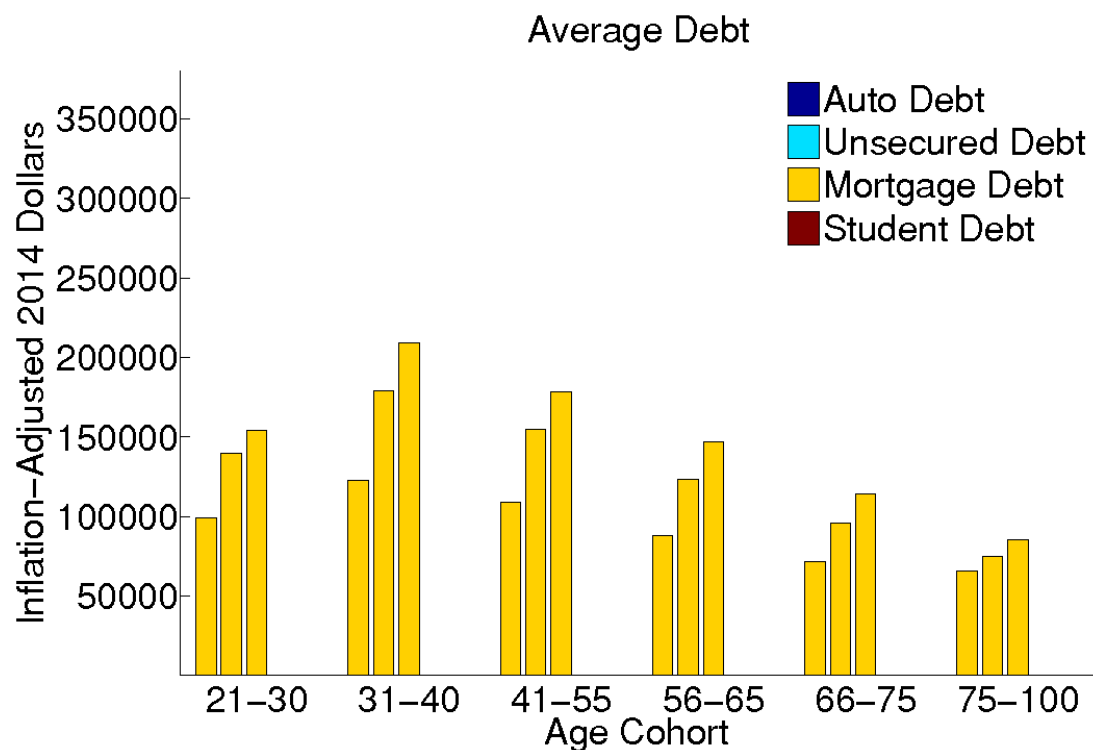
SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

# Holding Only Mortgage Debt: 2005



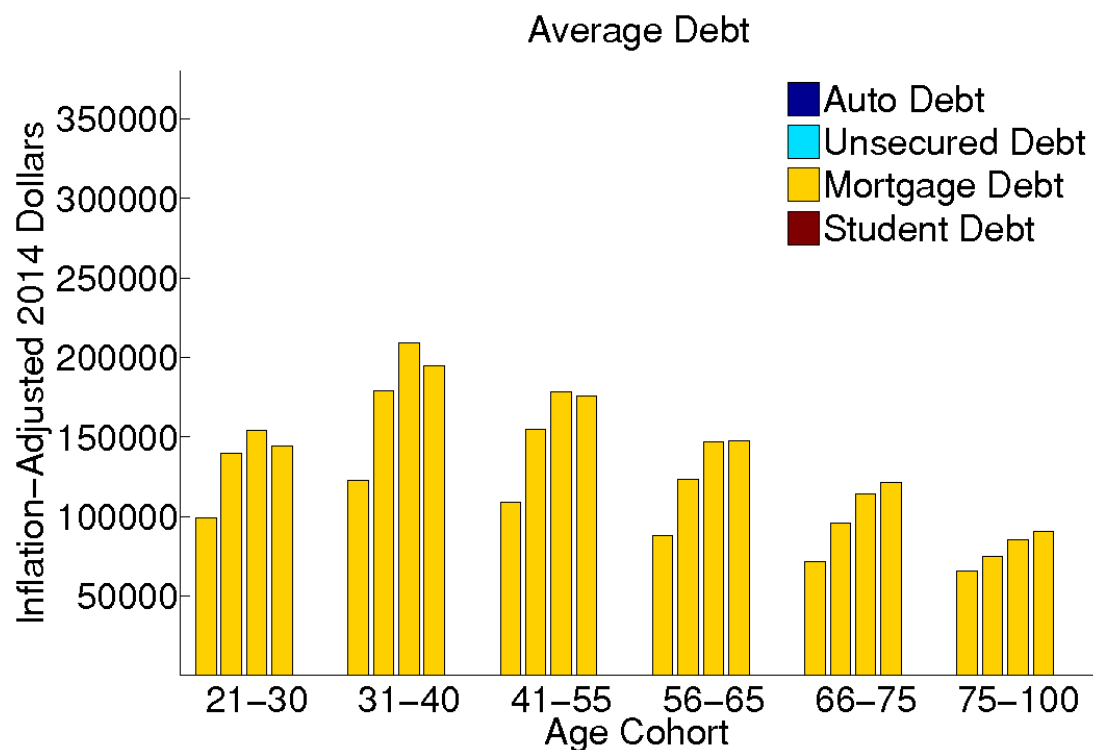
SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

# Holding Only Mortgage Debt: 2008



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

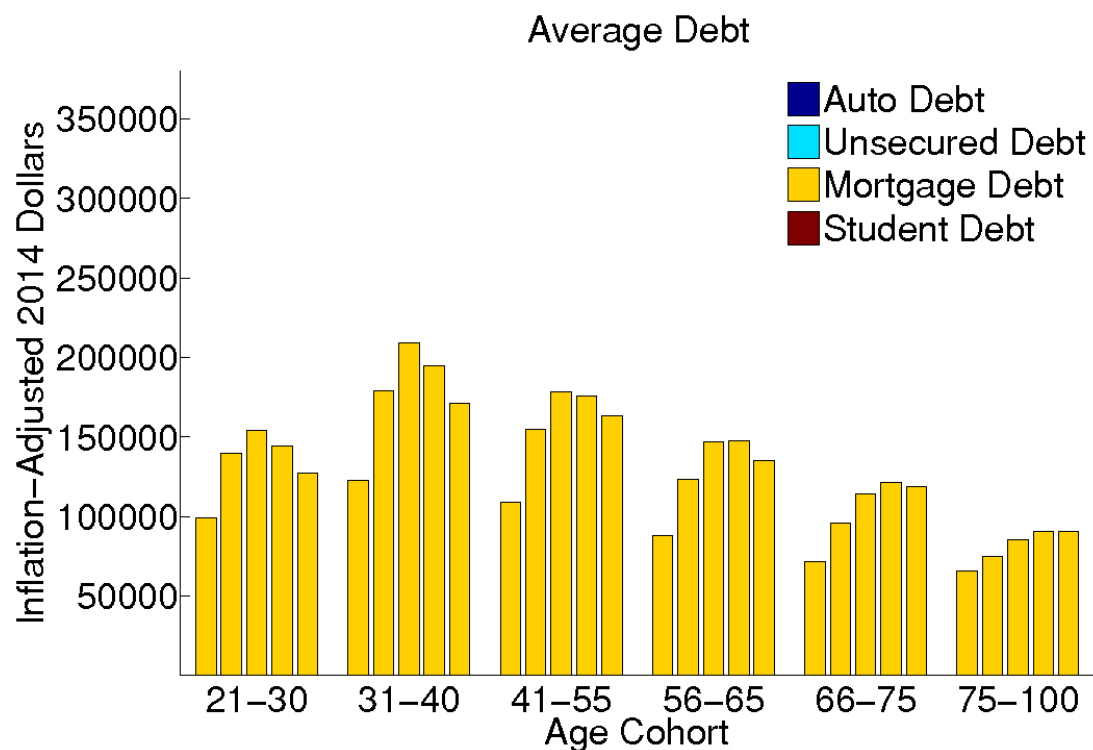
# Holding Only Mortgage Debt: 2010



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

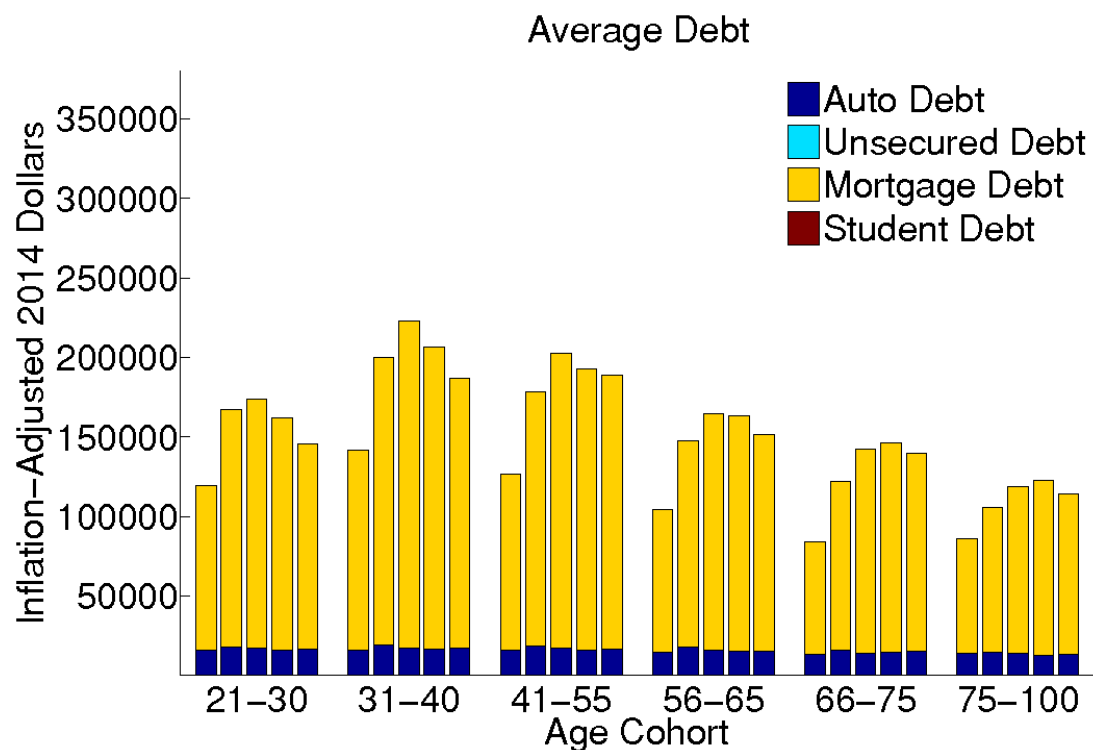


# Holding Only Mortgage Debt: 2013



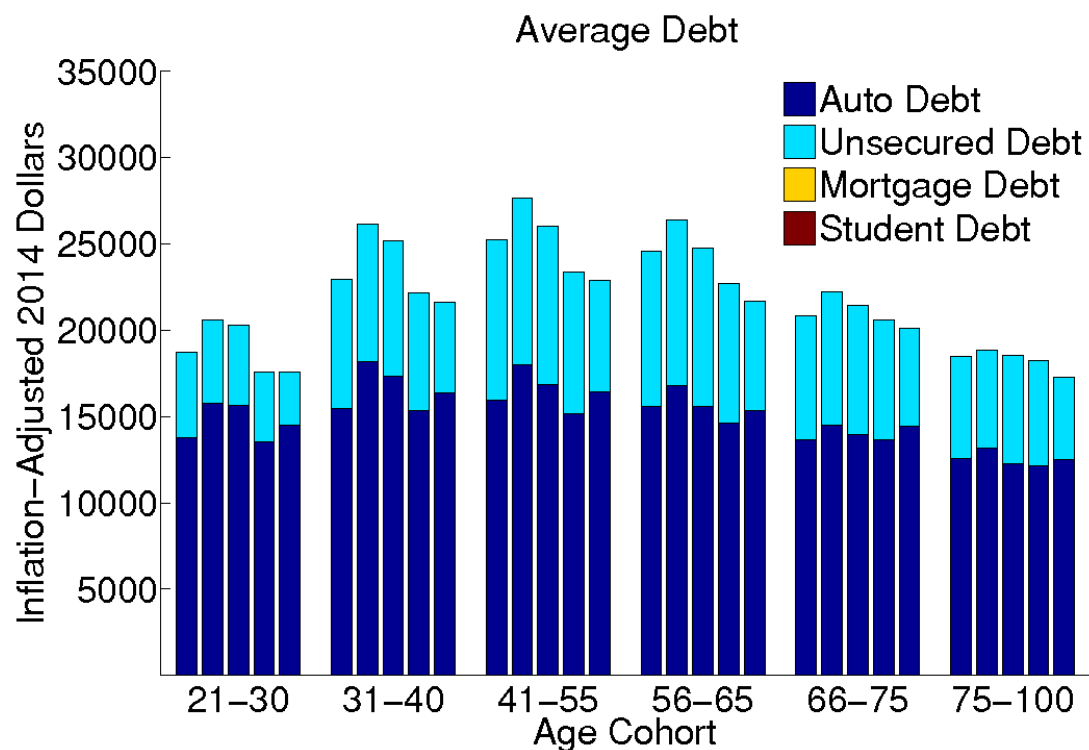
SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

# Holding Mortgage and Auto Debt



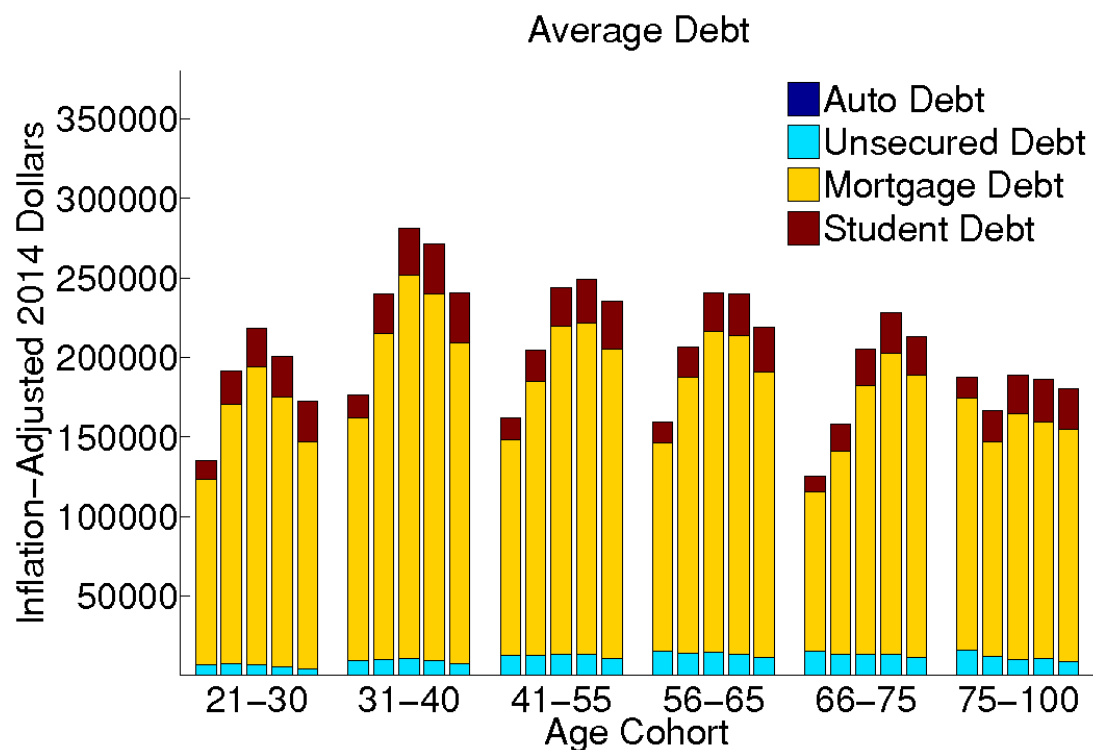
SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

# Holding Unsecured Credit and Auto Debt



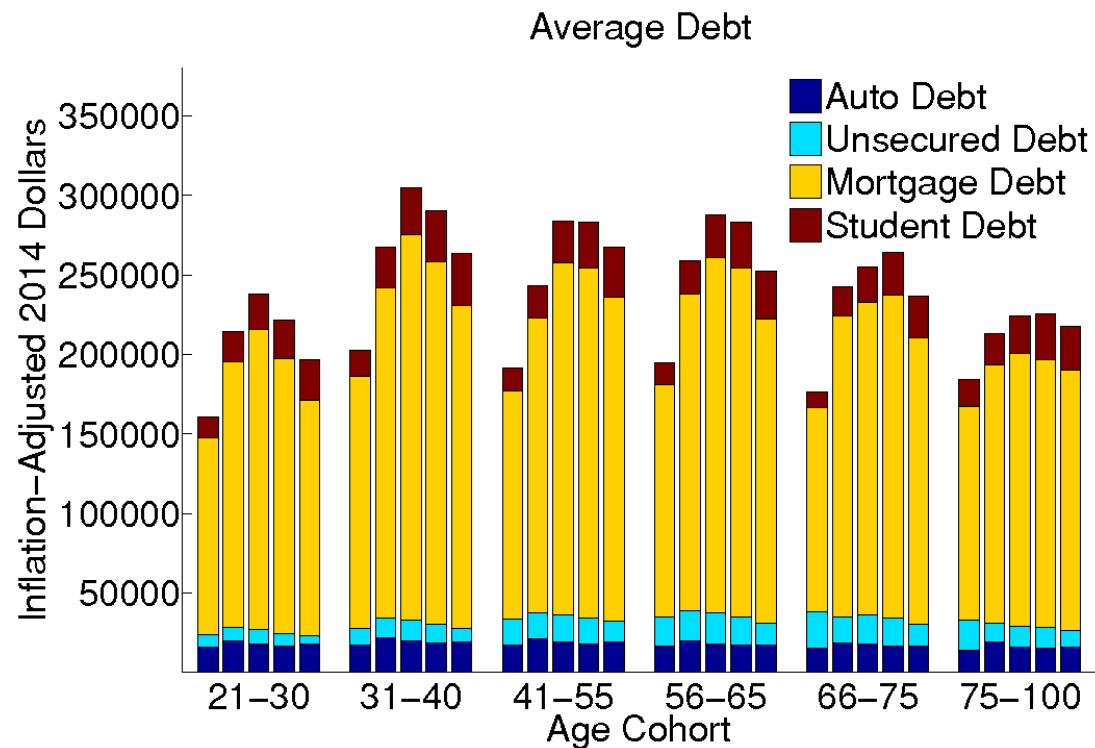
SOURCE: FRBNY Credit Panel / Equifax Based on Authors' Calculations.

# 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

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- ❑ 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.

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# Households' Balance Sheets, the Economy and Monetary Policy

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# Household Balance Sheets and the Great Recession

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## □ 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

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## ❑ 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?

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- ❑ 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

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- Why is the Fed interested in microeconomic data?

# St. Louis Fed Initiatives

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- ❑ 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/](http://www.stlouisfed.org/education_resources/)



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# Questions?