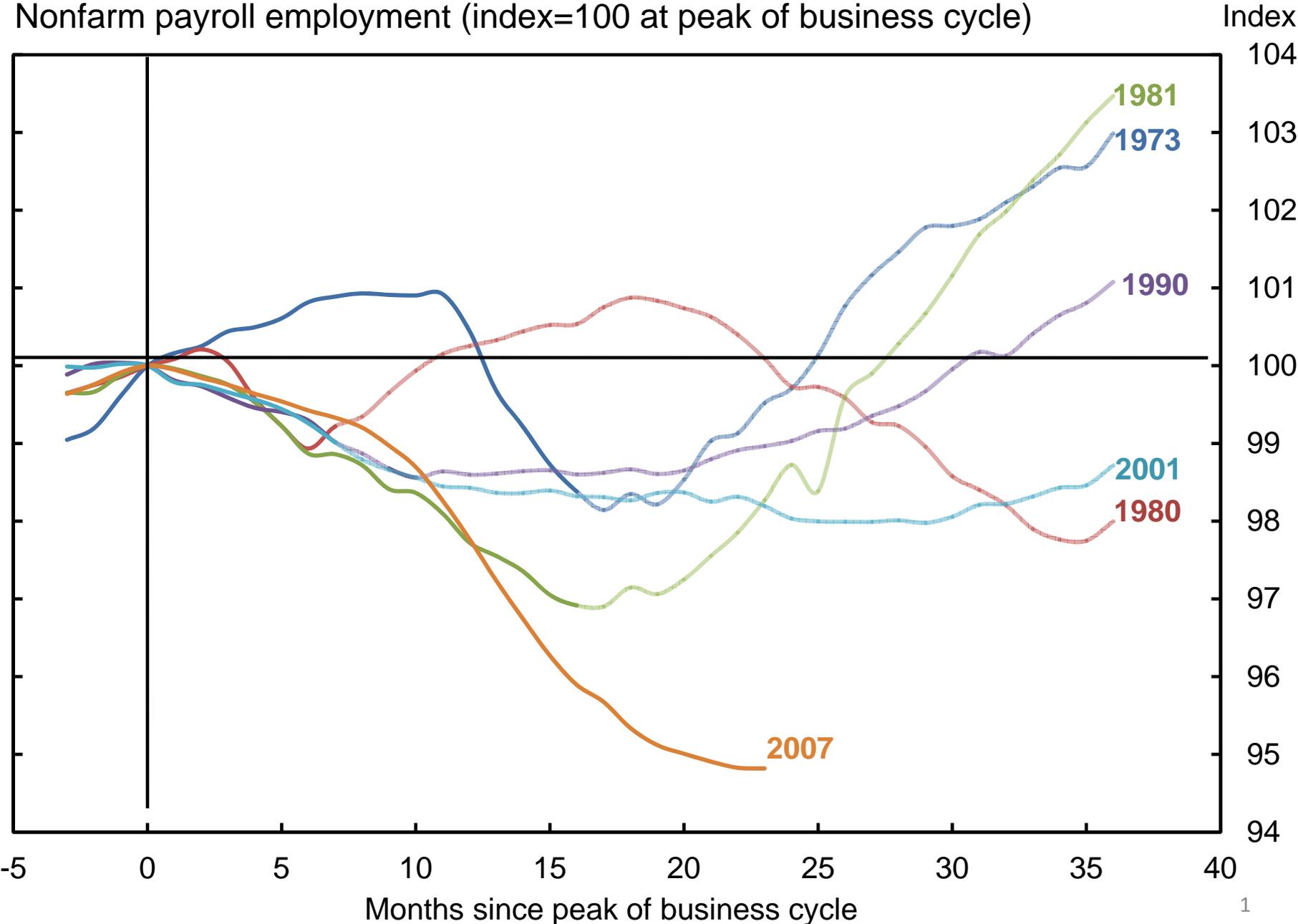


Employment declined dramatically

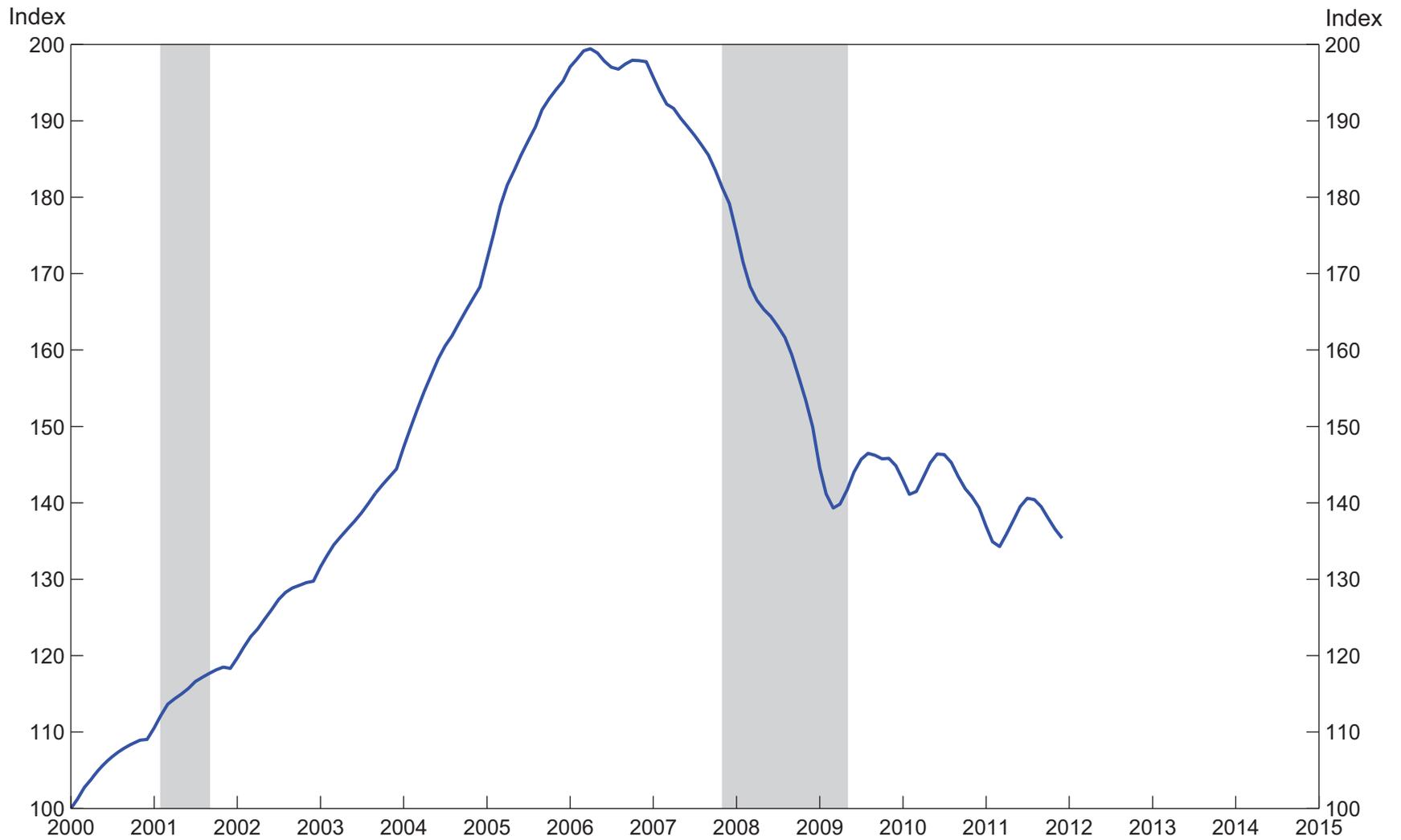
Nonfarm payroll employment (index=100 at peak of business cycle)



Source: Bureau of Labor Statistics, NBER, and authors' calculations

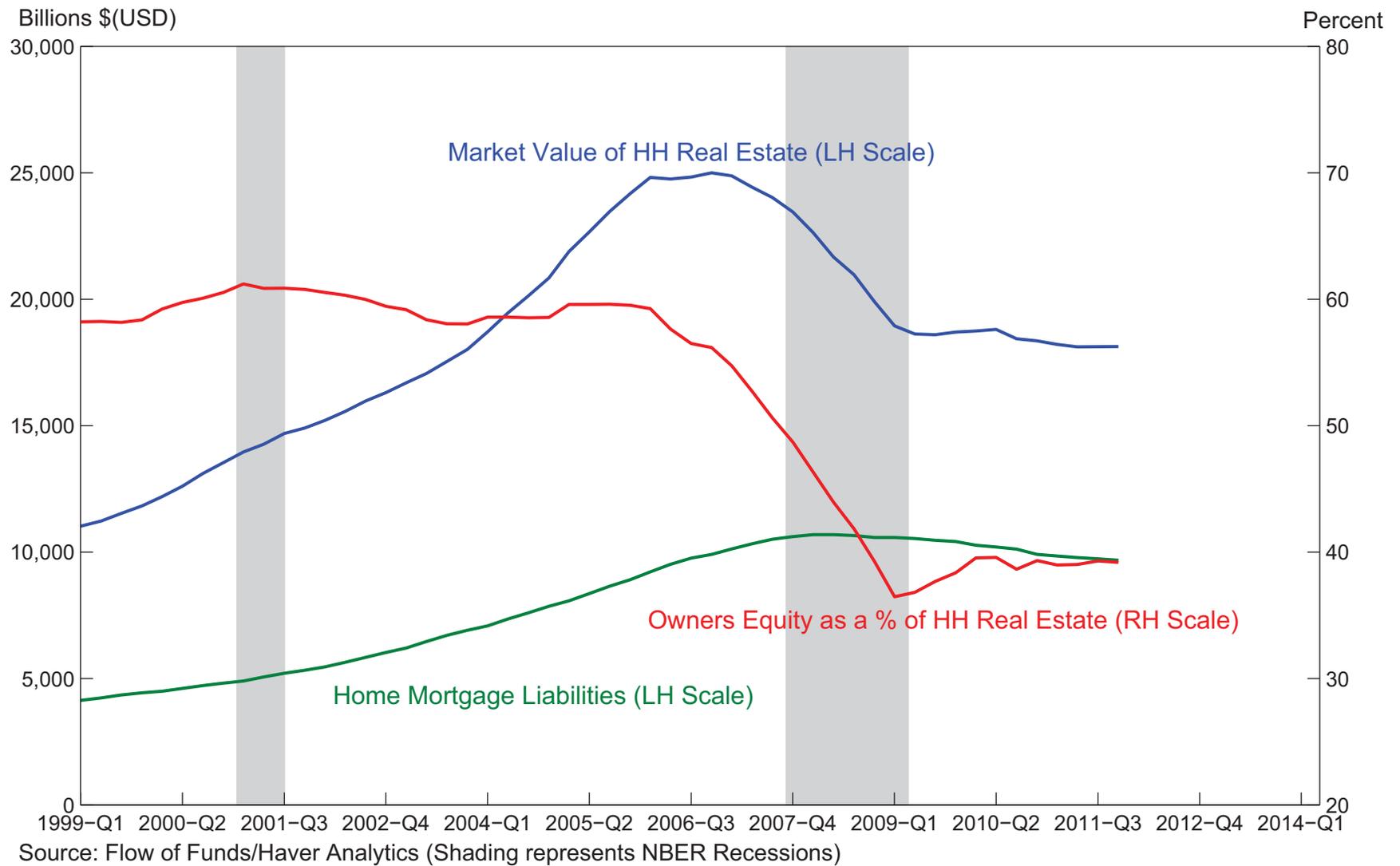
House Prices Peaked and Fell Precipitously

(Shown through the end of 2011)



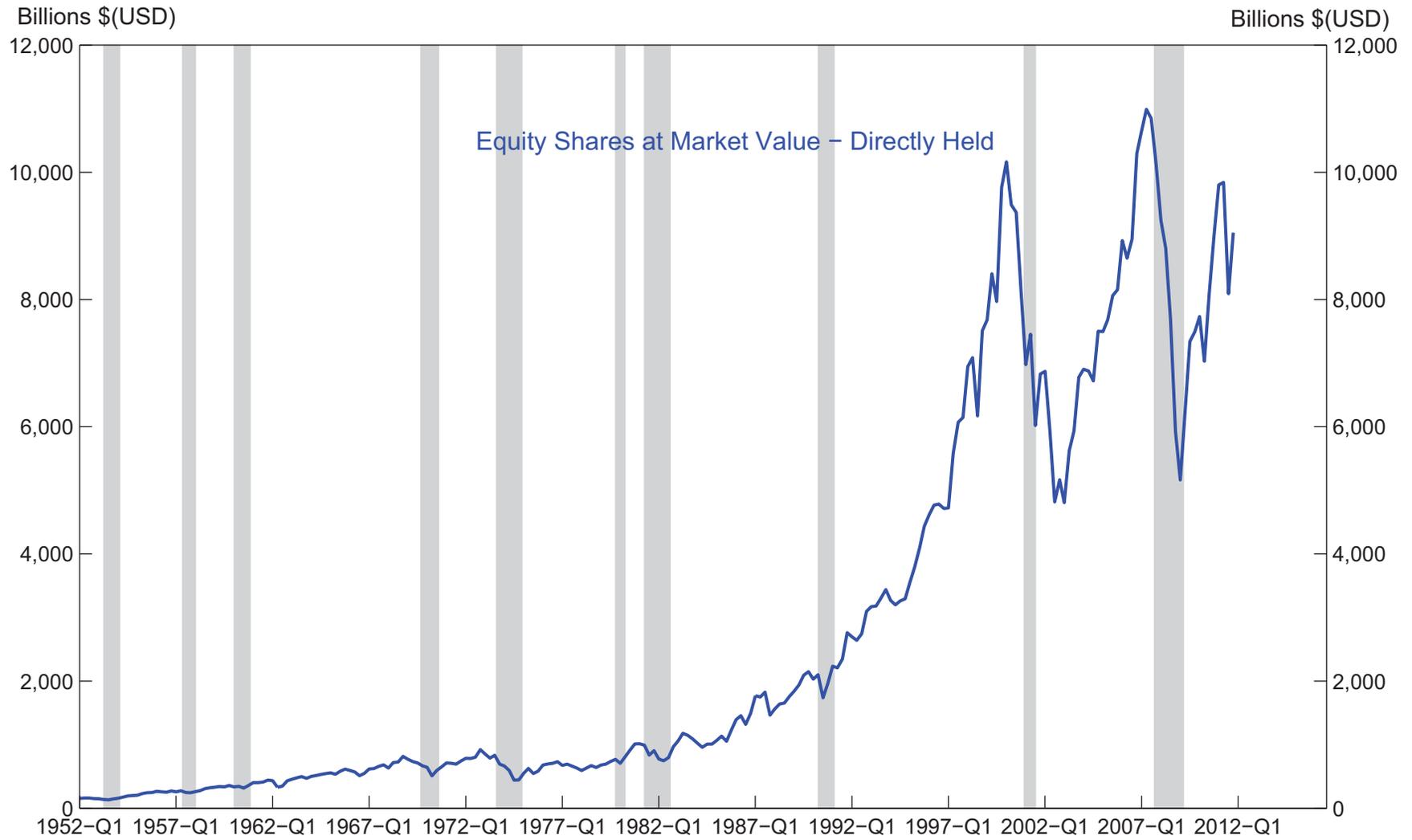
Source: Haver Analytics/CoreLogic (Shading represents NBER Recessions)

Result was a Huge Decline in Owners' Equity in HH RE



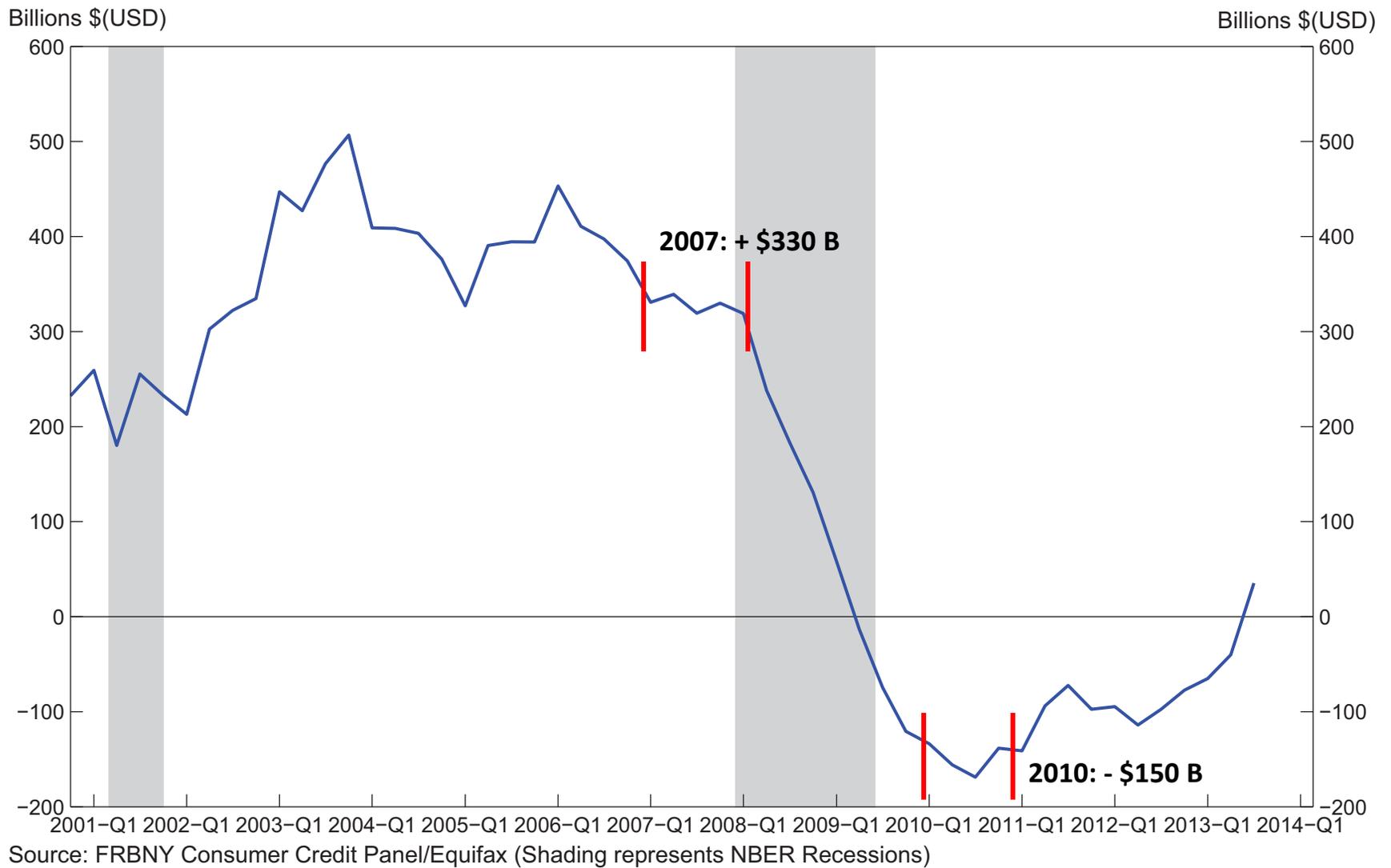
Stock Market Wealth also Fell Sharply

(Shown through the end of 2011)



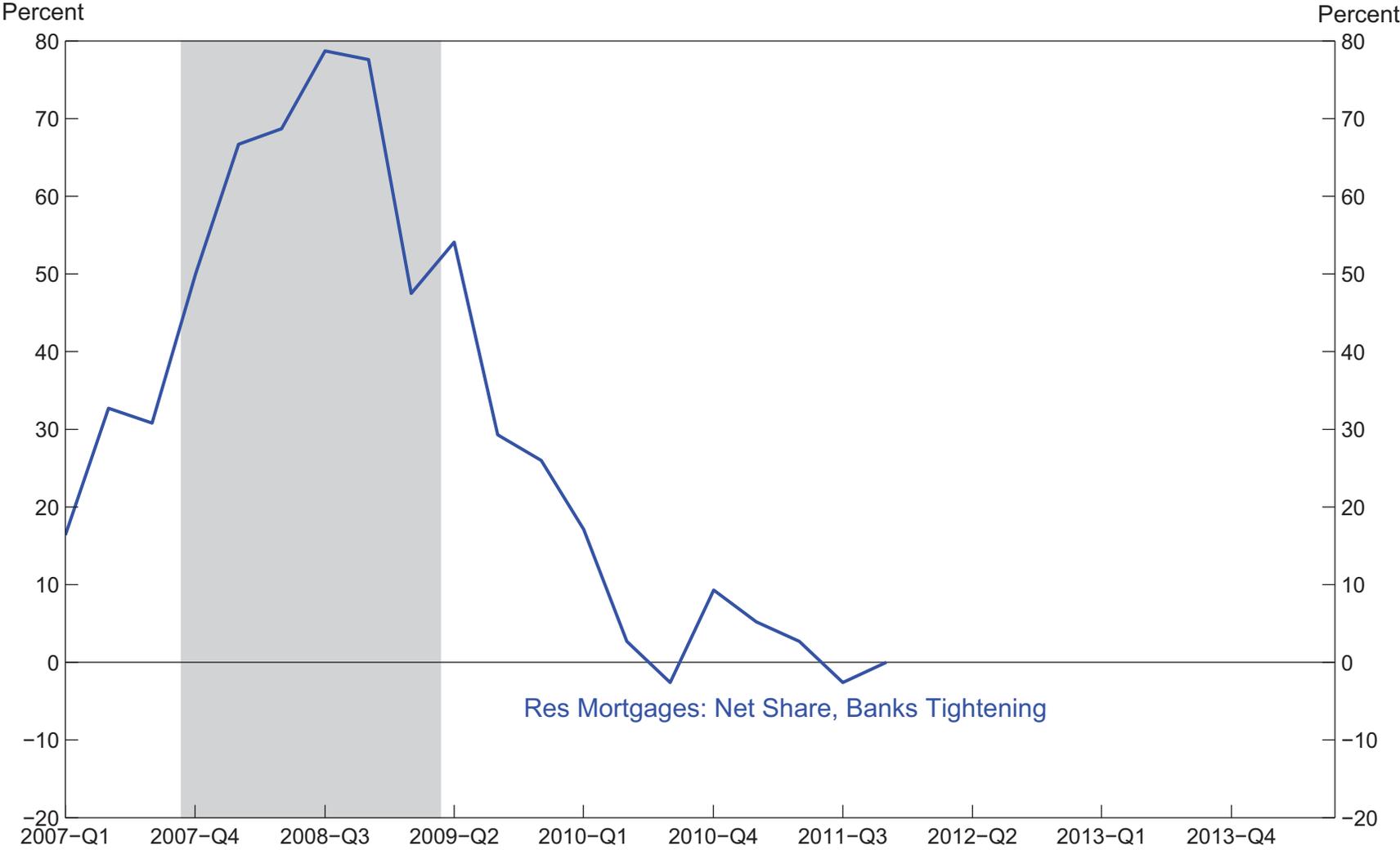
Source: Flow of Funds/Haver Analytics (Shading represents NBER Recessions)

Four-Quarter Cash Flow from Borrowing (Unrelated to Transfers of Homeownership)



Banks and Lenders Imposed Tighter Mortgage Lending Standards

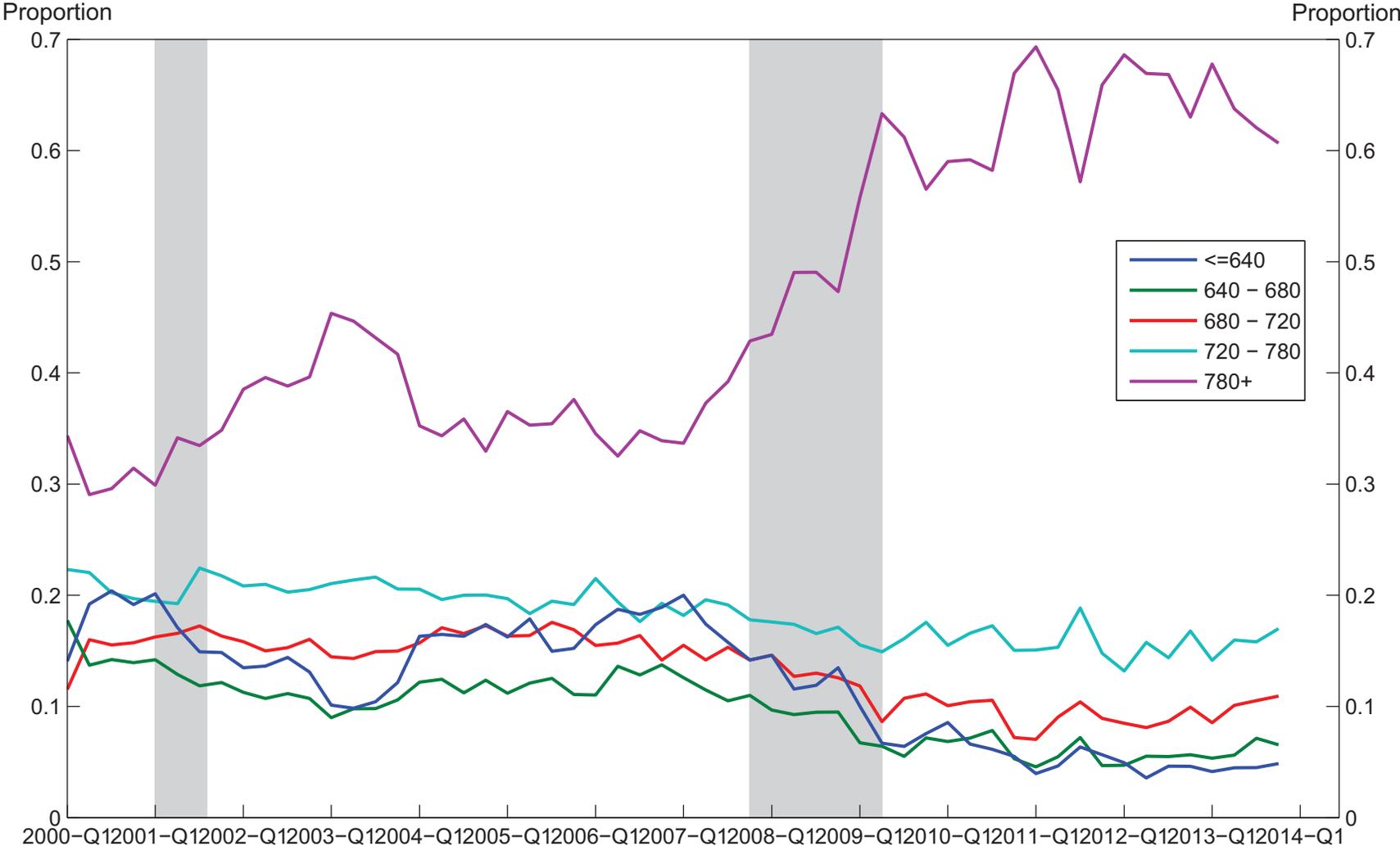
(Shown through the end of 2011)



Source: FRS Senior Loan Officer Opinion Survey (Shading represents NBER Recessions)

Origination by Risk Score - First Mortgages

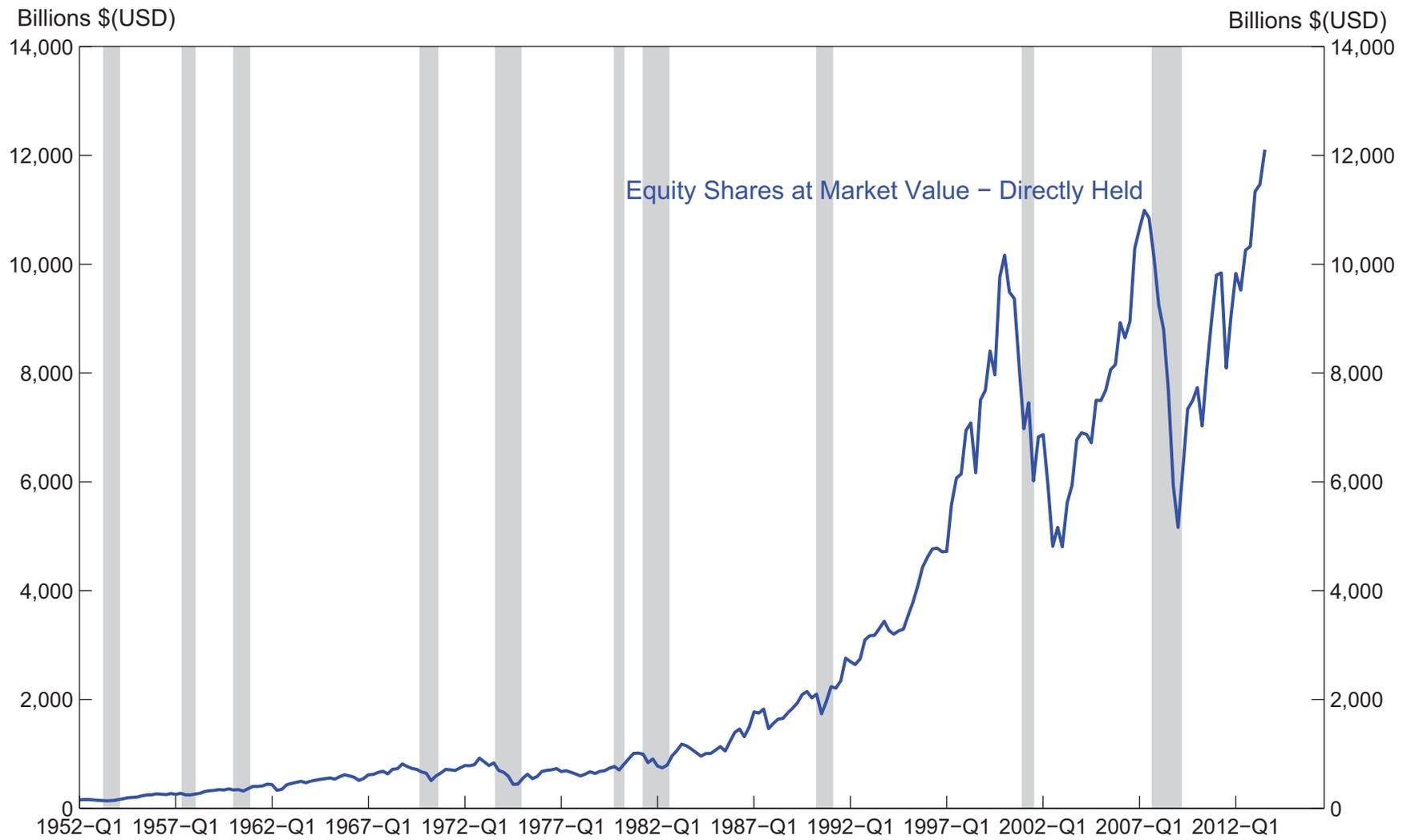
(Fannie Mae and Freddie Mac: US Figures)



Source: FRBNY Consumer Credit Panel (Shading represents NBER Recessions)

Stock Market Wealth also Fell Sharply

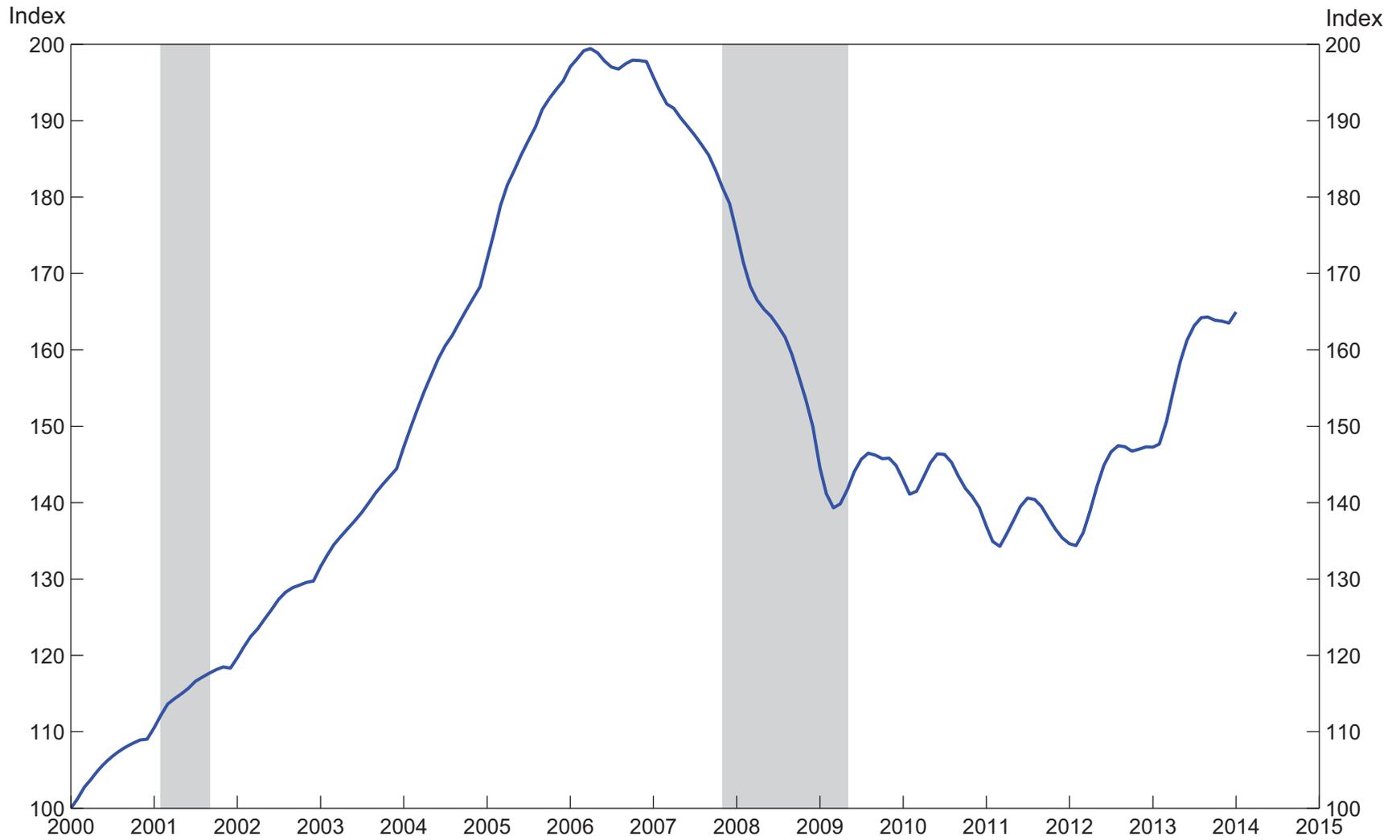
(Shown through the present)



Source: Flow of Funds/Haver Analytics (Shading represents NBER Recessions)

House Prices Peaked and Fell Precipitously

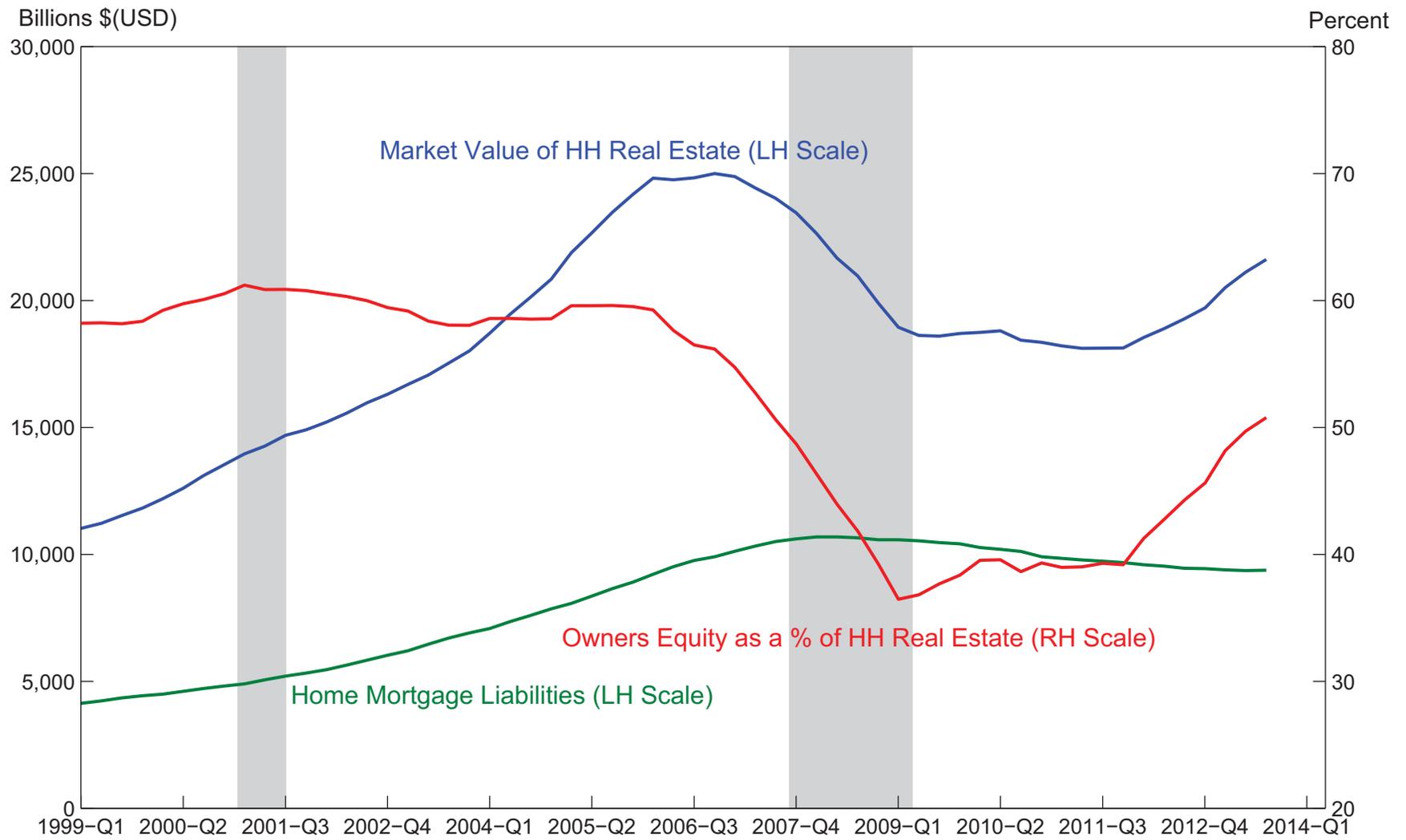
(Shown through the present)



Source: Haver Analytics/CoreLogic (Shading represents NBER Recessions)

Result was a Huge Decline in Owners' Equity in HH RE

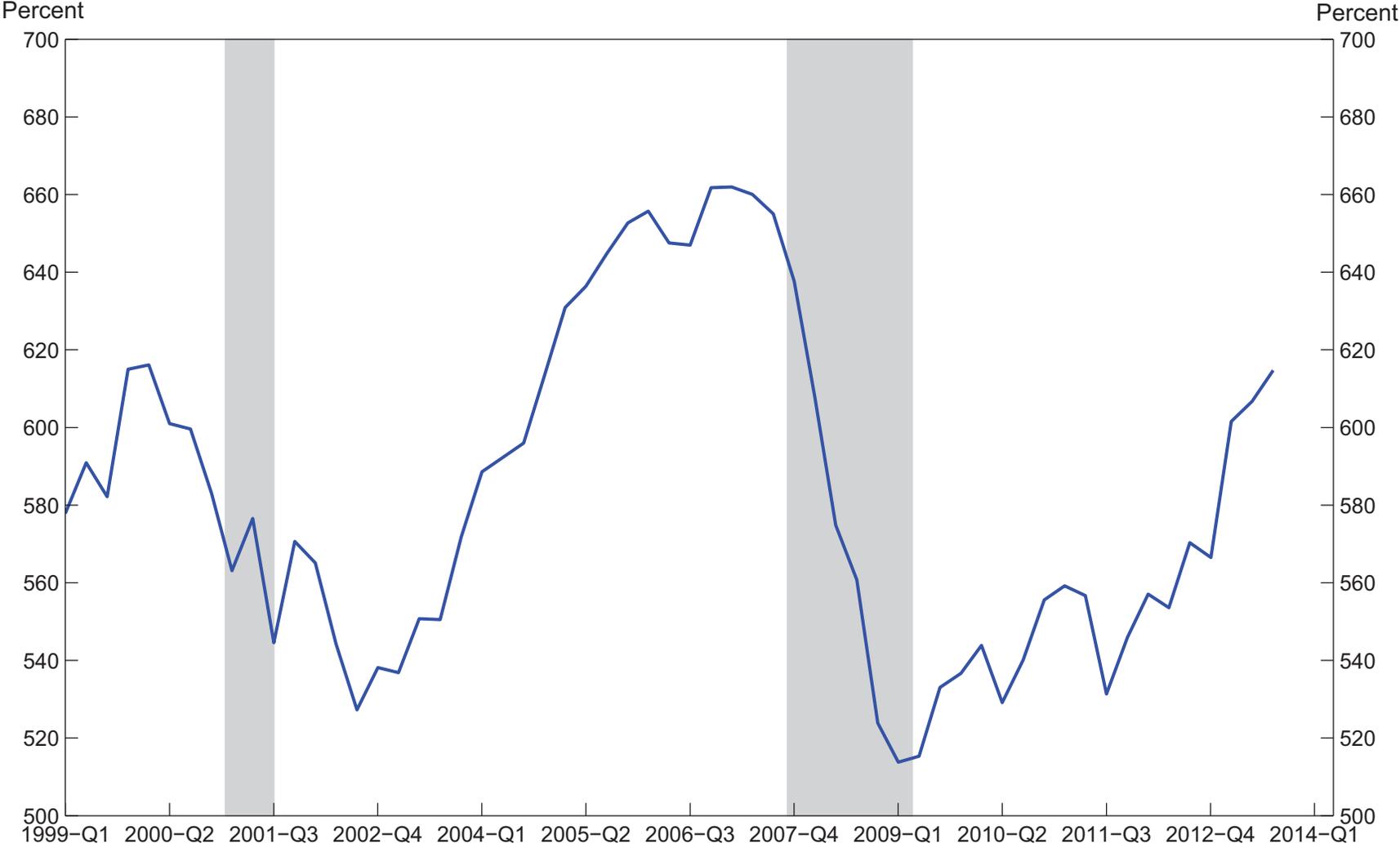
(Shown through the present)



Source: Flow of Funds/Haver Analytics (Shading represents NBER Recessions)

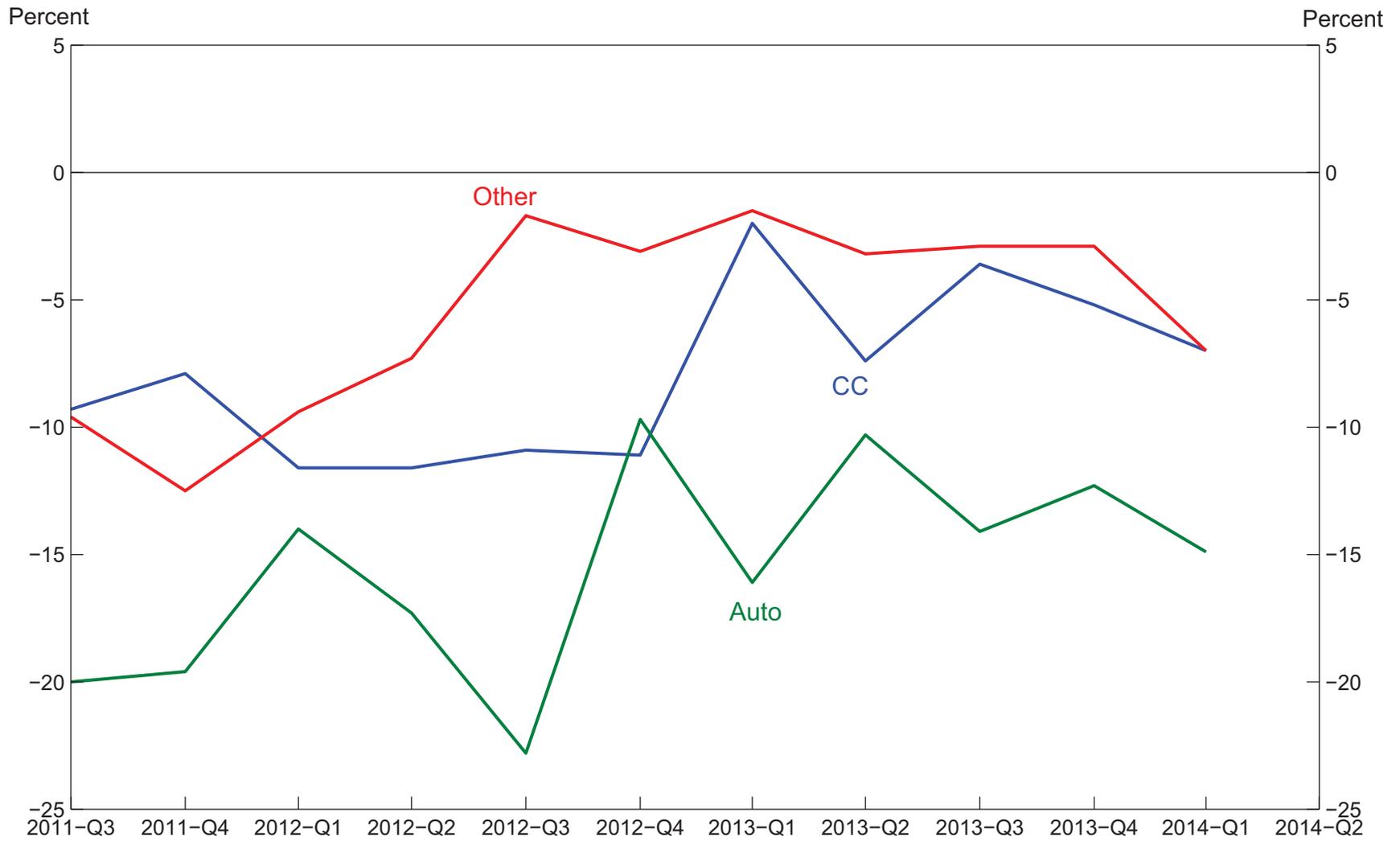
Household Net Worth

(percent of disposable income)



Source: Board of Governors of the Federal Reserve System (Shading represents NBER Recessions)

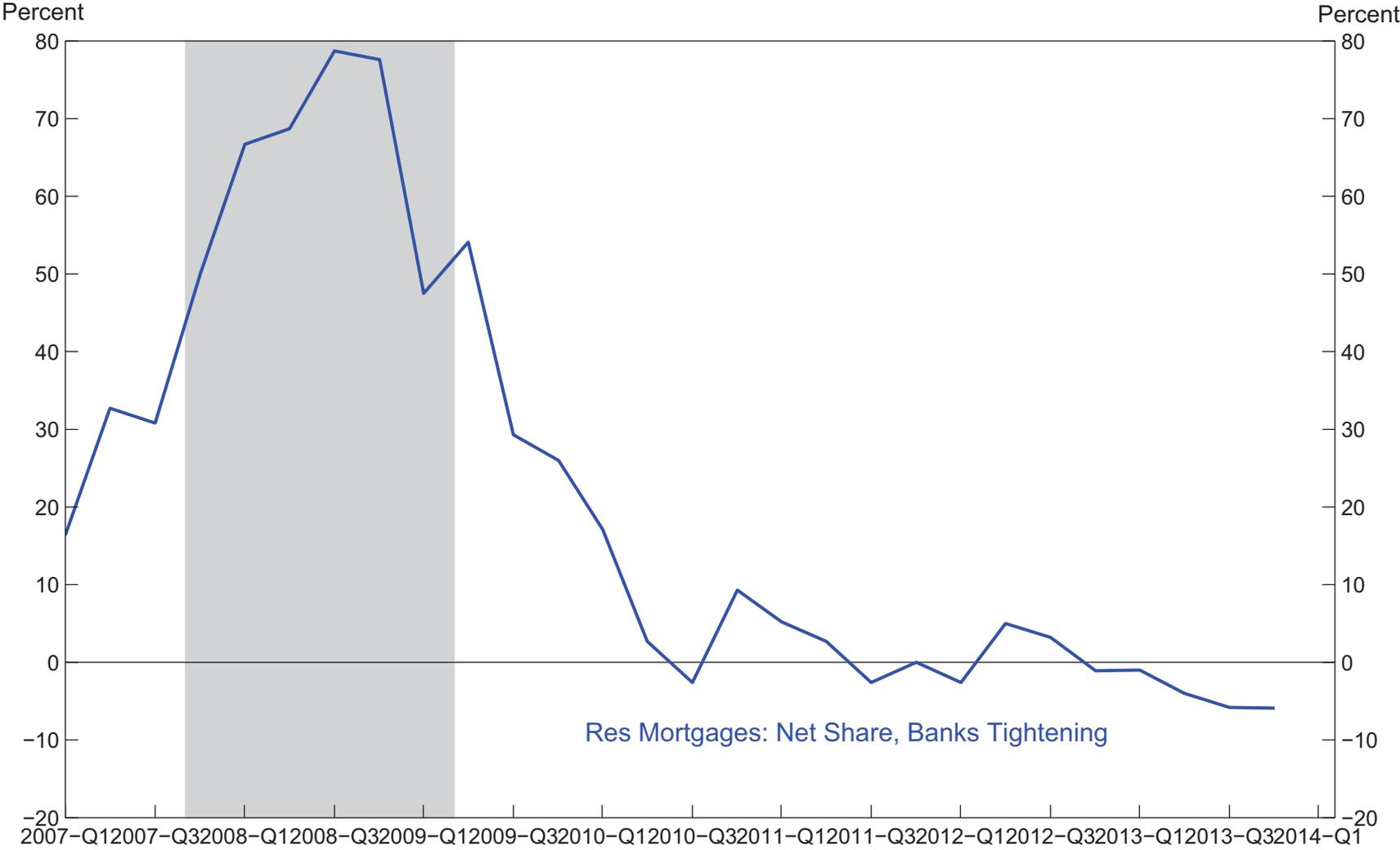
Standards have Loosened since 2011 on Non-Mortgage Products



Source: FRS Senior Loan Officer Opinion Survey (Shading represents NBER Recessions)

Banks and Lenders Imposed Tighter Mortgage Lending Standards

(Shown through 2013-Q4)

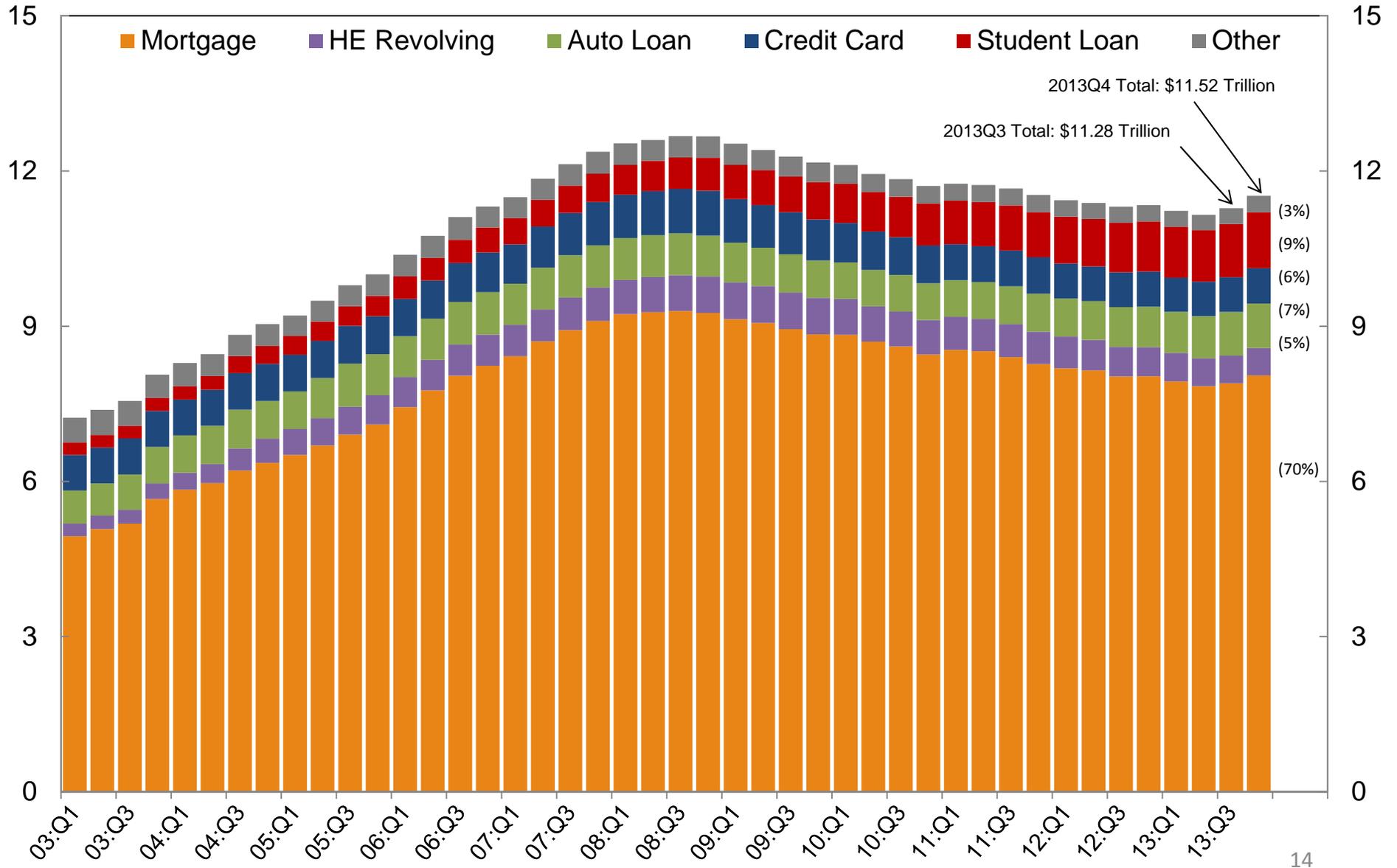


Source: FRS Senior Loan Officer Opinion Survey (Shading represents NBER Recessions)

Total Debt Balance and its Composition

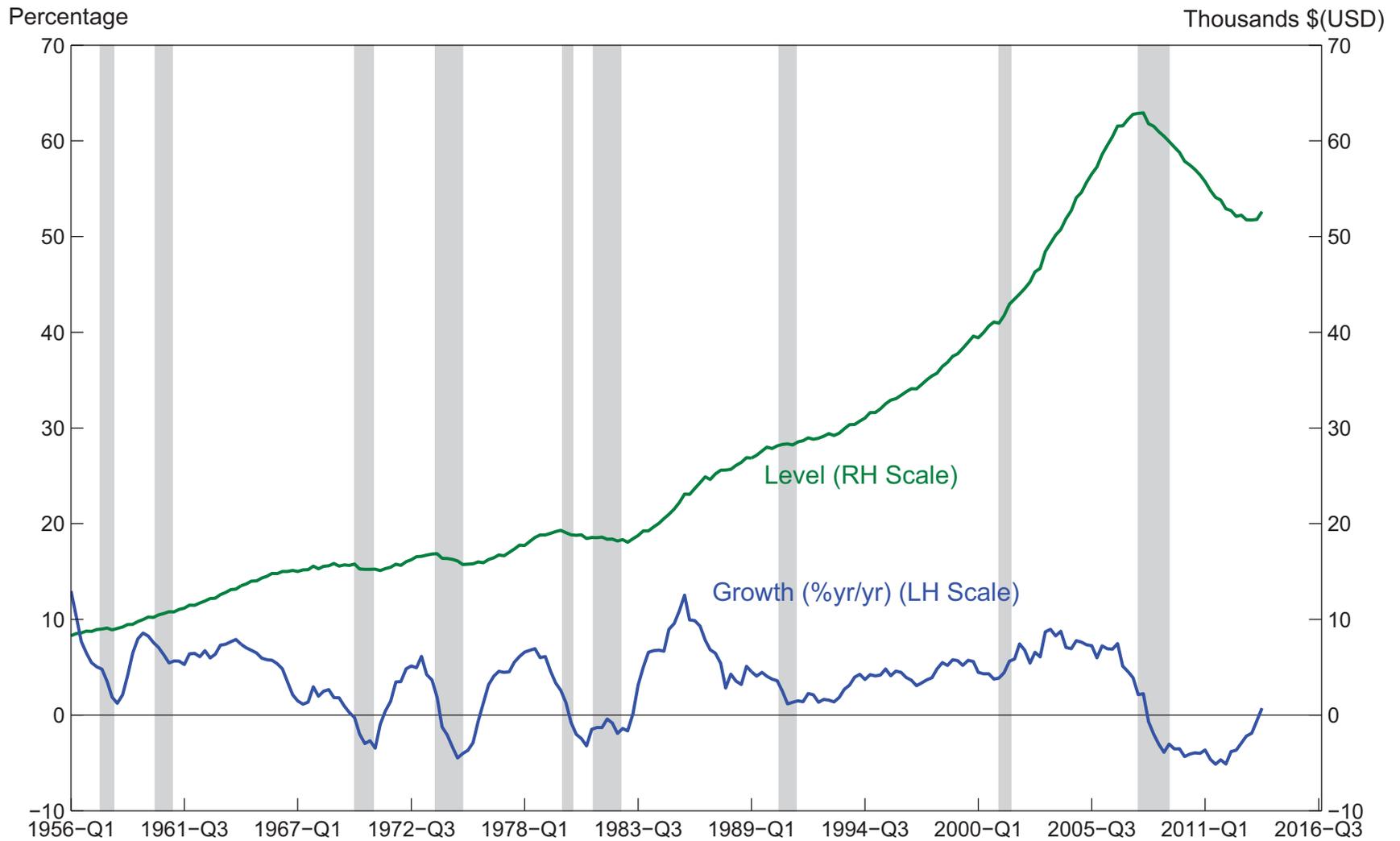
Trillions of Dollars

Trillions of Dollars



Source: FRBNY Consumer Credit Panel/Equifax

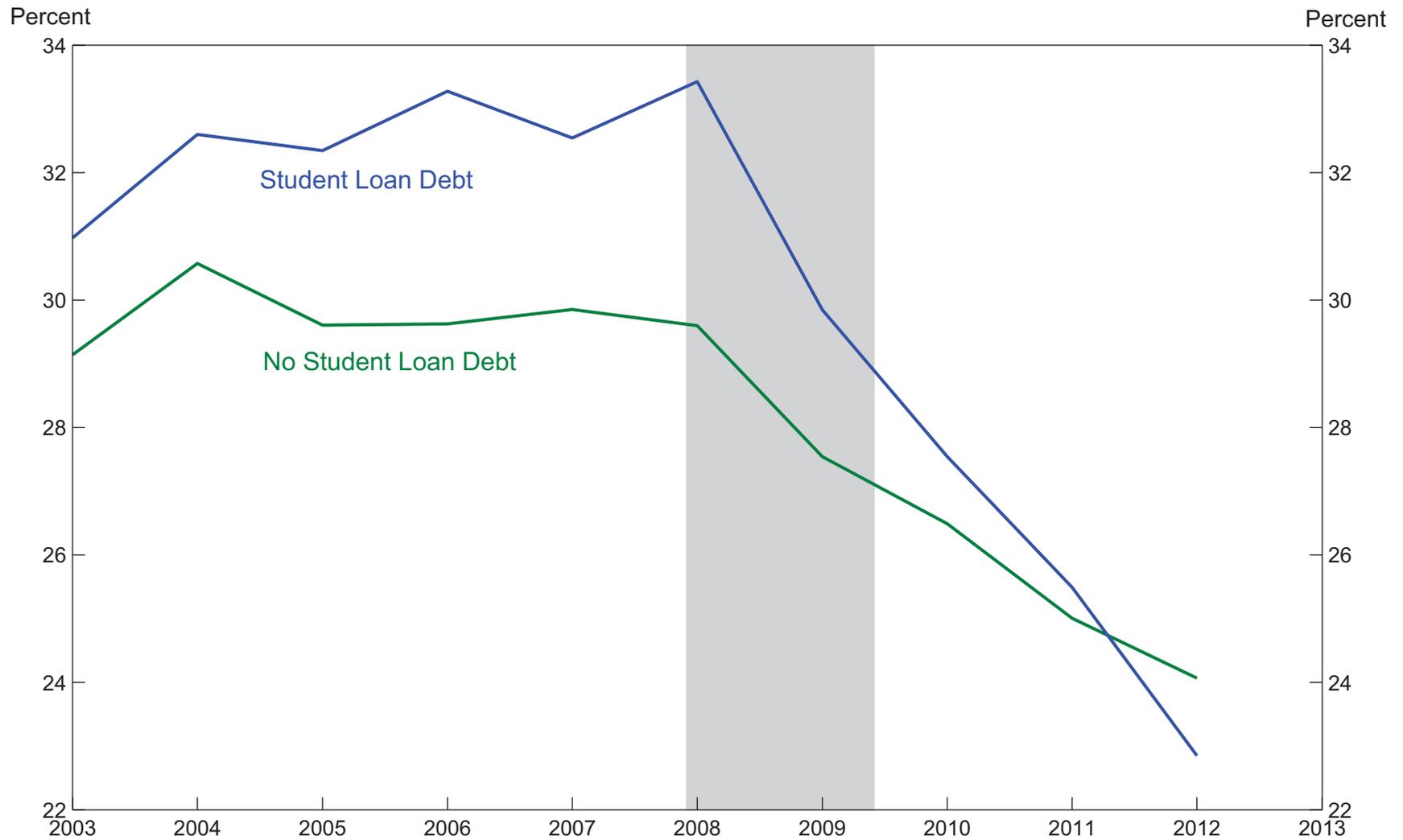
Real Household Liabilities Per Capita



Source: Flow of Funds, BEA, Census Bureau (Shading represents NBER Recessions)

Note: 2013Q4 value is an estimate based on FRBNY CCP

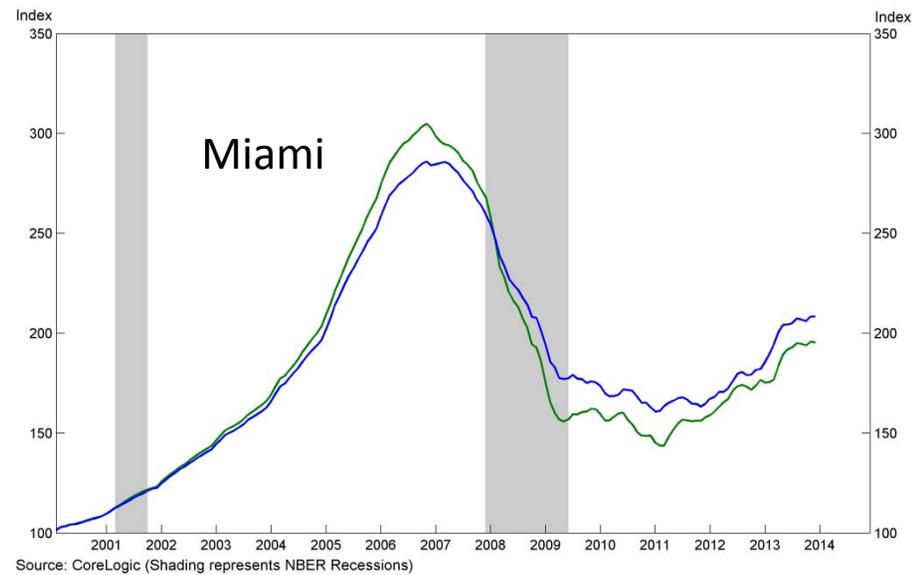
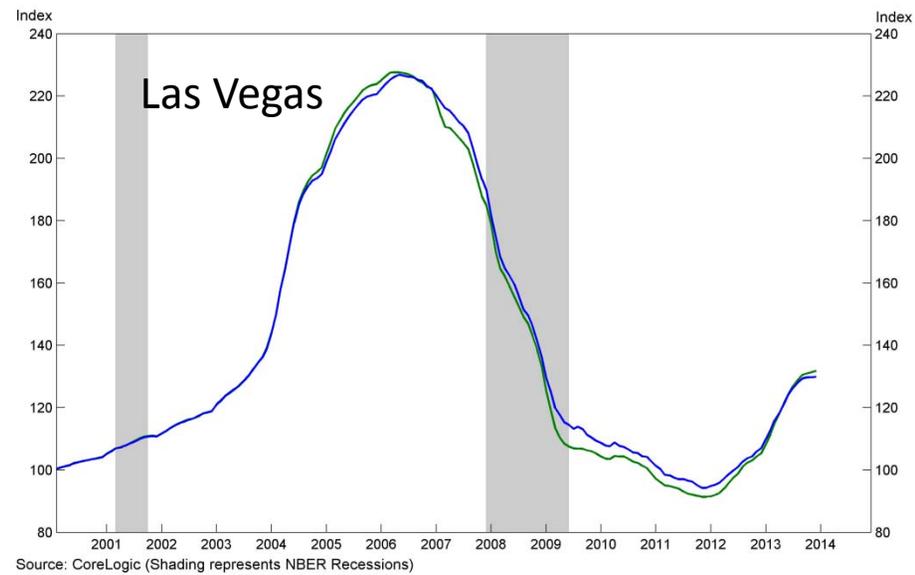
Proportion of Borrowers with Home-secured Debt at Age 30



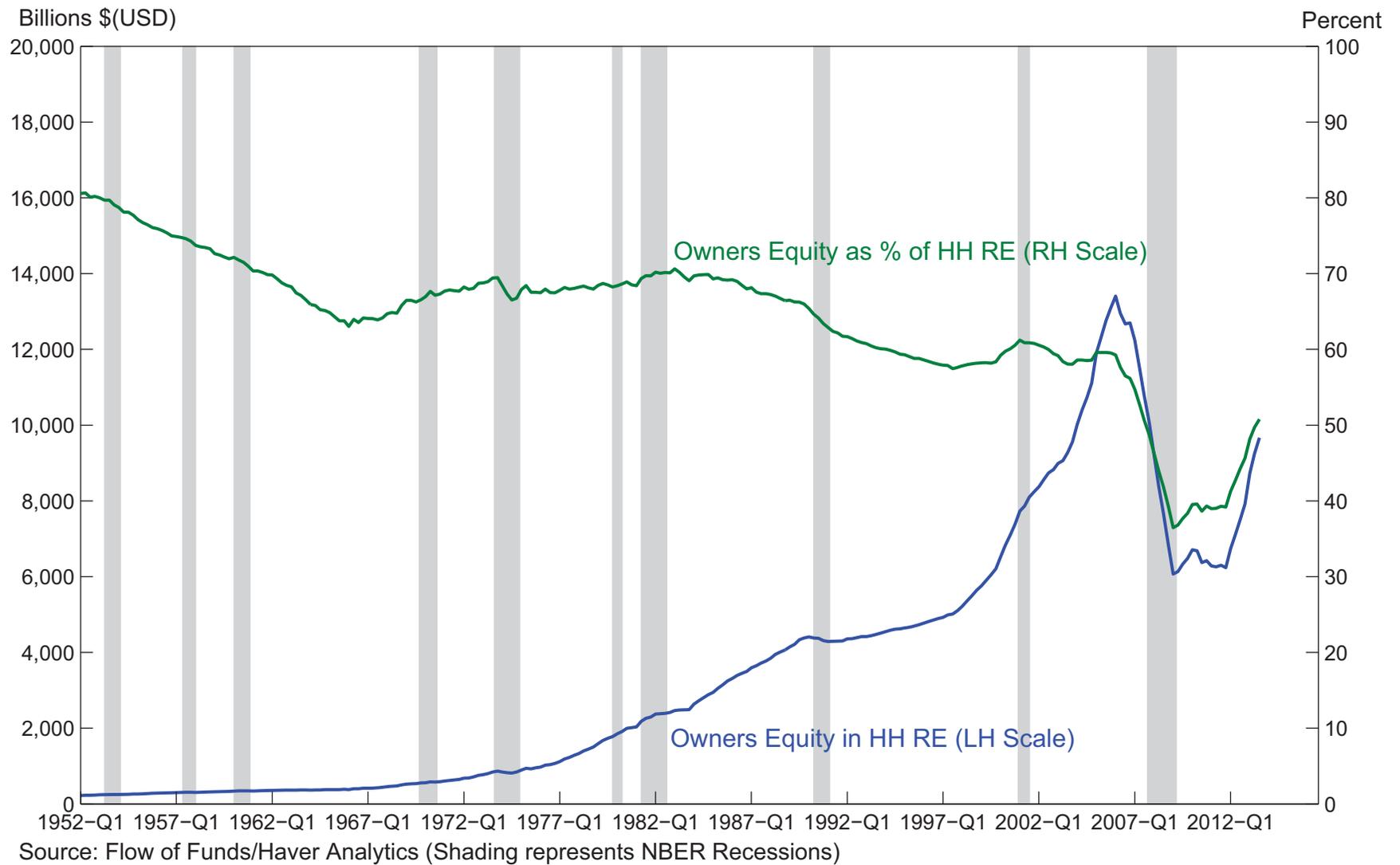
Source: Federal Reserve Bank of New York Consumer Credit Panel/Equifax.
(Shading represents NBER Recessions)

REFERENCE

Even More Dramatic in Some Cities

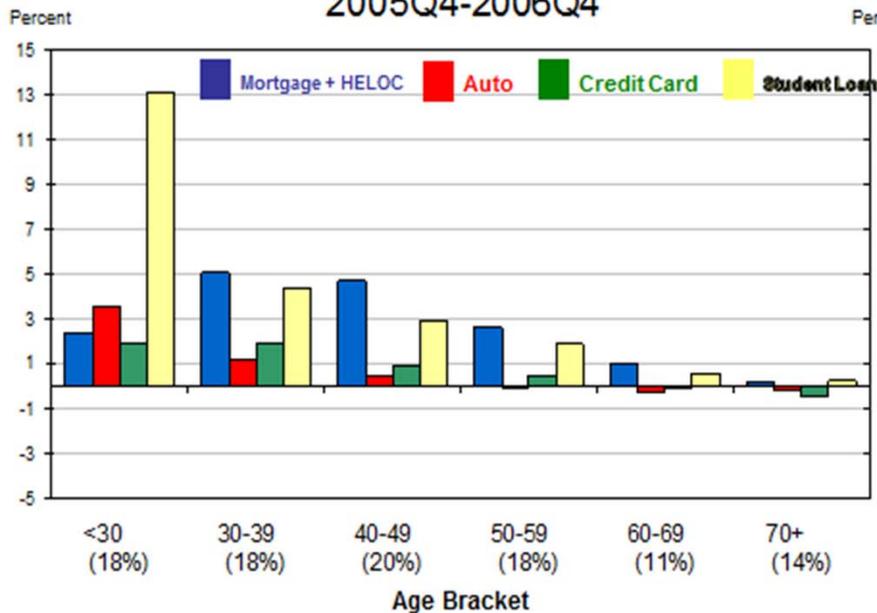


Result was a Huge Decline in Owners' Equity in HH RE

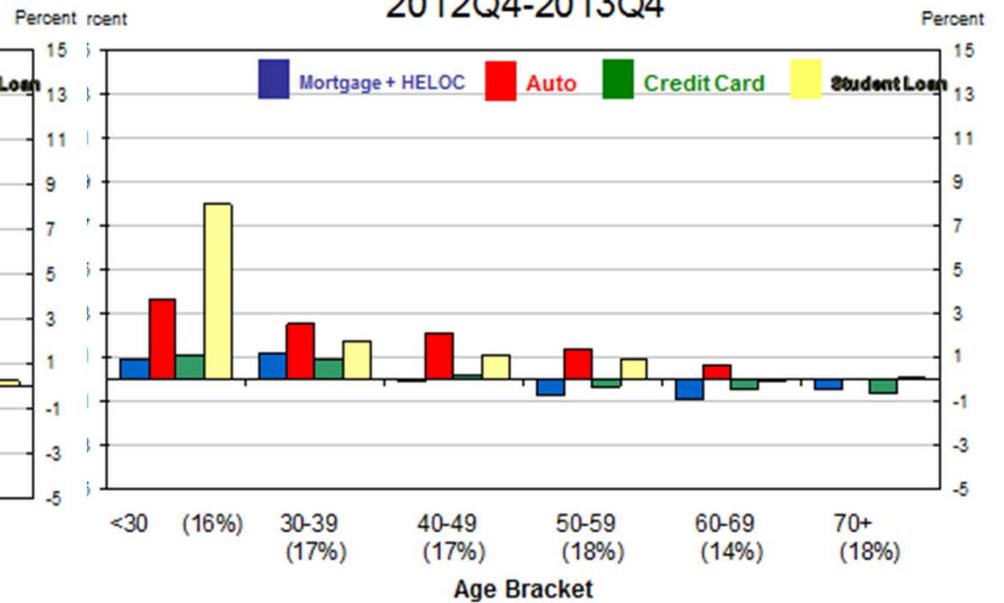


Changes in the distribution of borrowing by type of loan

Change in Debt by Borrower Age
2005Q4-2006Q4



Change in Debt by Borrower Age
2012Q4-2013Q4



Source: FRBNY Consumer Credit Panel

Note: Numbers in Parentheses denote relative frequency

Source: FRBNY Consumer Credit Panel

Note: Numbers in Parentheses denote relative frequencies