



FEDERAL RESERVE BANK *of* NEW YORK

# Household Debt and Credit 2015 in Review

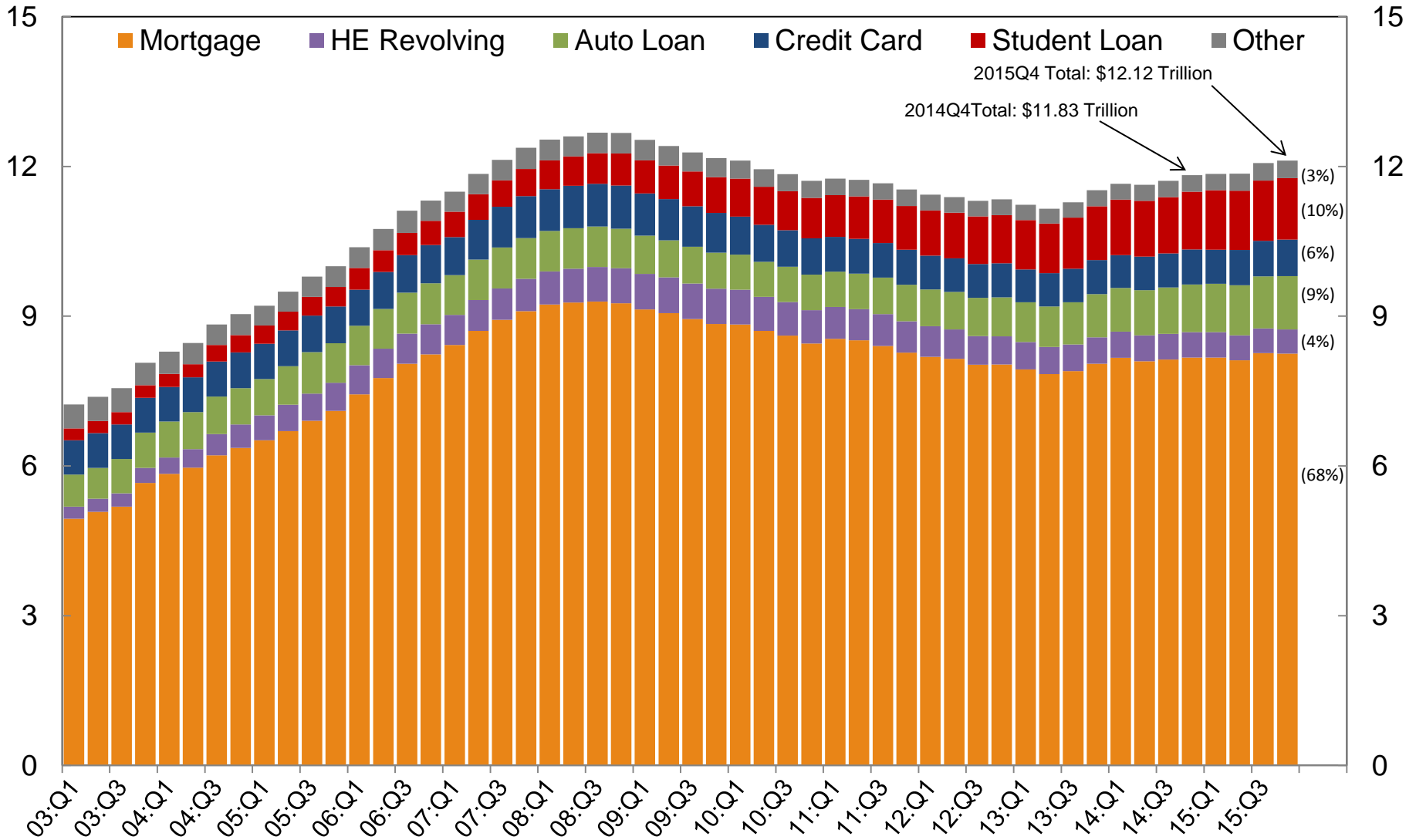
Andrew Haughwout

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# Total Debt Balance and its Composition

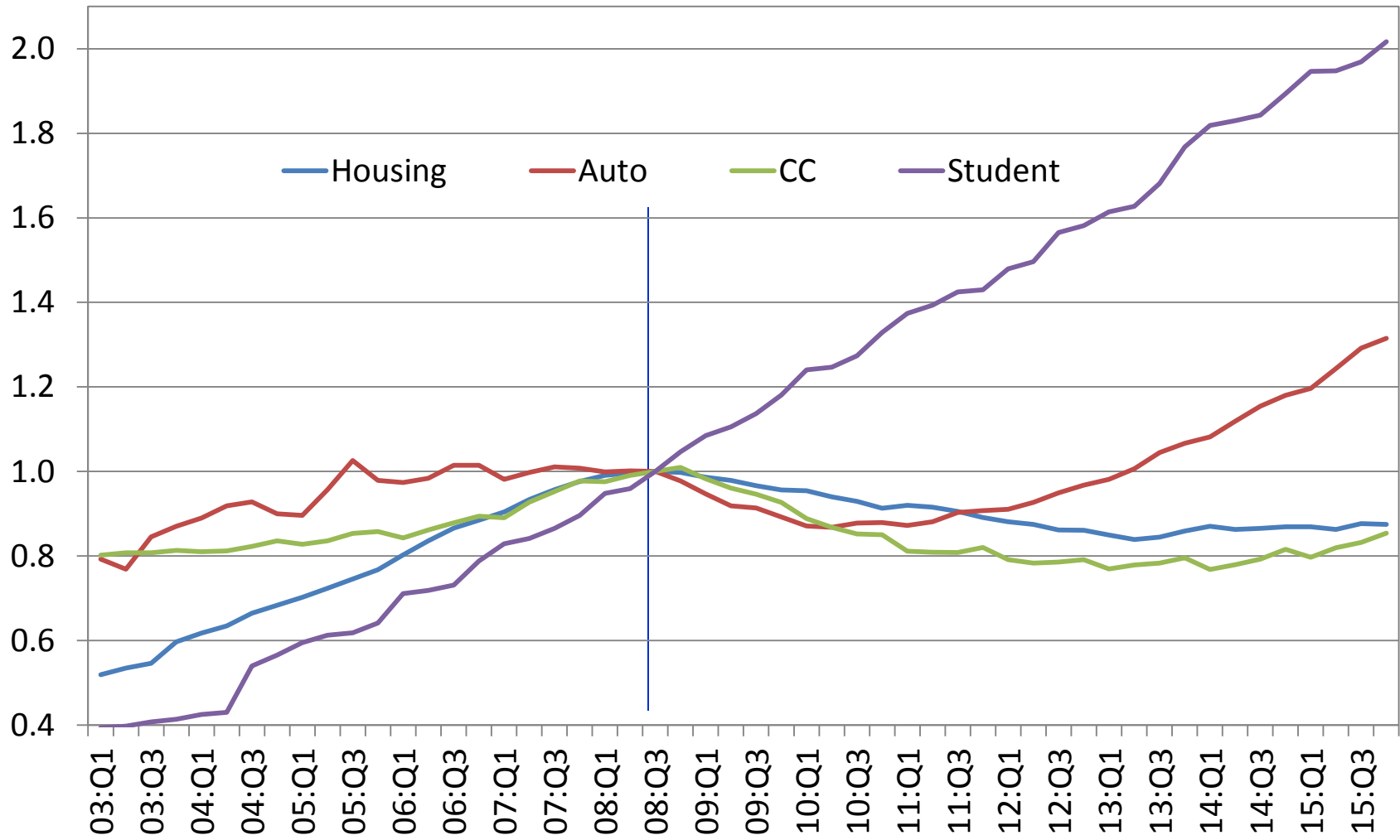
Trillions of Dollars

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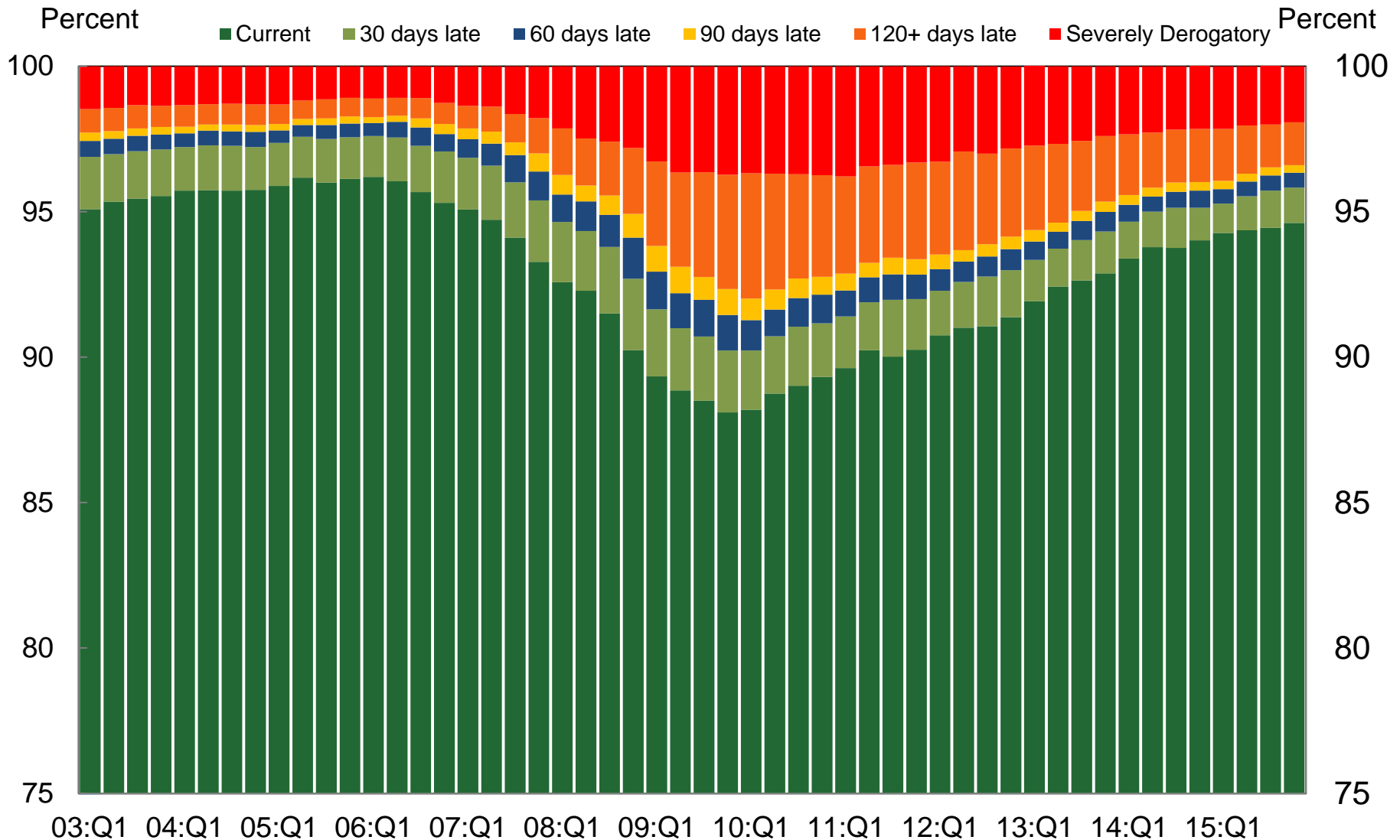


Source: FRBNY Consumer Credit Panel/Equifax

# Auto and Student Debt Growth has Outstripped Mortgage and CC

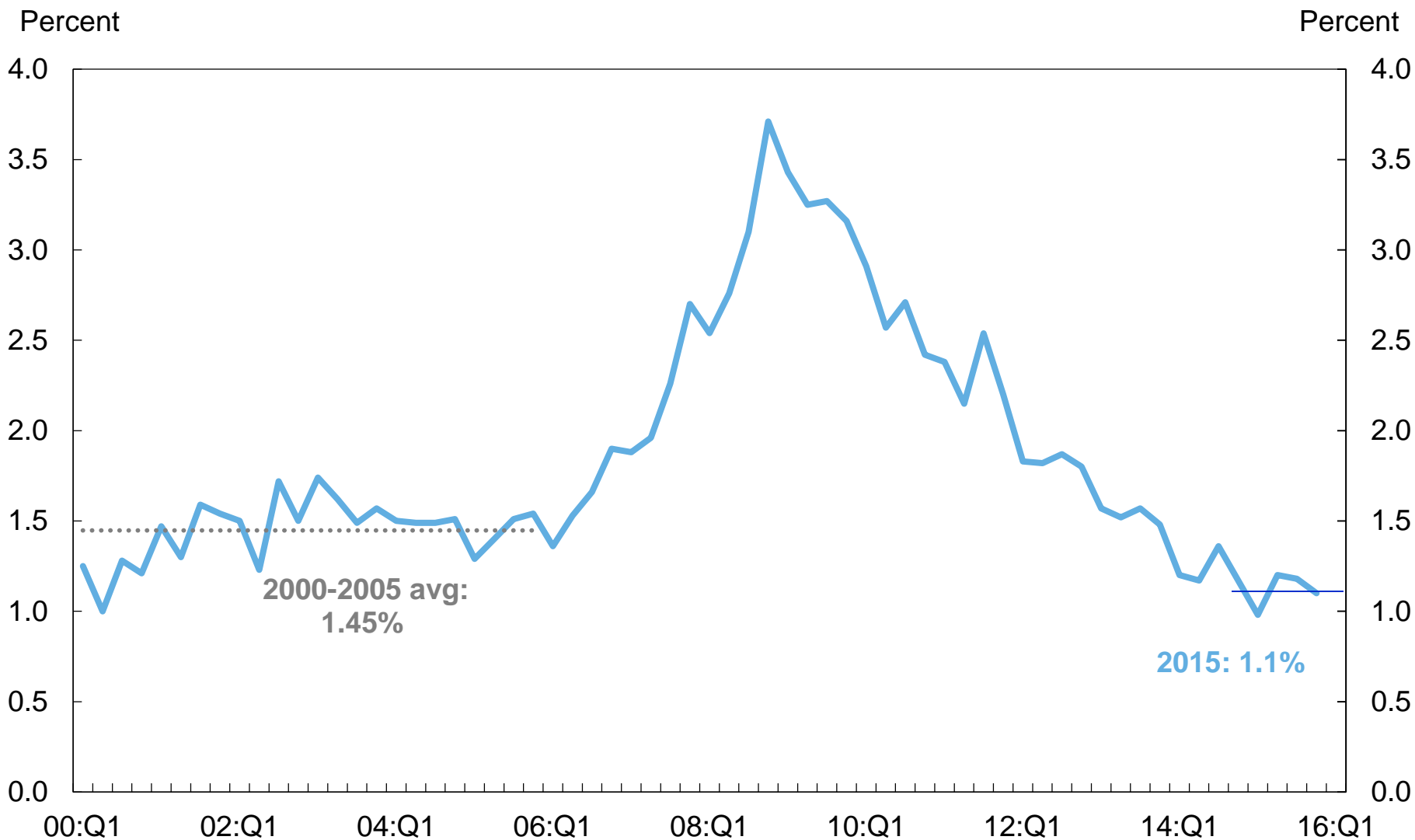


# Total Balance by Delinquency Status



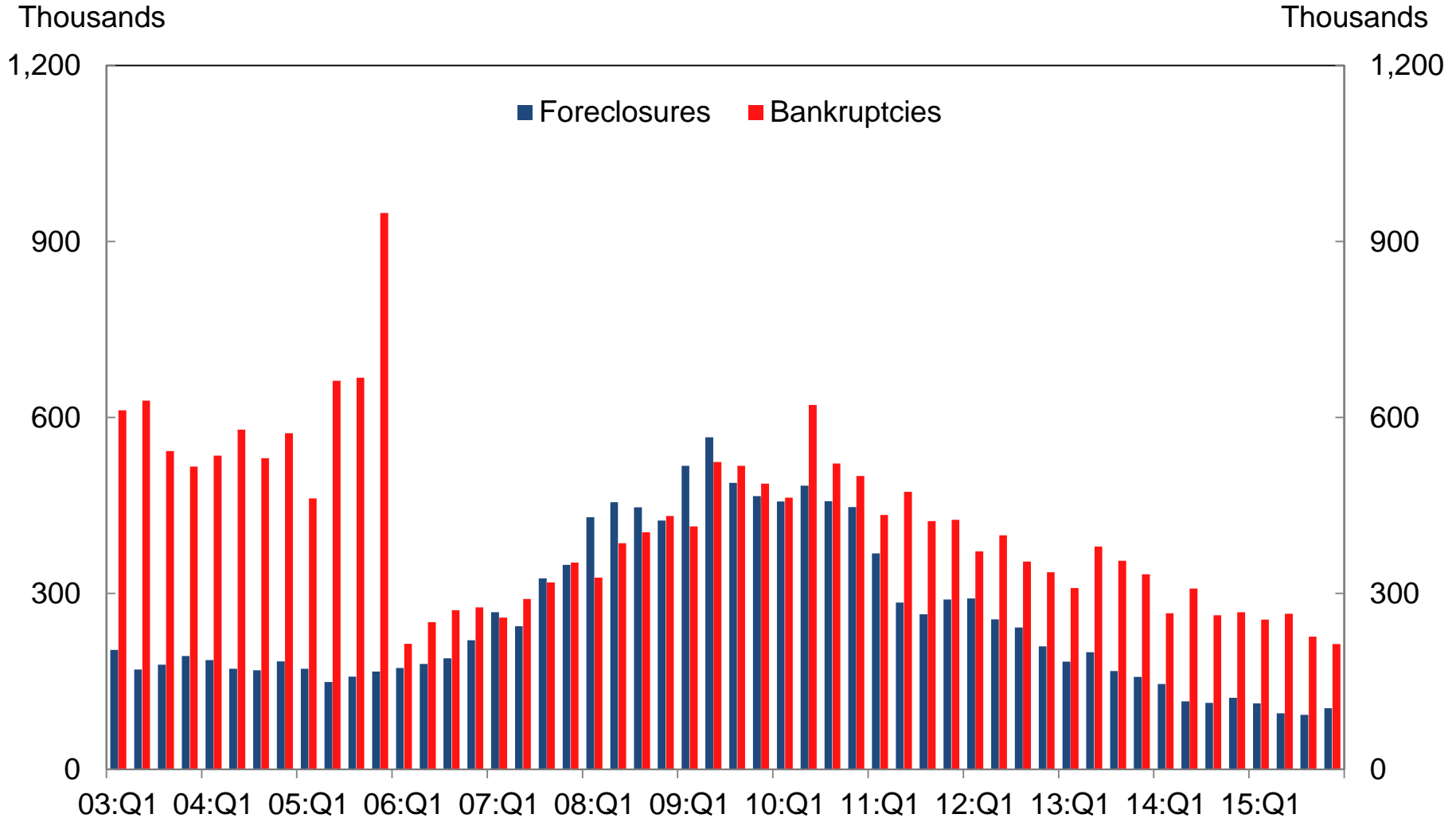
Source: FRBNY Consumer Credit Panel/Equifax

# Transition into delinquency for current mortgages



Source: FRBNY Consumer Credit Panel/Equifax

# Number of Consumers with New Foreclosures and Bankruptcies



Source: FRBNY Consumer Credit Panel/Equifax

## Notable in 2015

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- Delinquencies continued to decline
  - At year end 5.4% of debt was delinquent, lowest since early 2007
  - New foreclosures are at the lowest level we've seen
    - Data begin in 1999
  - Bankruptcies also trending down
  - Student loan delinquency remains high
- Total household debt rose \$289 billion, or 2.4%
  - Auto debt led the way, growing \$109 billion (over 11%)
    - Outstanding auto debt crossed the \$1 trillion mark in Q2
  - Other non-housing debt also grew strongly (4.7% - 6.5%)
  - Housing debt growth has been sluggish since end of deleveraging, and continued in 2015

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# WHITHER MORTGAGES?

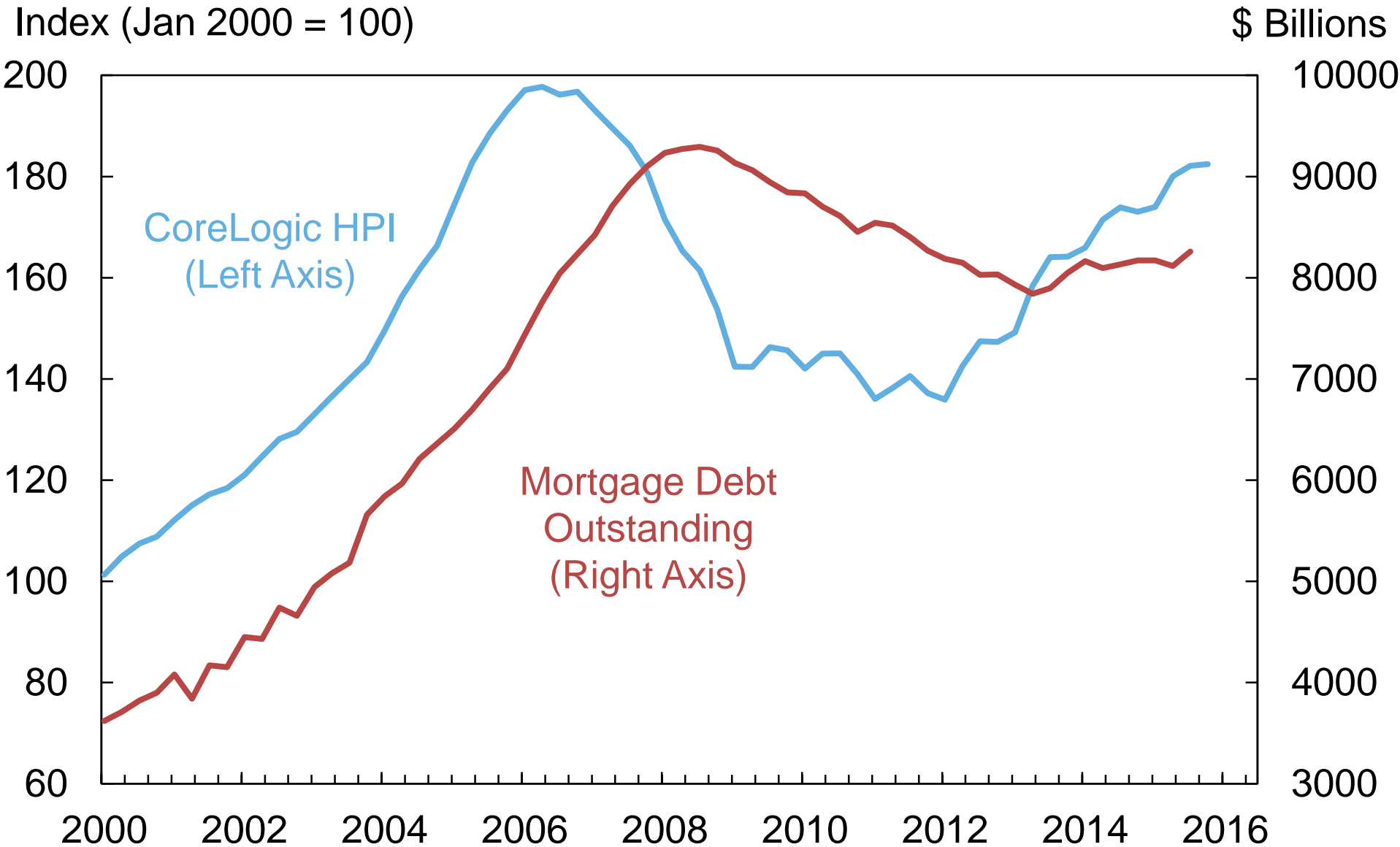


# Why has mortgage debt been so sluggish?

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- In spite of rising house prices, mortgage credit hasn't expanded much
- House prices up more than 1/3 since early 2012
- But mortgage debt hasn't grown (up less than 1%)
- A stark contrast to last expansion
  - Both prices and debt roughly doubled 2000-2006
- Why is this time different?

# House Prices and Mortgage Debt



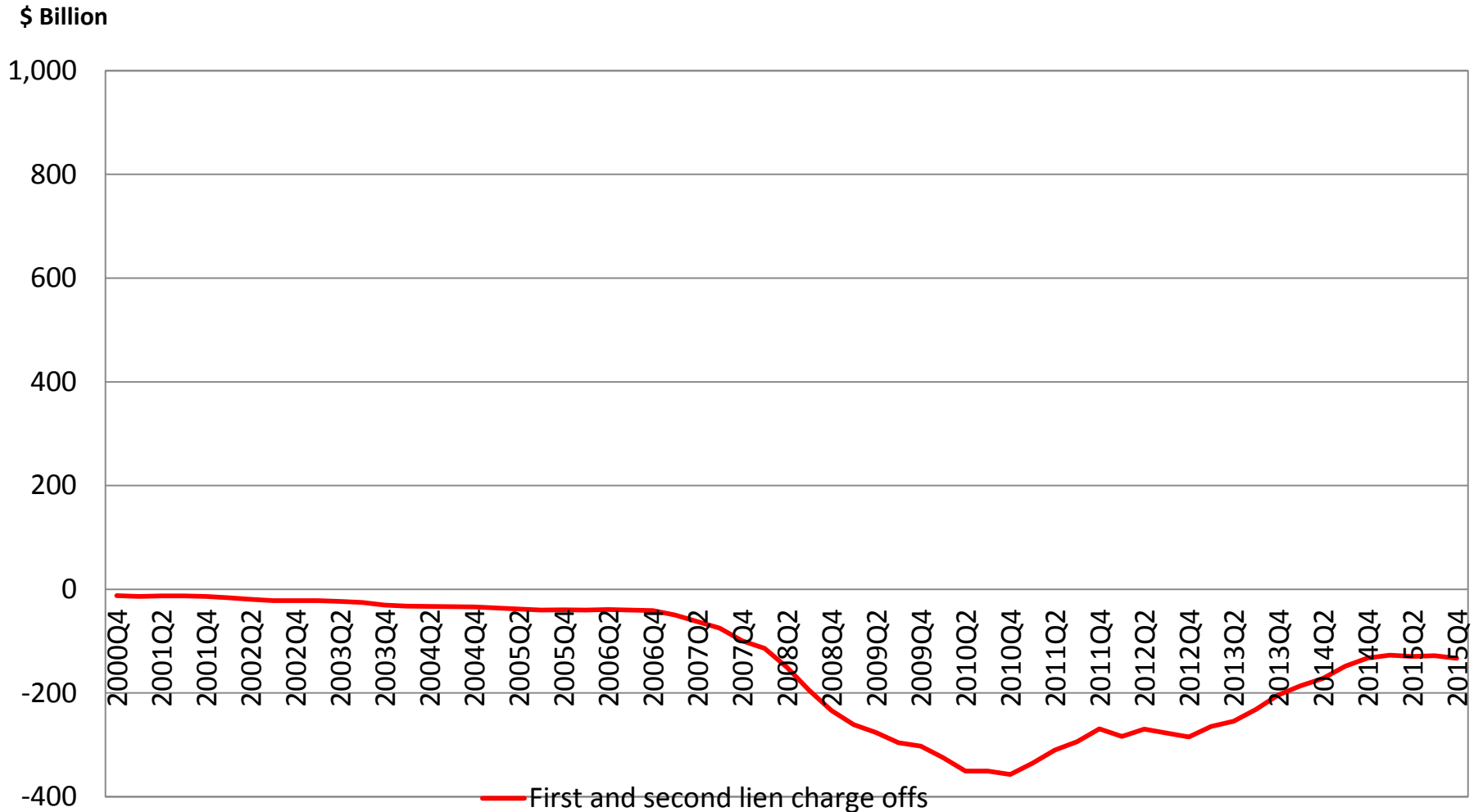
Source: FRBNY Consumer Credit Panel/Equifax and CoreLogic

# Fact 1: Foreclosures' influence is fading

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- Foreclosures eventually result in debt being “charged off”: disappearing from borrower’s credit report, reducing balances
  - Charge offs were minor (< \$50 billion per year) until 2007
  - Then grew sharply to > \$250 billion in 2009-13
  - Now declining (\$130 billion in 2015)
- So foreclosures are still reducing balances, but influence fading
- Can’t explain sluggish growth since 2012

# Fact 1: Foreclosures' influence is fading



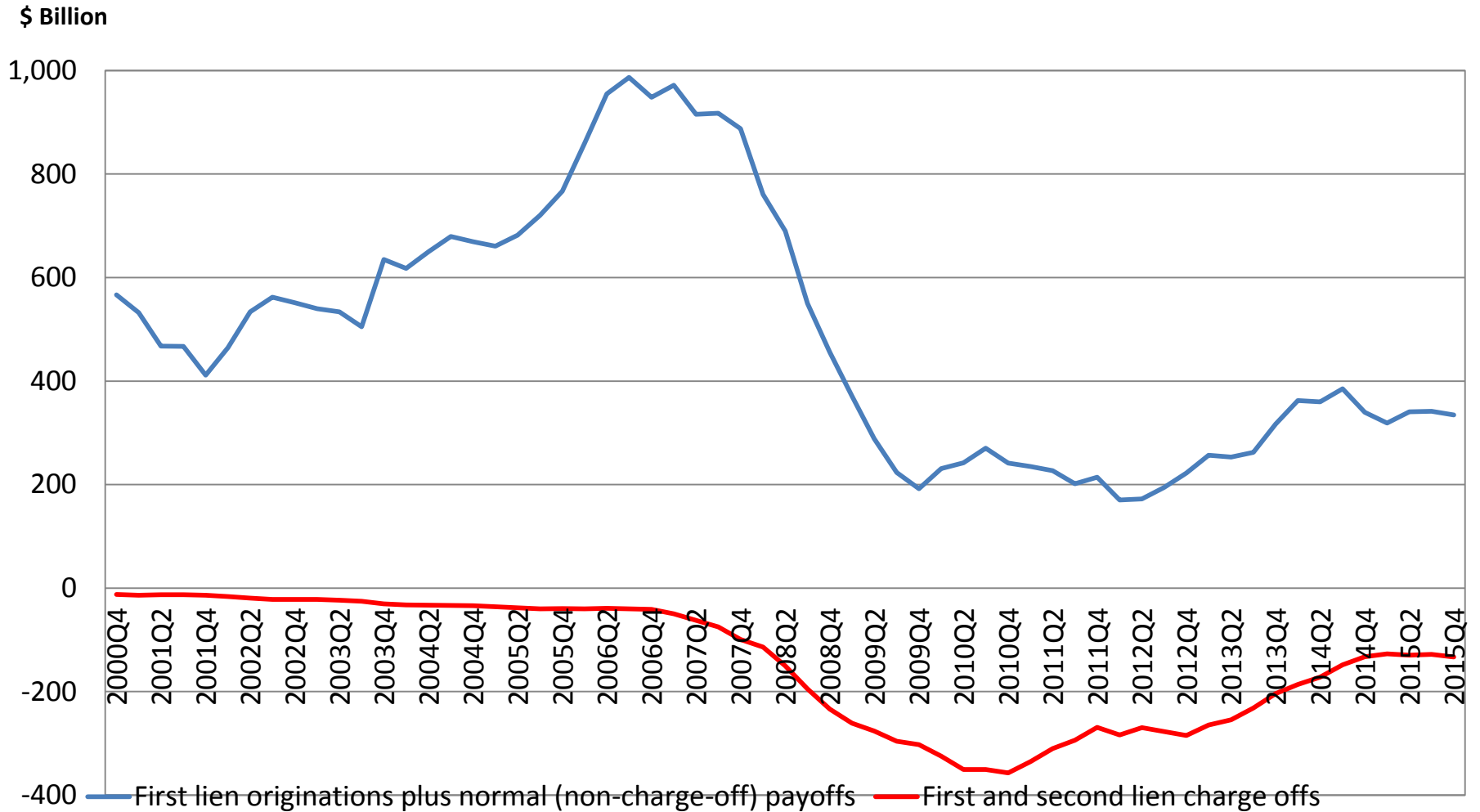
Source: FRBNY Consumer Credit Panel/Equifax

## Fact 2: Purchases not adding much

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- Housing transactions typically add to outstanding debt
  - Some new construction purchased with (net) new mortgages
    - Housing starts still well below boom levels
  - Sellers' (paid off) mortgages are smaller than buyers' (opened)
    - Sellers have paid down debt
    - Especially true when prices are rising, buyer must borrow more
- In 2006 and 2007, transactions added \$800B - \$1T annually
- \$200B in 2009-11, now back to \$350B
- Much lower contribution to mortgage debt than during the boom

# Fact 2: Purchases not adding much



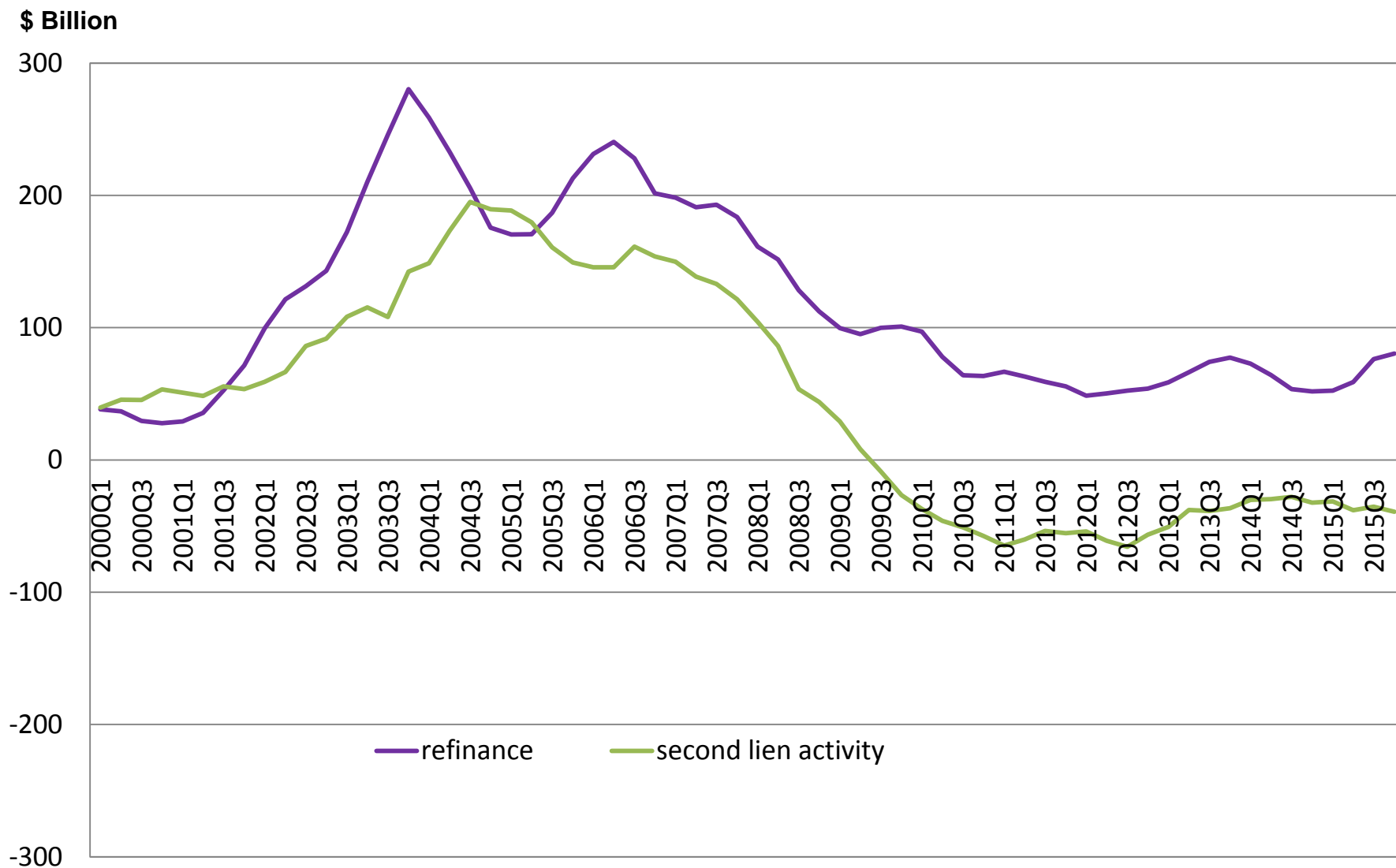
Source: FRBNY Consumer Credit Panel/Equifax

## Fact 3: Much less cash out than in boom

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- Borrowers can take cash out of properties without moving
  - With a cash-out refinance
  - With a junior lien (eg, Home Equity Loans or Lines of Credit)
- Very important during the boom
  - \$300-\$400 billion in cash withdrawn per year in 2003-2007
- Declined sharply during the bust
- \$10-\$40 billion annual rate since 2012
- Much lower contribution to mortgage debt than during the boom

# Fact 3: Much less cash out than during the boom



Source: FRBNY Consumer Credit Panel/Equifax



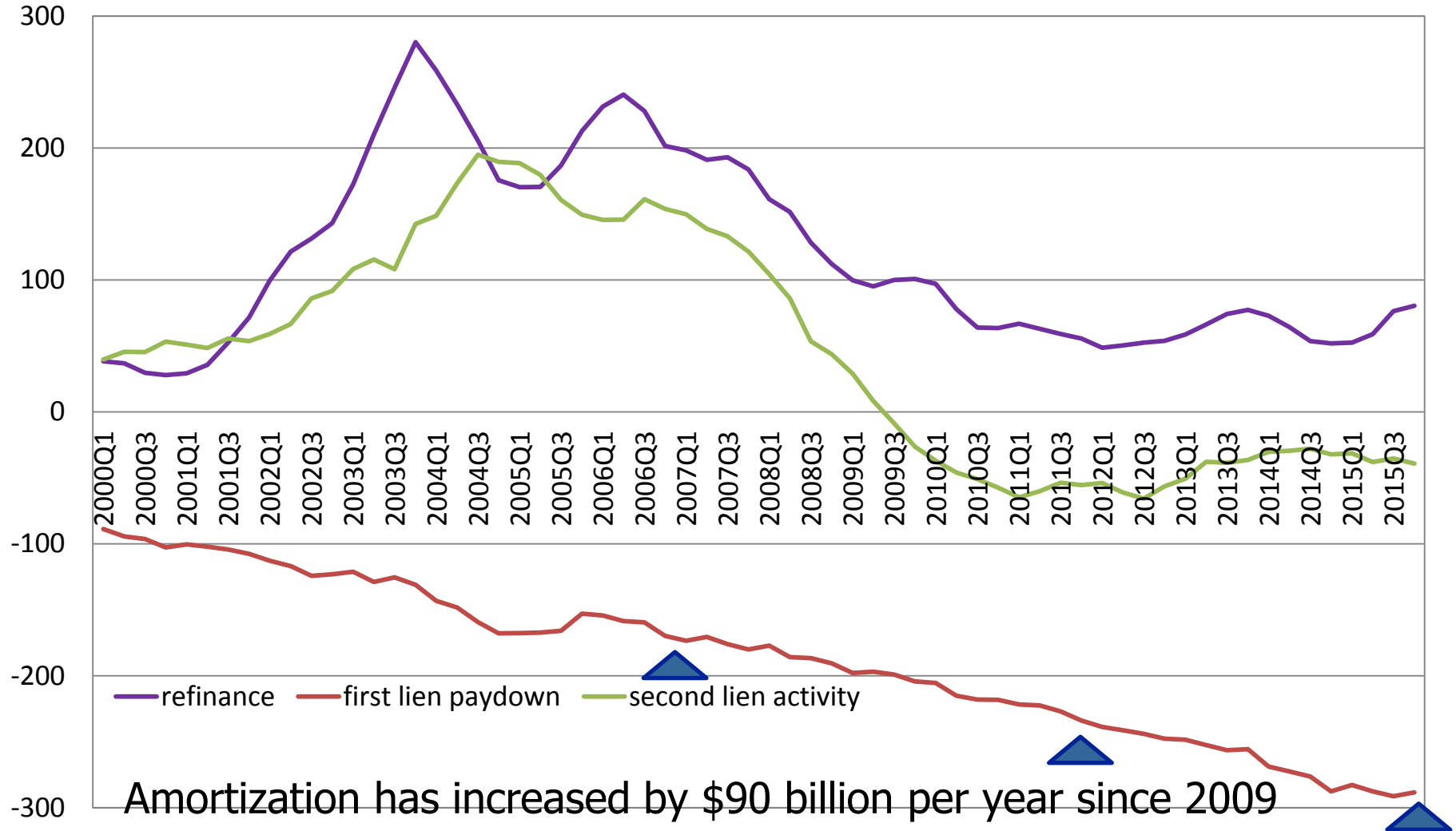
## Fact 4: First-lien principal pay-down has grown a lot

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- 2015Q4 outstanding mortgage debt is \$8.25T
- We've seen this level 3 times now (all Q4)
  - 2006: \$170 billion in annual pay-down (2.1%)
  - 2011: \$234 billion in annual pay-down (2.8%)
  - 2015: \$288 billion in annual pay-down (3.5%)
    - \$118 billion or 70% increase since 2006 on same base

# Fact 4: First-lien principal pay-down has grown a lot

\$ Billion

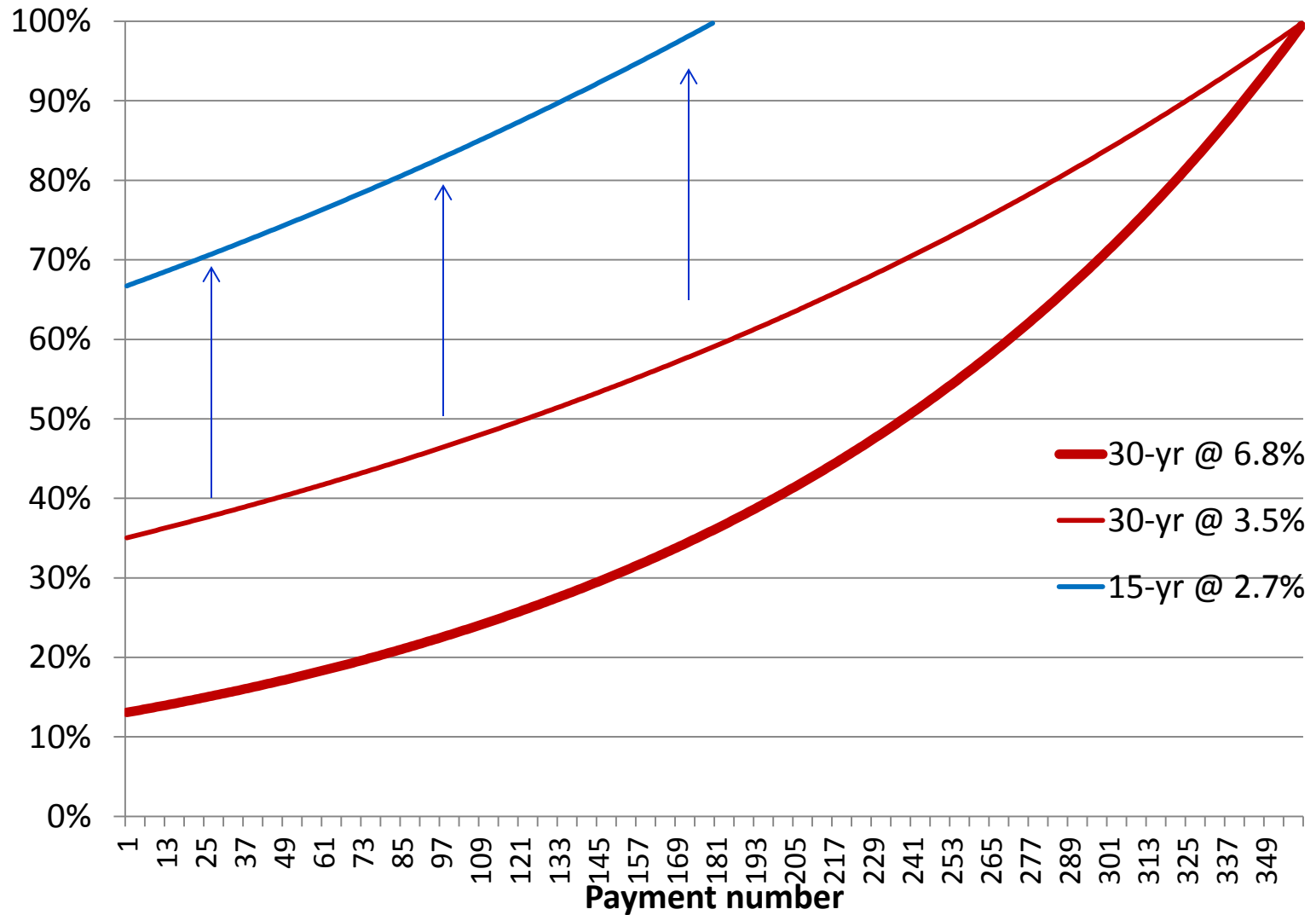


# Why is pay-down share increasing?

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- Three factors determine pay-down share
  - Interest rate
    - Loans with low rates have higher principal pay-down per dollar of payment
  - Loan age
    - Older loans have higher principal pay-down per dollar of payment
  - Term of loan
    - Loans with shorter terms have higher principal pay-down per payment
- All of these factors are currently pushing principal share up

# Interest rate, term and age determine principal share



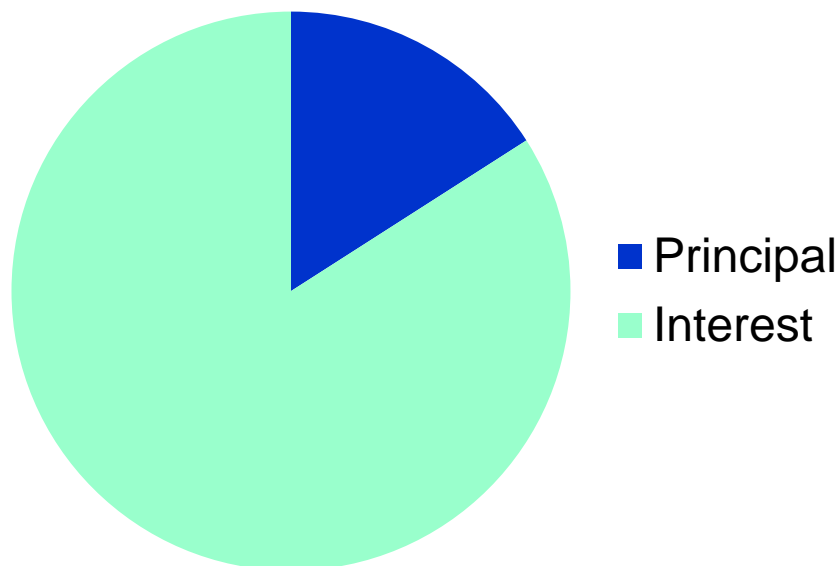
Source: Authors' calculations

# Savings from refinancing a \$200,000 mortgage

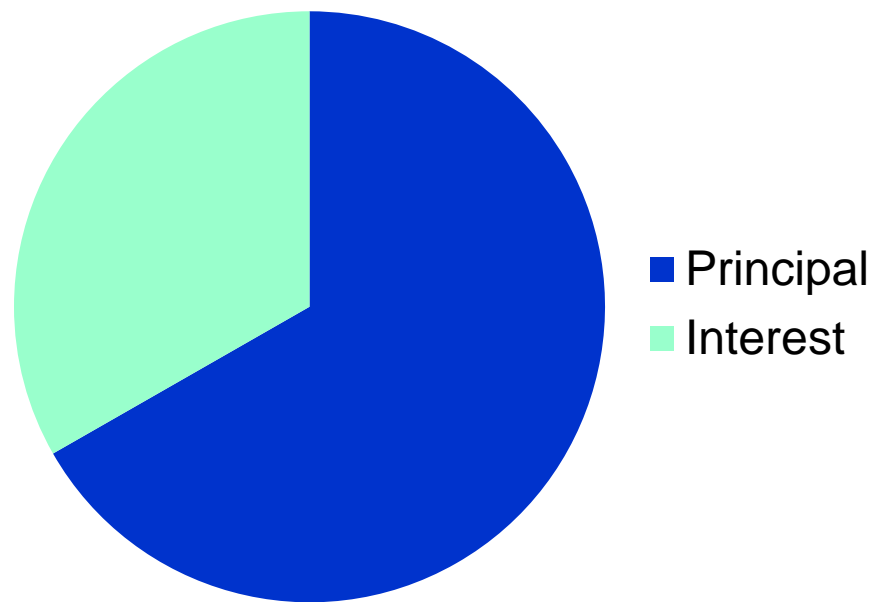
**30-yr @ 6.8%, pmt 78**

**15-yr @ 2.7%, pmt 1**

Assumes borrower income of \$75,000 finances all payments



Payment \$1,303  
Principal \$ 263 (4.2% of income)

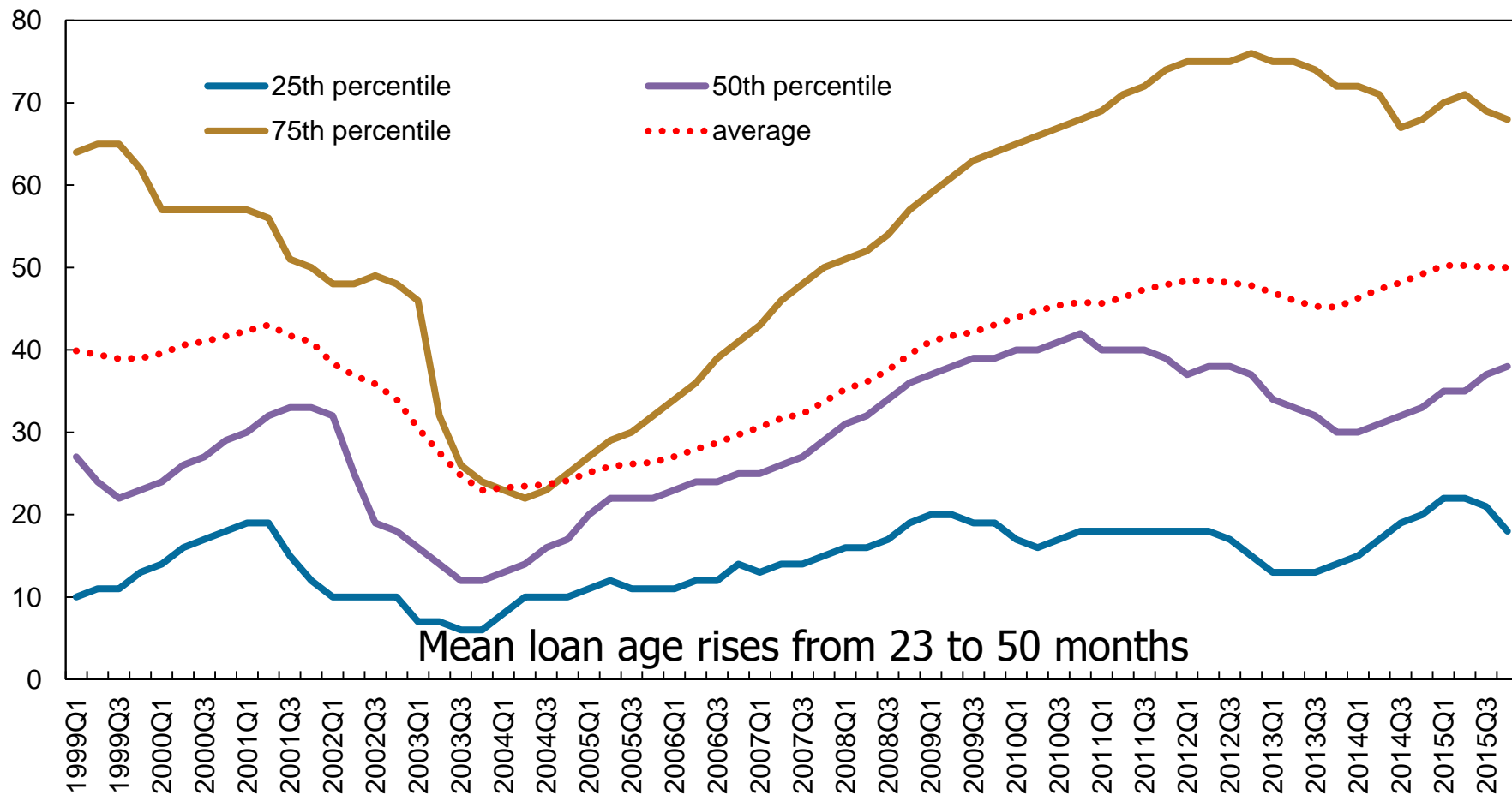


Payment \$1,352 (+3.7%)  
Principal \$ 902 (14.4% of income)

Source: Authors' calculations

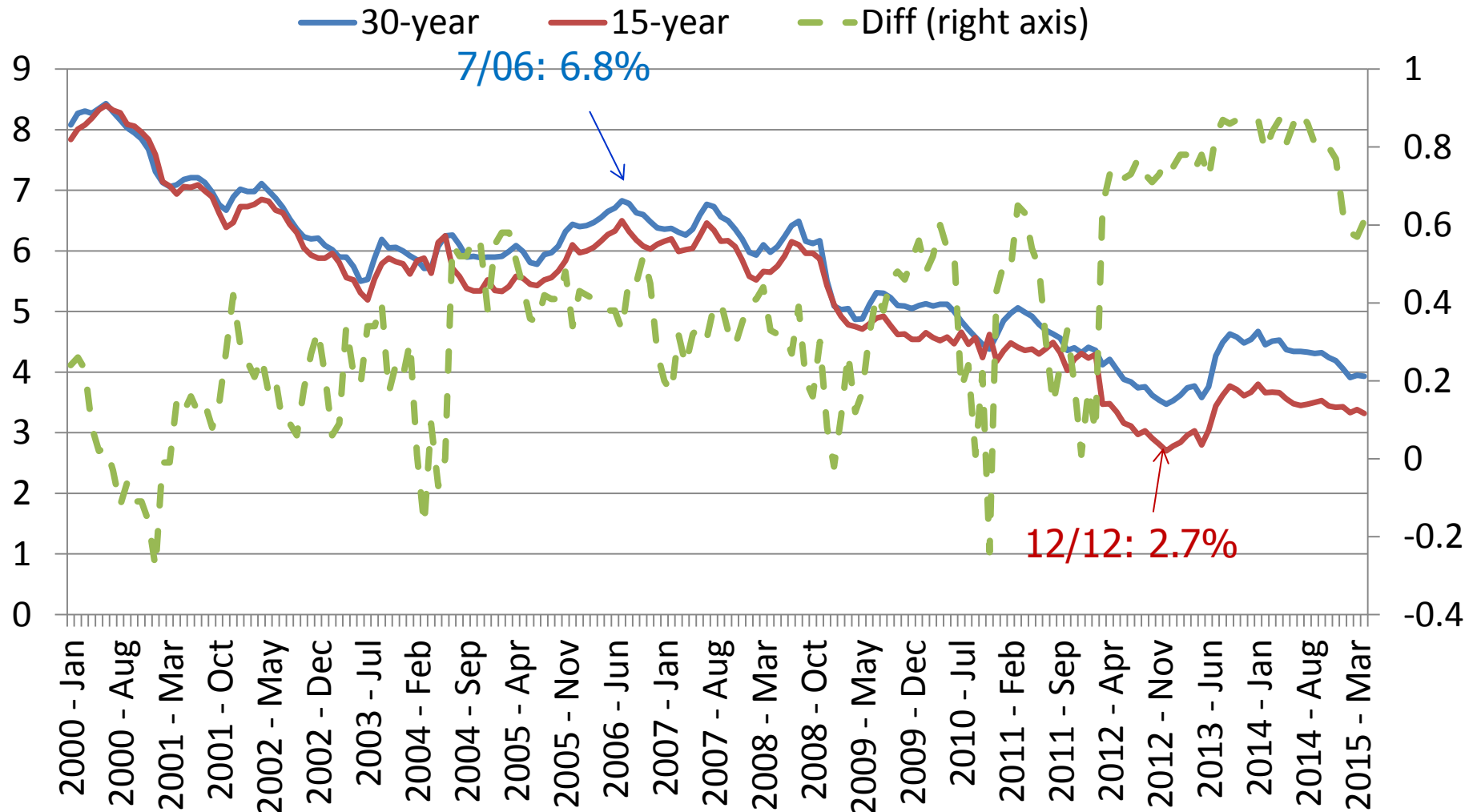
# Stock of outstanding debt has aged since 2003

Months since origination

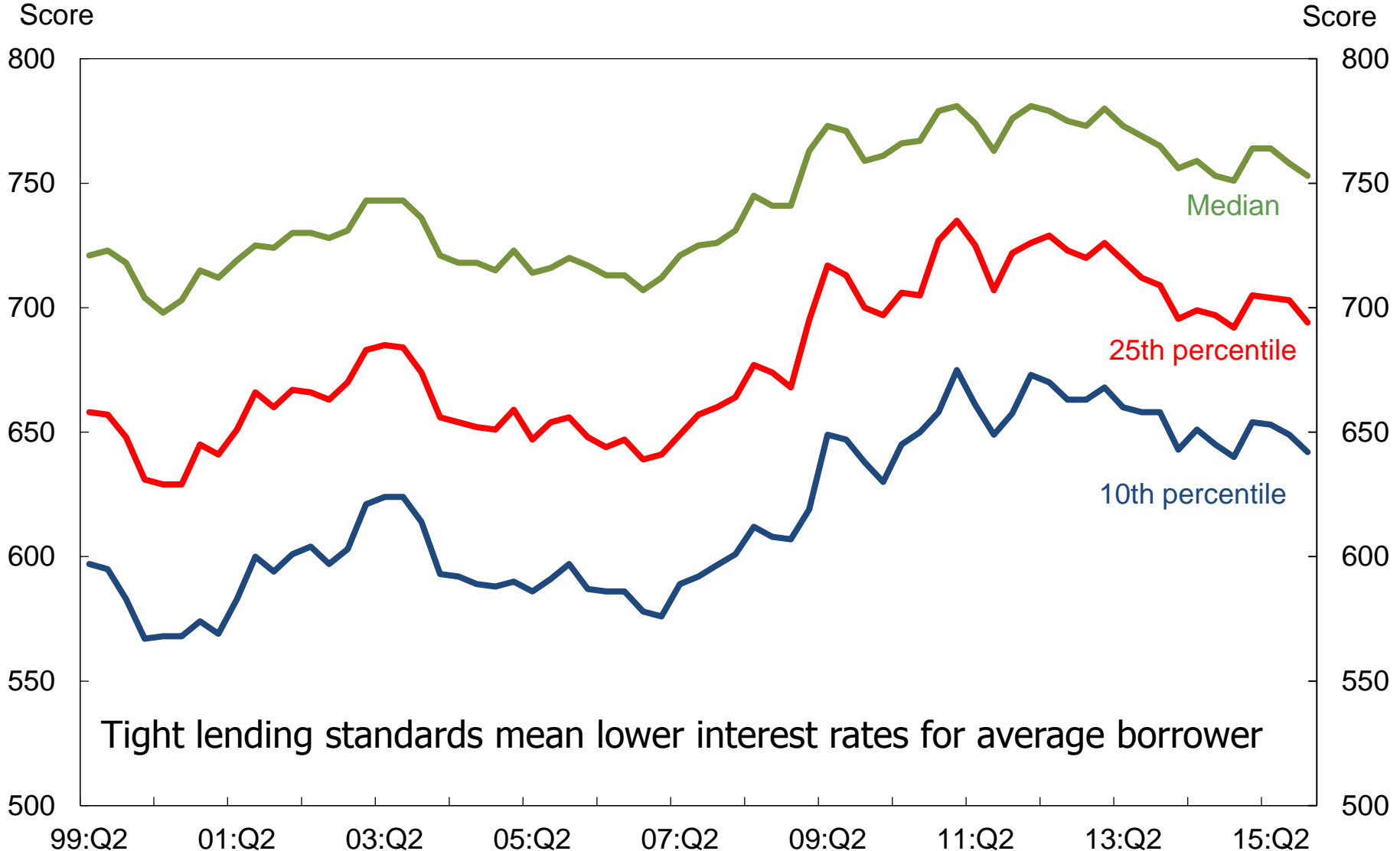


Source: New York Fed Consumer Credit Panel / Equifax

# Mortgage rates much lower, especially for 15-year



# Credit Score at Origination: Mortgages\*

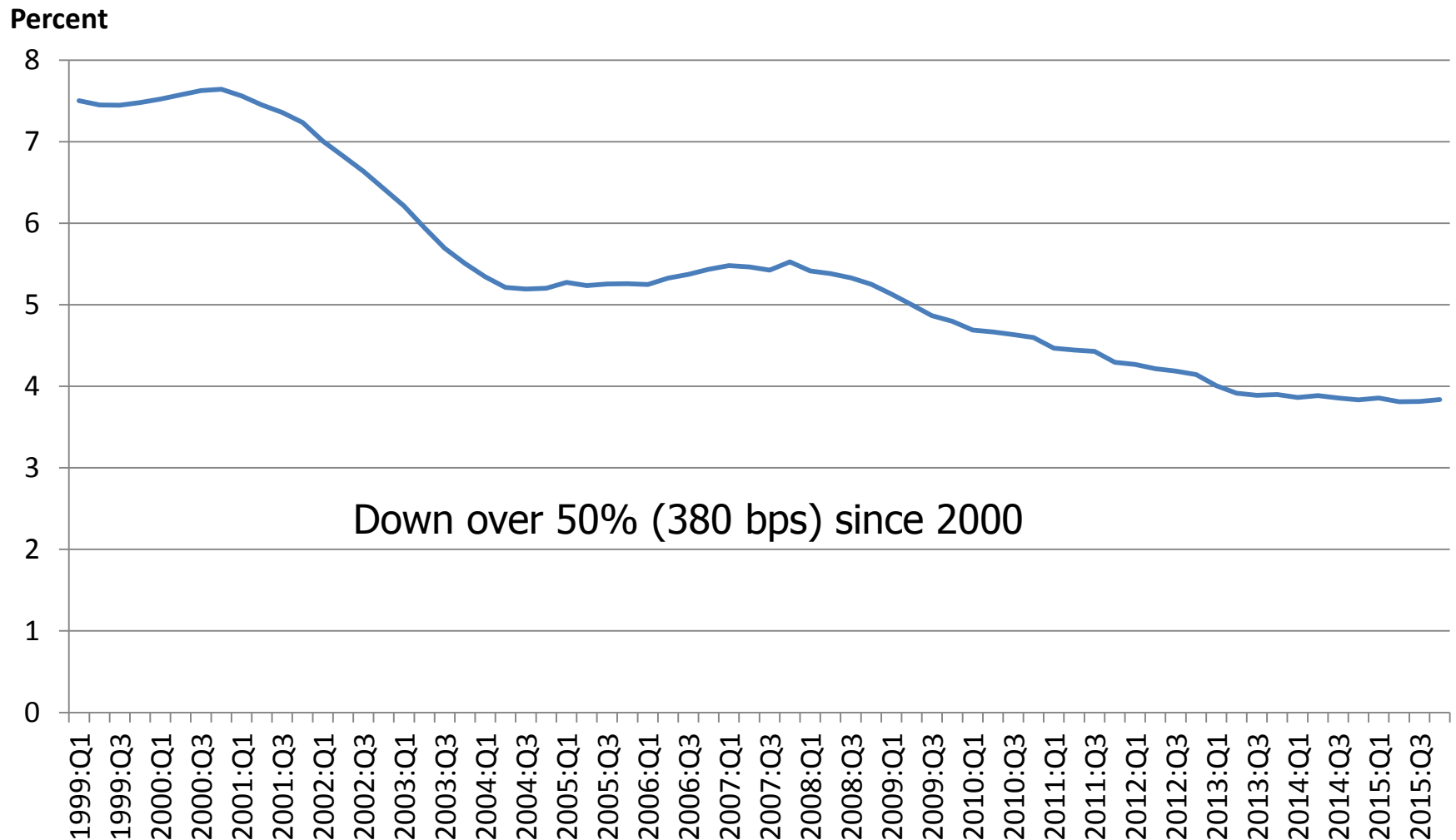


Source: FRBNY Consumer Credit Panel/Equifax

\* Credit Score is Equifax Riskscore 3.0; mortgages include first-liens only.



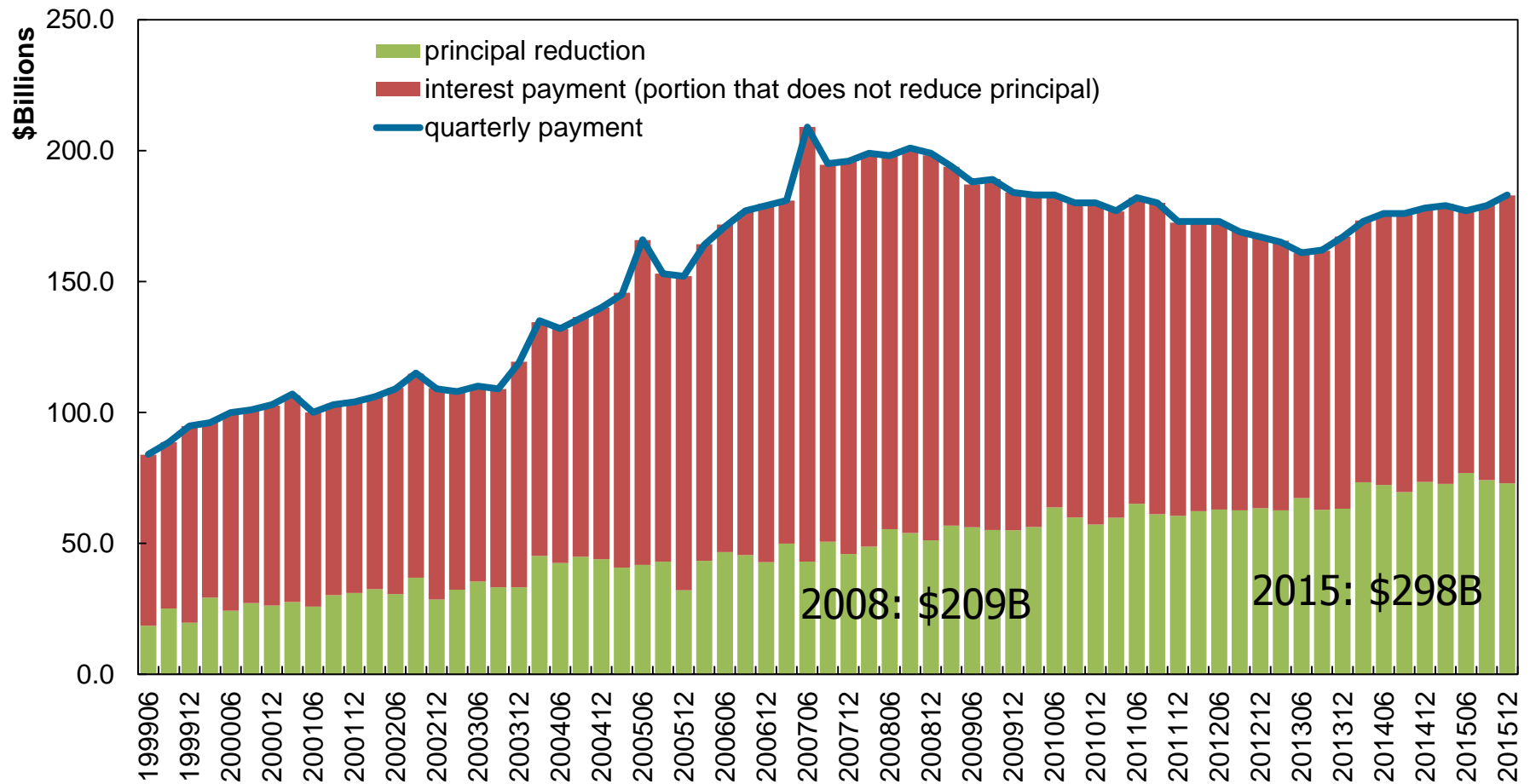
# Effective rate on outstanding mortgages has fallen



Source: Bureau of Economic Analysis

# Mortgage payments and their composition

2008-2015: Total payment falls 8%, principal paydown rises 41%



Source: New York Fed Consumer Credit Panel / Equifax

# Summary

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- Between 2000-2006, house prices and mortgage debt both doubled
- Since 2012 house prices have risen 34%, mortgage debt < 1%
- Foreclosures' effect on reducing debt is fading
- Equity withdrawal and transactions adding only modestly to balances
  - \$400 billion vs \$1.4 trillion annual
  - Stable since 2012
- A big change: increased principal paydown from aging stock of continuing debt and refinances into lower rate, shorter term debt
  - \$300 billion in paydown annually
  - A major increase in savings for these households

# Explanations, implications and outlook

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- Some of this is easy to understand
  - When borrower doesn't move or refinance, debt gets older and principal payment goes up
  - Lower rates and shorter terms refinances largely due to . . .
    - . . . decline in overall rates
    - . . . especially low 15-yr r
  - Tighter standards mean average borrower gets a lower rate
- Some of it is less clear
  - Are less equity withdrawal and transactions due to . . .
    - . . . borrower caution
    - or
    - . . . tighter standards/supply?
  - Could be a sign of stress for some borrowers (eg young student borrowers)

# Explanations, implications and outlook

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- Whatever the causes, these factors are increasing personal savings for these borrowers
- Existing stock of debt likely to “age in place”
  - If rates go up, strong incentives to continue in low rate mortgage
  - Leading to slow increase in pay-down/saving
- Could be offset by increase in equity withdrawal or purchase borrowing
  - But little sign of that yet