

# **Analysis of Current and Forecasted Demand for Housing in North America and Europe**

## **TIMBER MEASUREMENT SOCIETY**

**Central Meeting**

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**Coeur d'Alene, Idaho**

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# Housing Demand Overview

## Factors Influencing Housing Demand

Key Variables

Economic

## Europe, Canada, and United States Housing Indicators:

Demographics

Housing Permits, Starts, and Completions

Existing and New House Sales

Construction Spending

Residential Remodeling

Projections

**Threats**

**Conclusions**

# Housing Demand Factors

## Factors Influencing Housing Demand

### Household Formation

United States Census Bureau: household = occupied housing unit.

In any year, the sum of single- and multi-family units is about equal to the number of U.S. households<sup>1</sup> (132 mm houses; 75 mm owner occupied and 40 mm rentals; about 18 mm vacant)<sup>2</sup>.

### Demographics

Changes in the size and composition of the U.S. population shift the demand for housing units (with constant house prices).

The growth of the U.S. population over time has increased aggregate demand for housing units<sup>1</sup>.

# Housing Demand Factors

## Factors Influencing Housing Demand

### **Technology**

Rapid advancements in automobile technology allowed people to live further from where they worked -- helping fuel demand for single-family housing

### **Public Policy**

Public investments in highways after World War II allowed people to live further from where they worked<sup>1</sup>

### **Housing Replacement**

Disaster, dilapidation, other uses, etc.

# Housing Demand Factors

## Factors Influencing Housing Demand

### Housing Price

As relative house prices increase, the number of housing units demanded will decrease

### Business Cycle

Households tend to reduce housing expenses when jobs become scarce and increase them when jobs become plentiful

### Lifetime Income

Long-run trend increases in real income have caused many households to increase spending on housing<sup>1</sup>

# Housing Demand Factors

## Factors Influencing Housing Demand

### Real Median Income

Inflation-adjusted household income – “Real” income

Median inflation-adjusted household income generally increases or decreases with the business cycle<sup>1</sup>

### Employment → → Jobs

Well-paying jobs are important – if not critical

# European Housing

Eurozone: Euro Area, EU 15, & 27



# European Housing

## Markit (Flash) Eurozone PMI and GDP

Markit Composite PMI Output Index  
sa, 50 = no change

Eurostat Eurozone GDP  
Quarterly % change



Source: Markit, Eurostat. GDP = gross domestic product



# European Housing



Source: Investing.com

Source: SoberLook; <http://3.bp.blogspot.com/-sw19txFh-dY/UzXHI5p-QMI/AAAAAAAAePs/3J2IYndg1Qw/s1600/Mortgage+growth.PNG>

# European Housing

## Eurozone Mortgage Loan Growth (year-over-year)

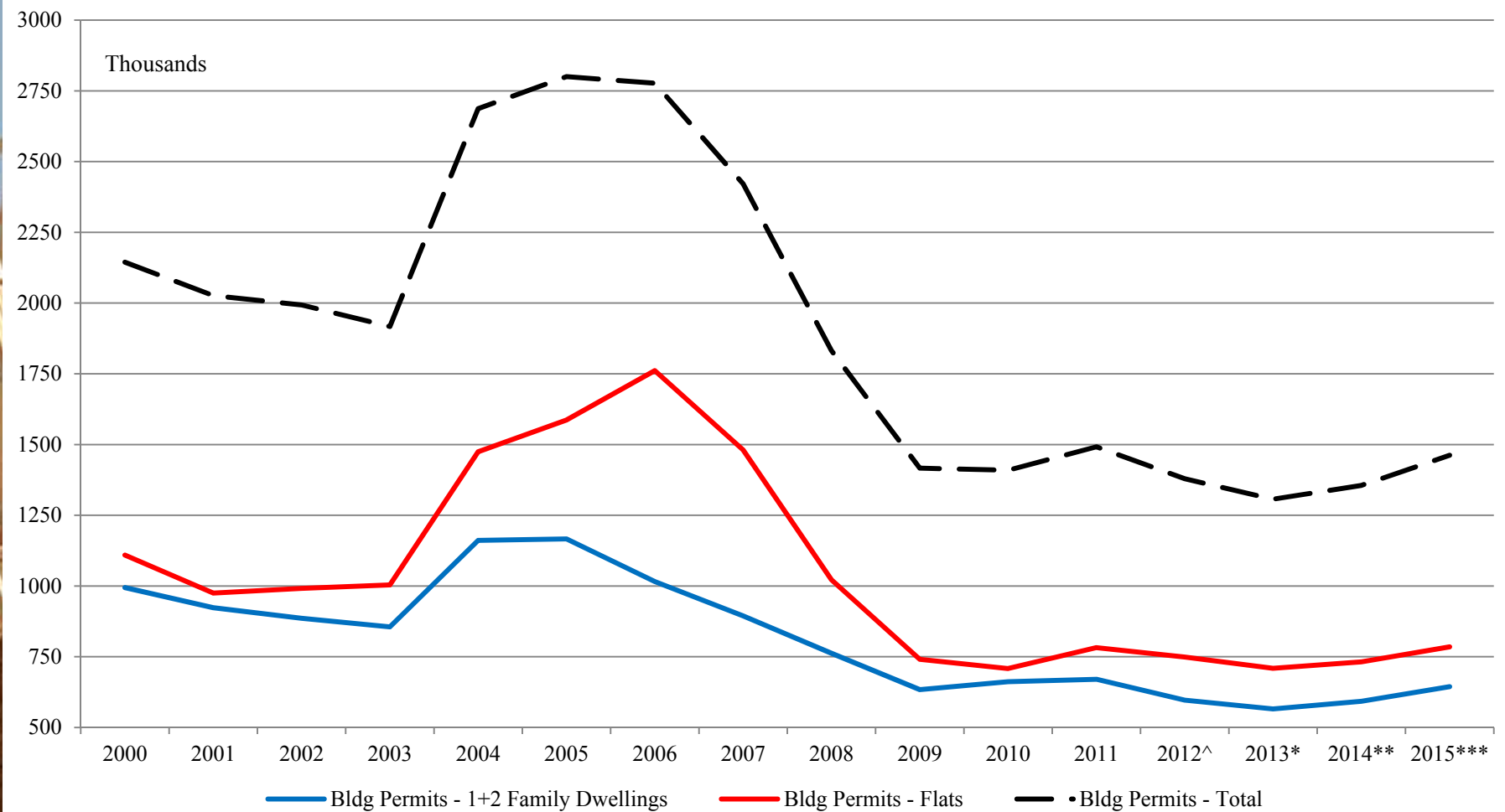


Source: ECB

Source: SoberLook; <http://3.bp.blogspot.com/-sw19txFh-dY/UzXHI5p-QMI/AAAAAAAAePs/3J2IYndg1Qw/s1600/Mortgage+growth.PNG>

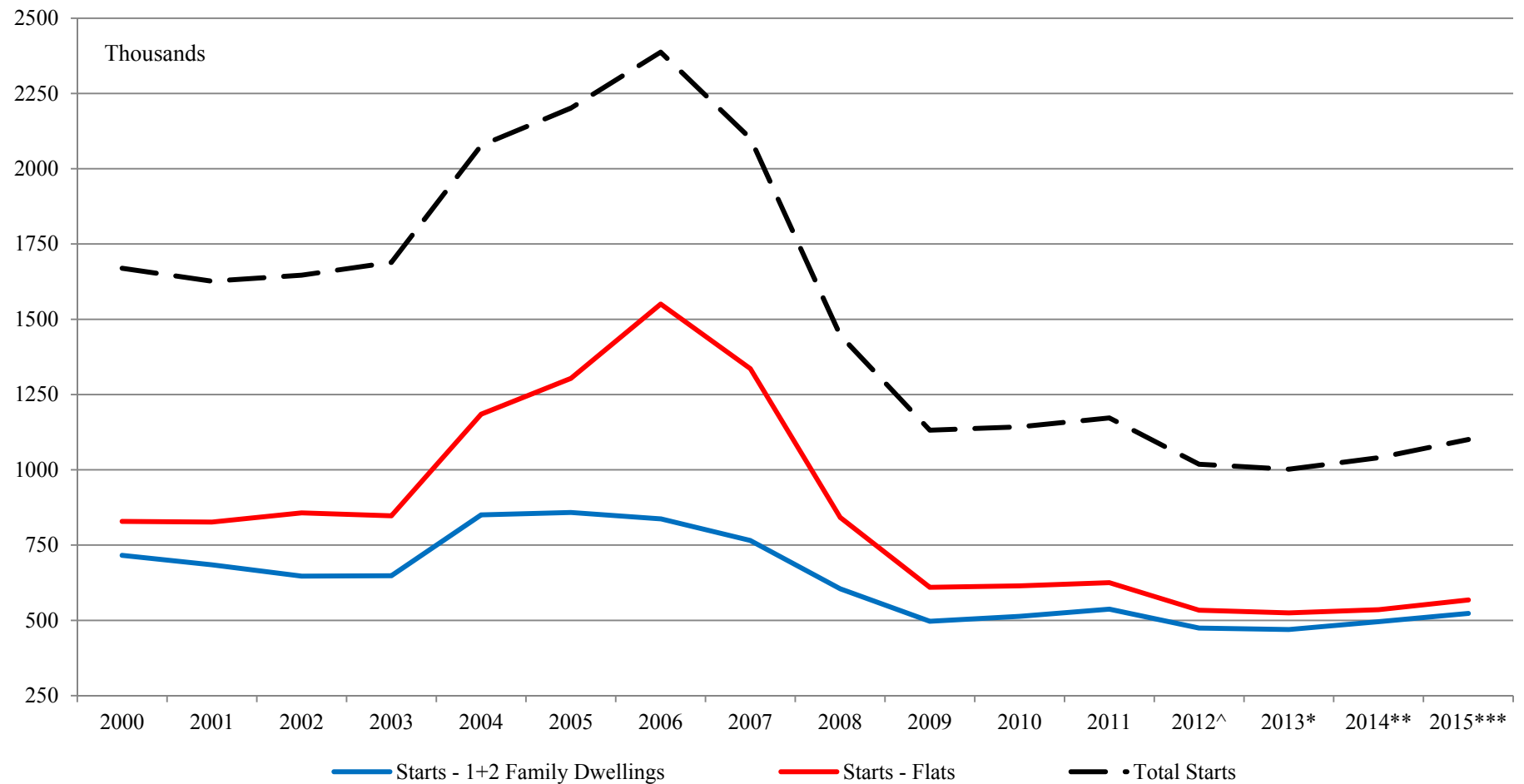
# European Housing

Euro Area, EU 15, & 27: Building Permits 2004 – 2015



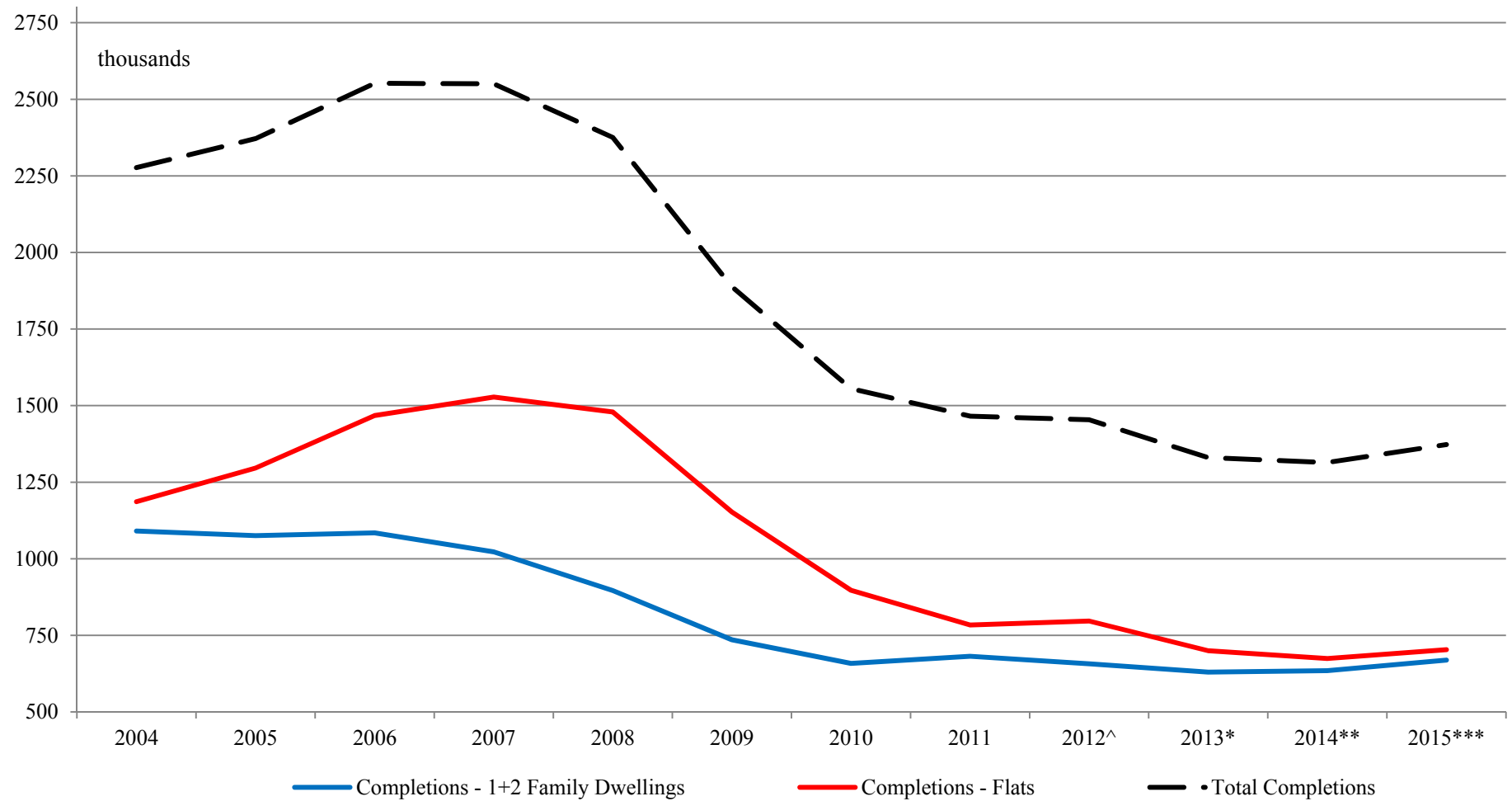
# European Housing

Euro Area, EU, 15 & 27: Starts 2004 –2015



# European Housing

Euro Area, EU 15, & 27: Completions 2004 –2015

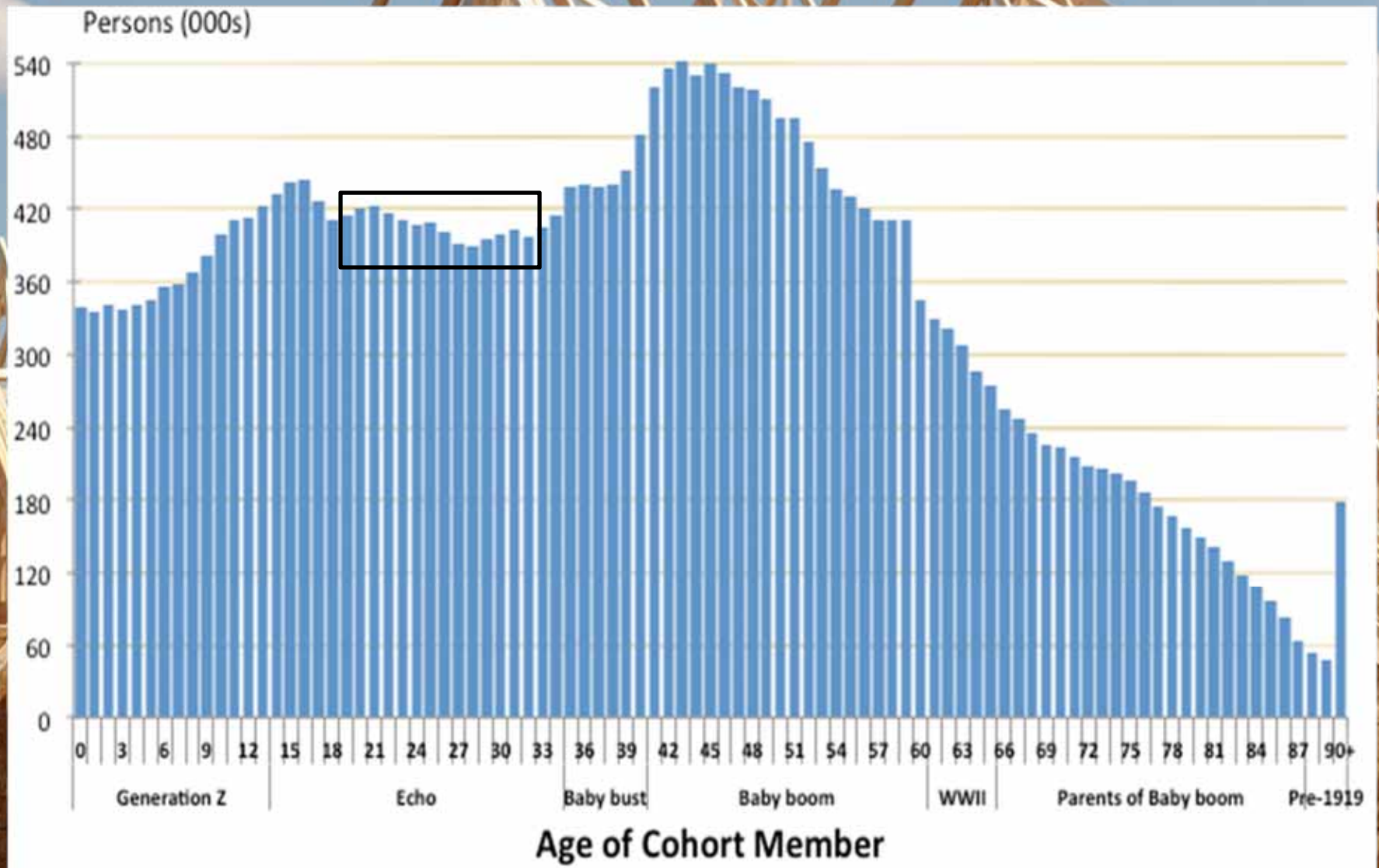


# **North American Housing**

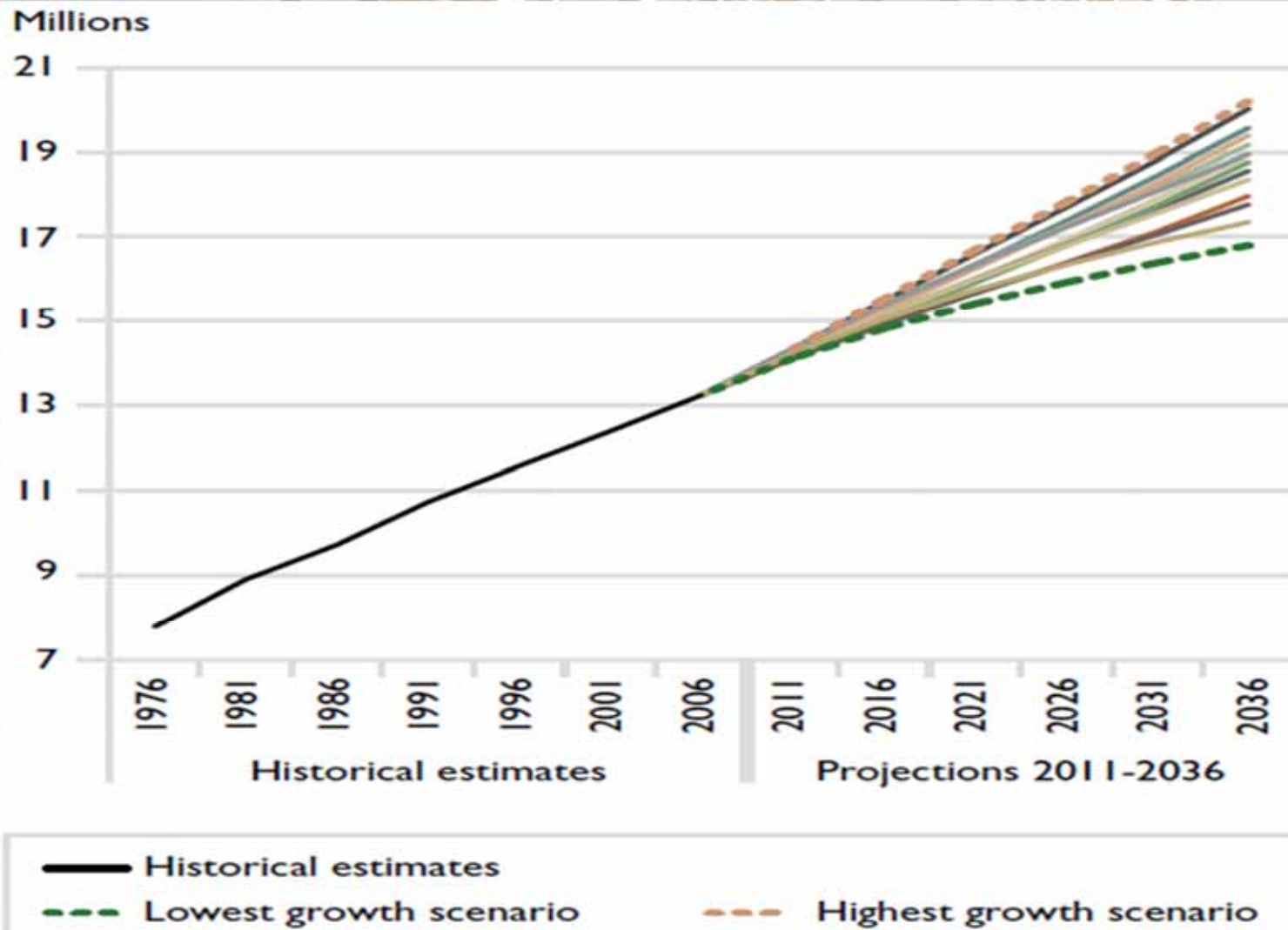
**Canada**



# Canada's Generations 2006

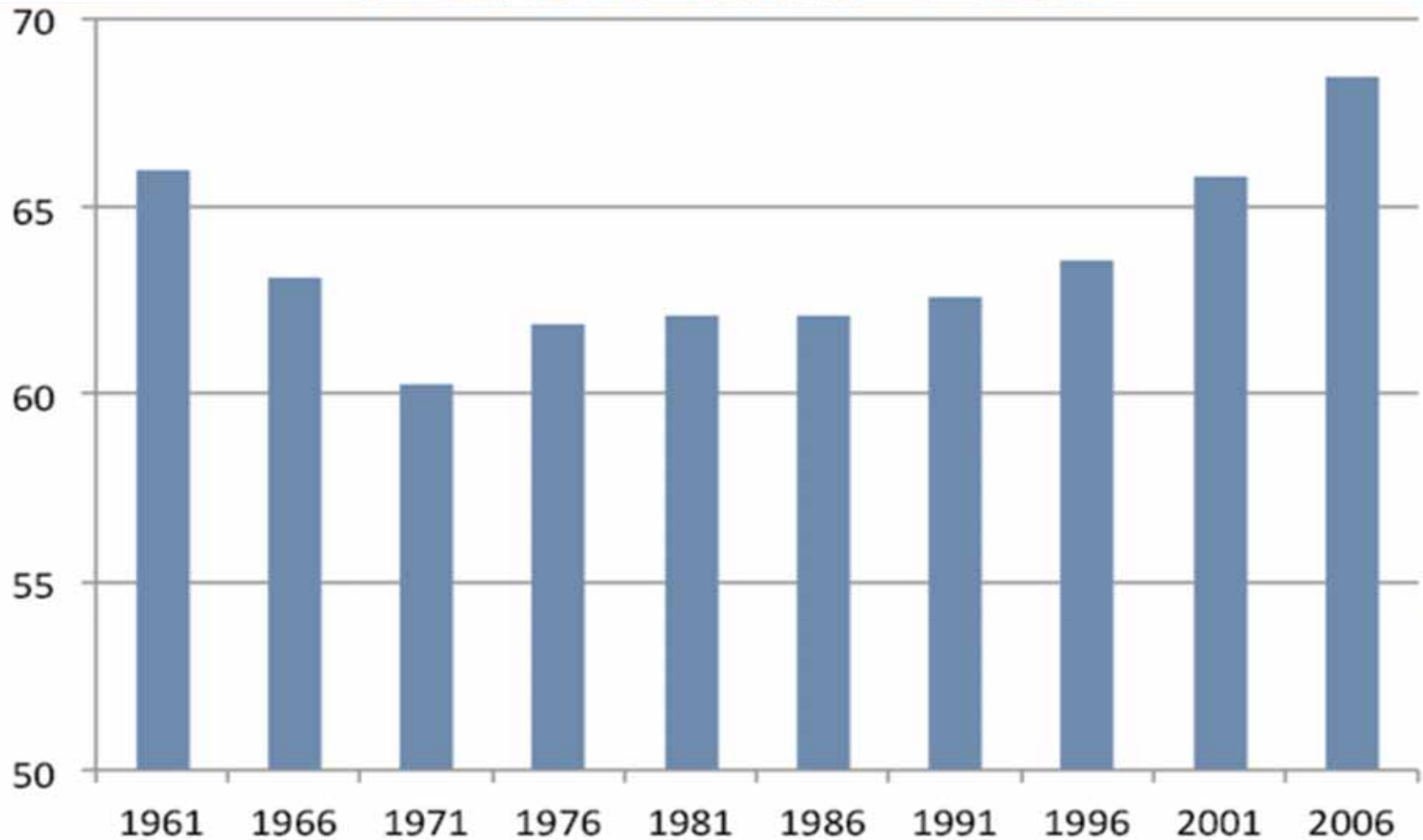


# Number of Households: 1976-2006 and Projections to 2036





# Canadian Homeownership Rate: 1961-2006

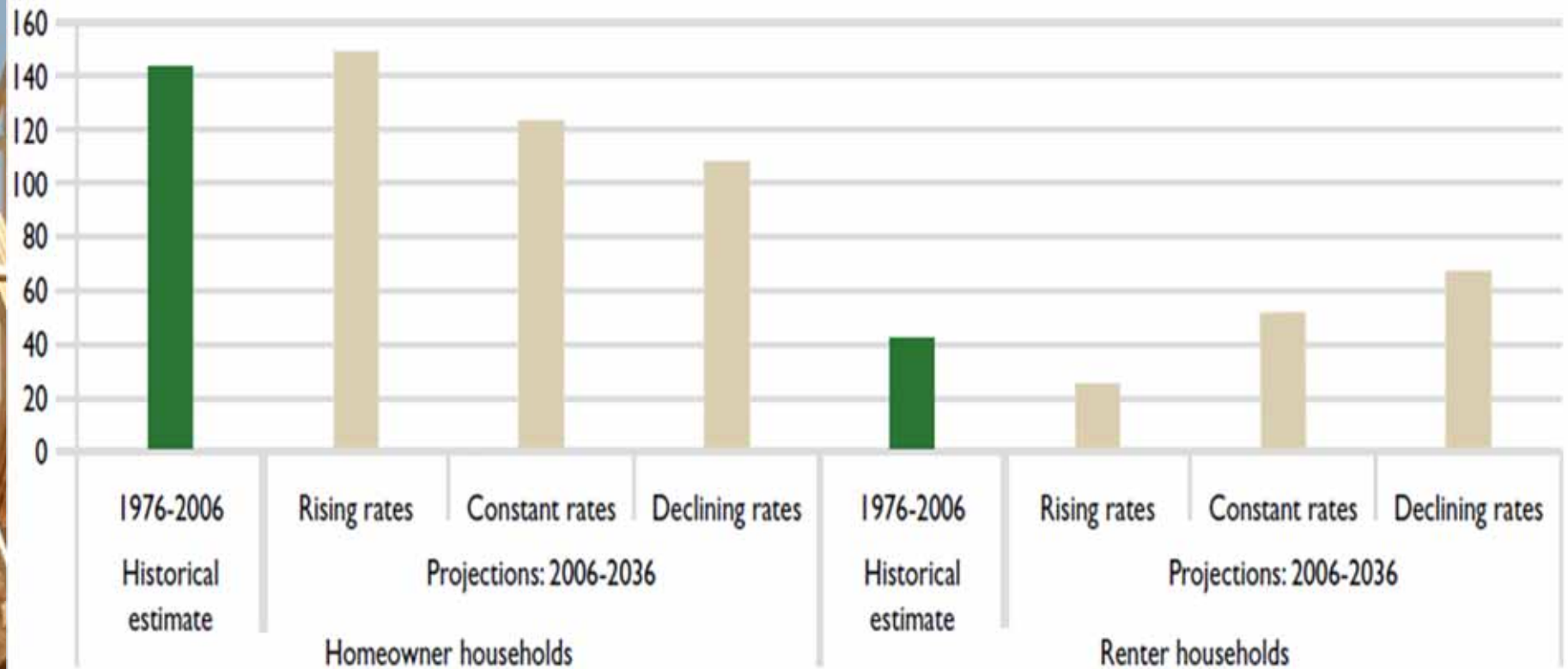


Source: CMHC, adapted from Statistics Canada (Census of Canada)

Source: <http://www.cmhc-schl.gc.ca/odpub/pdf/68024.pdf?fr=1392832006969>

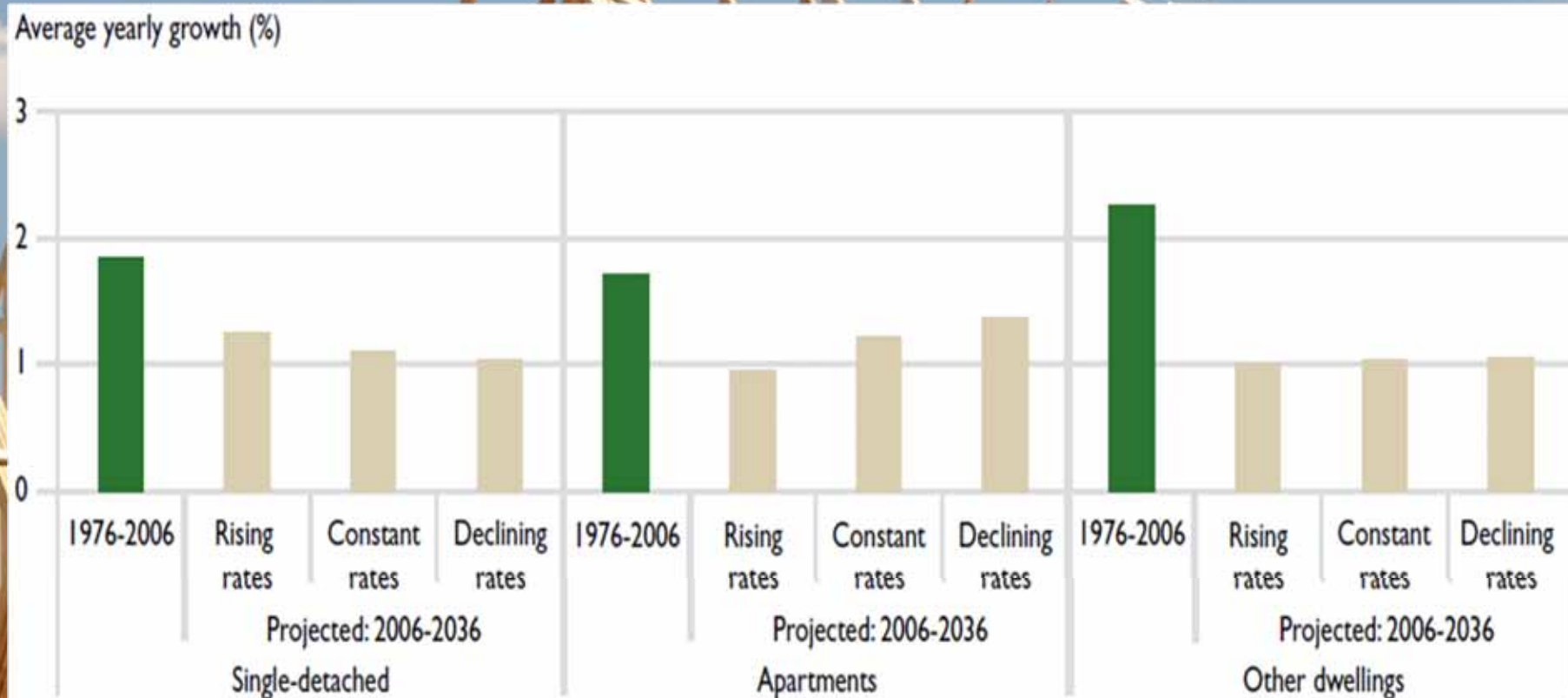
# Home Owner and Renter Households: 1976-2006 -- Projections to 2036

Average number of households per year (000s)



Medium household growth: rising, constant, and declining home ownership rates scenarios

# Private Dwellings: 1976-2006; Forecast to 2036

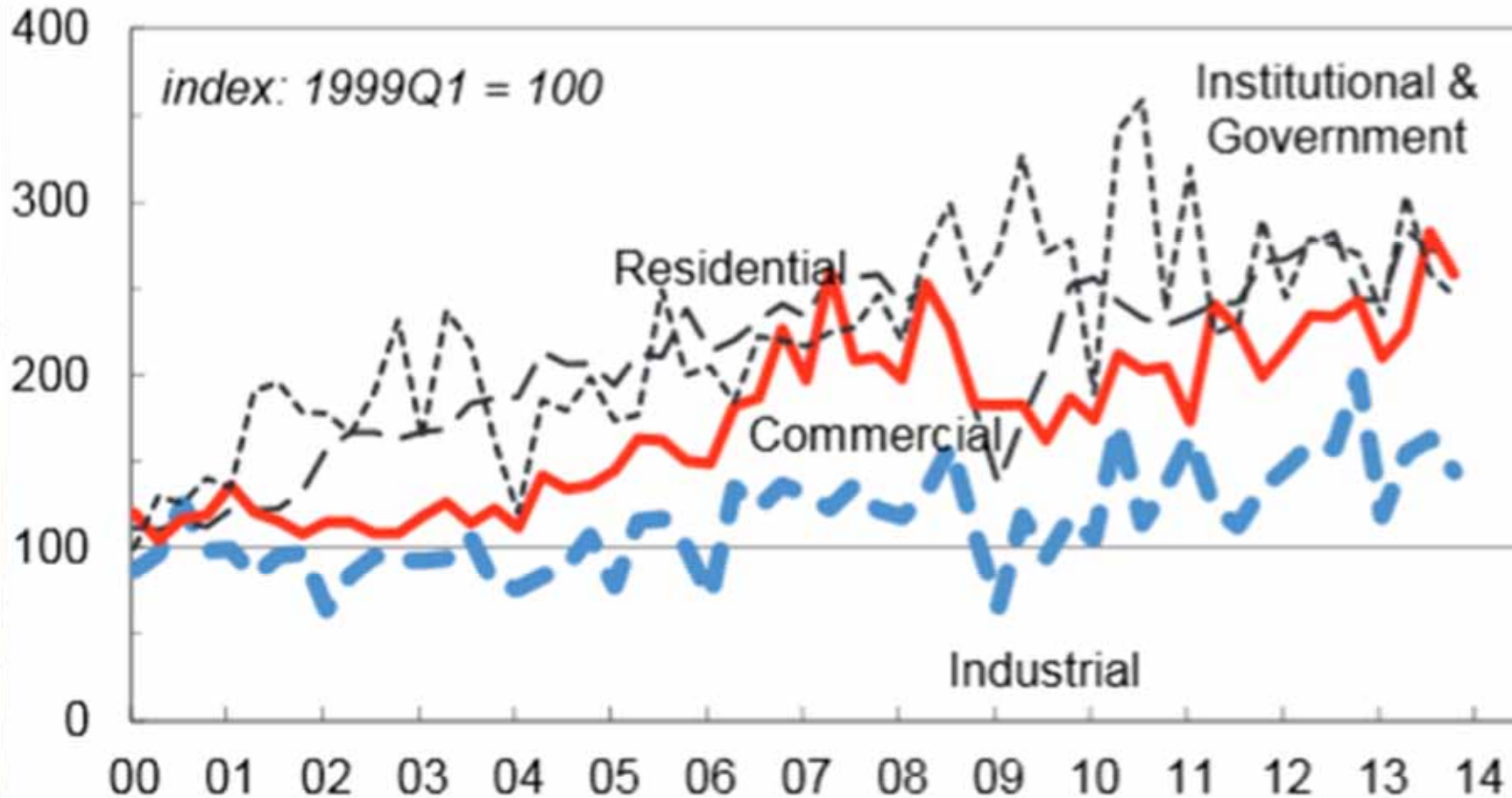


An apartment can be a dwelling unit in a high-rise apartment building that has five or more storeys or a dwelling unit in a building that has fewer than five storeys. The category "other dwellings" comprises row houses, semi-detached or double houses, units in a detached duplex, other single-attached houses, mobile homes and other movable dwellings.

Medium household growth scenario: rising, constant, and declining home ownership rates scenarios

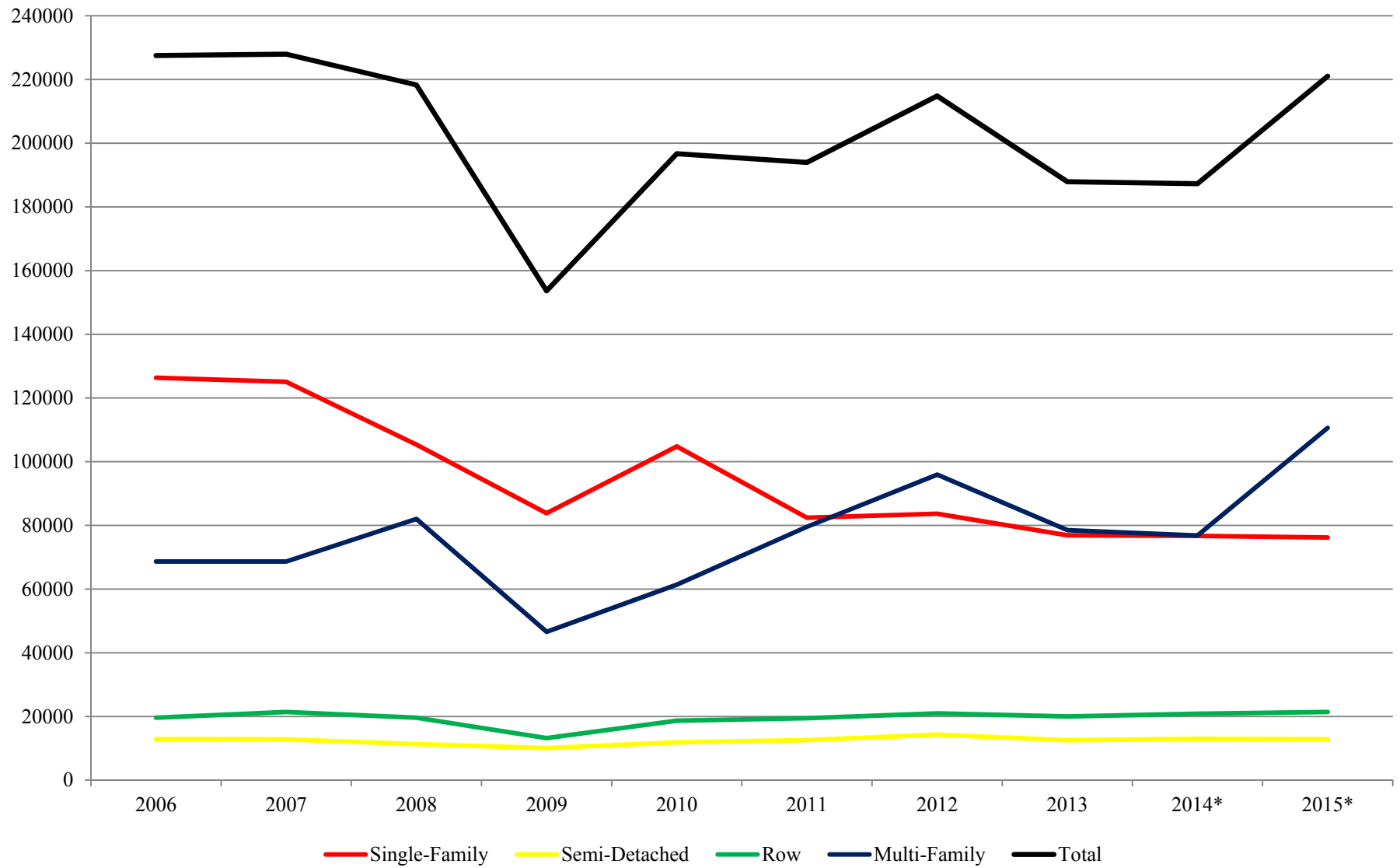
# Canada: Housing Starts

## Building Permits



Source: Statistics Canada, Scotiabank Economics.

# Canada: Housing Starts



Source: Canada Mortgage and Housing Corporation



# **North American Housing**

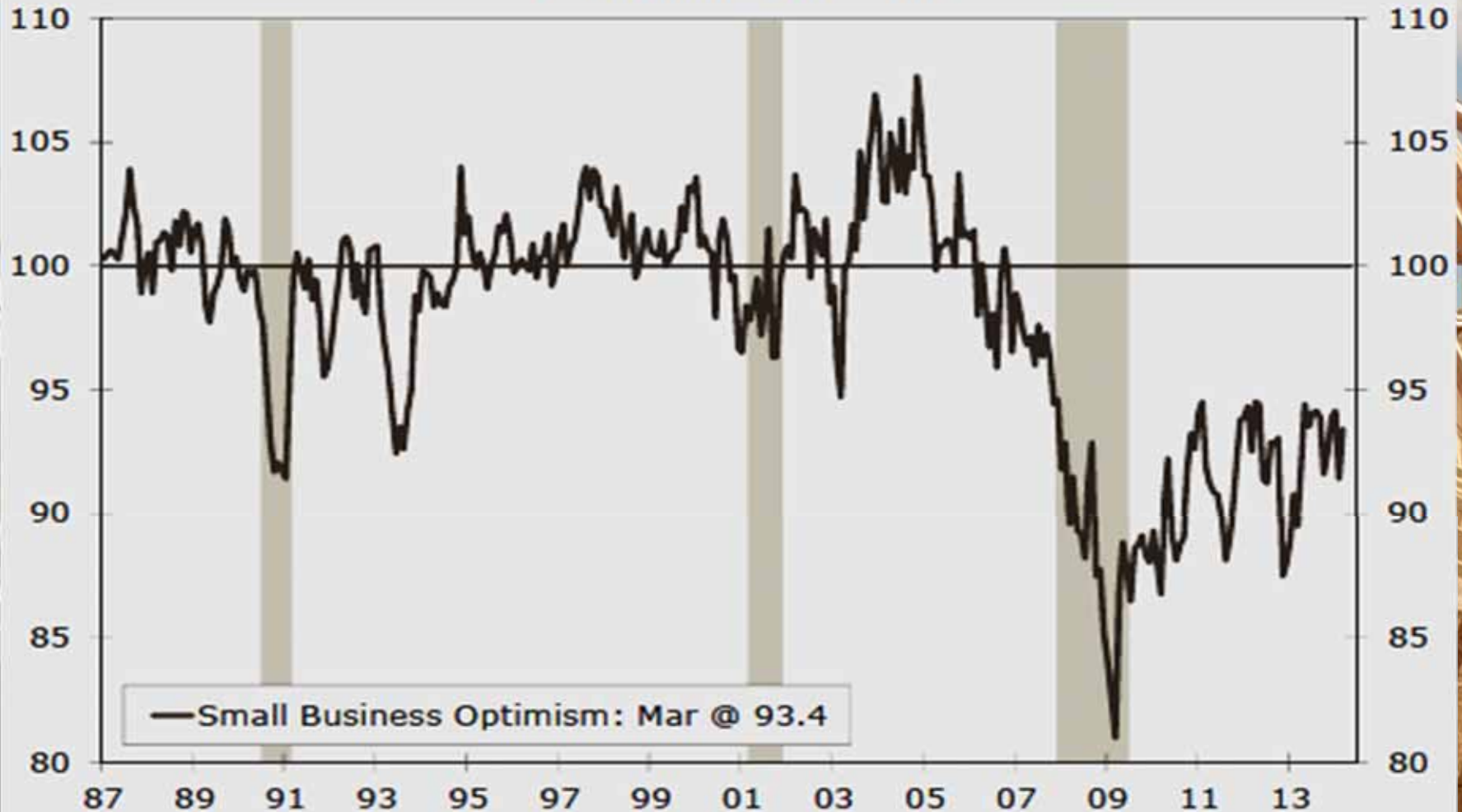
**United States**

# United States Housing Forecasts: 2014

<b>(000s)</b>	<b>New House Sales</b>	<b>Single-Family Starts</b>	<b>Multi-Family Starts</b>	<b>Total Starts</b>
<b>APA - The Engineered Wood Association</b>		730	365	1,095
<b>NAHB</b>	607	820	326	1,146
<b>Barclays</b>				1,200
<b>BMO (Montreal)</b>				1,240
<b>Fannie Mae</b>	518	768	338	1,106
<b>Forest Economic Advisors</b>		753	365	1,095
<b>Ivy Zelman &amp; Associates</b>		735	325	1,060
<b>JP Morgan</b>				1,080
<b>MBA</b>	497	750	335	1,085
<b>Merrill Lynch</b>	517			1,100
<b>RBC</b>				1,329
<b>TD Economics</b>				1,200
<b>UBS</b>				1,150
<b>Wells Fargo</b>	535	800		1,140

# United States Housing

NFIB Small Business Optimism  
Overall Index 1986 = 100



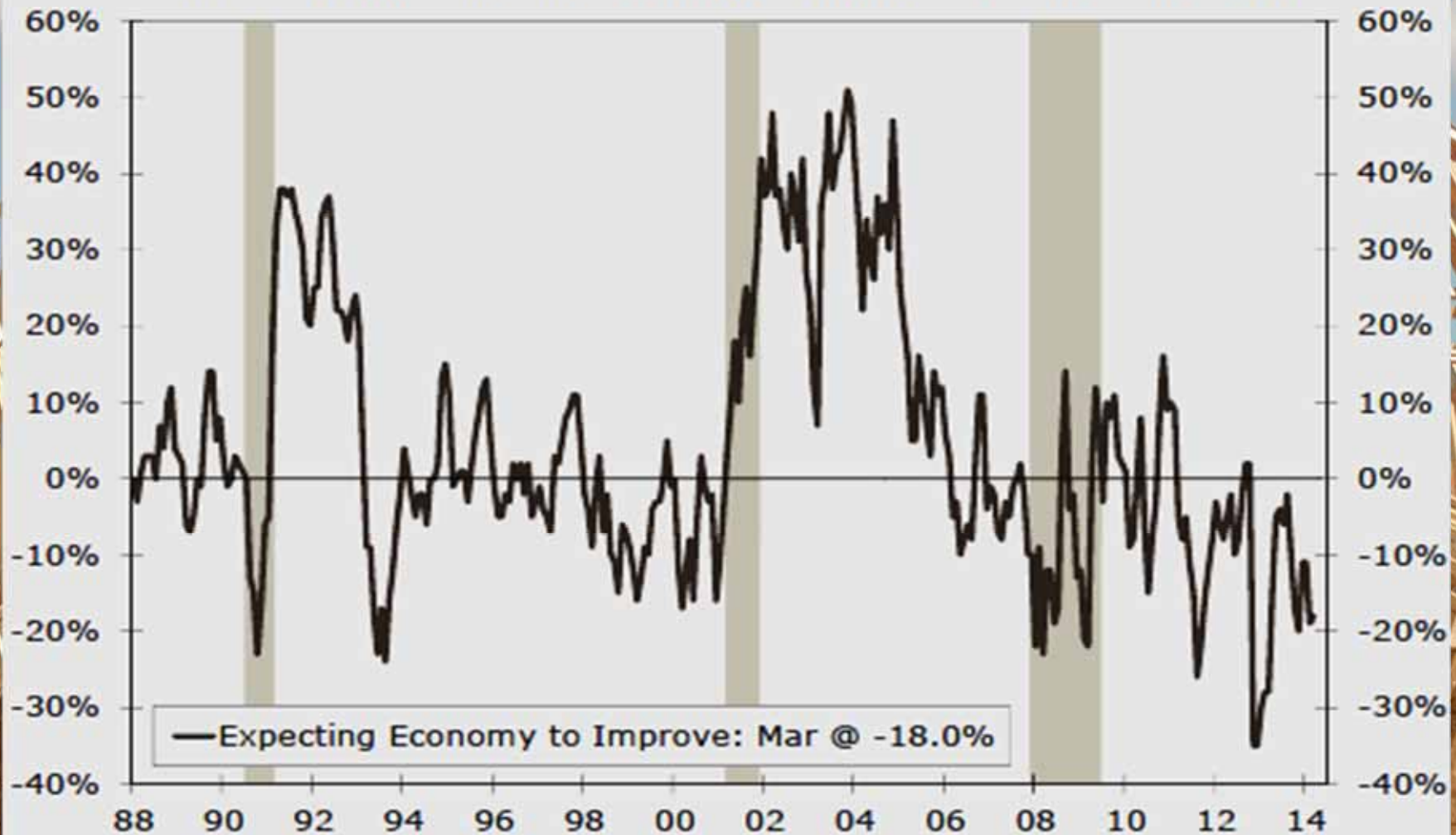
Source: National Federation of Independent Business and Wells Fargo Securities, LLC

Source: <https://wellsfargo.mworld.com/econ/alerts.asp>; 4/8/14



# United States Housing

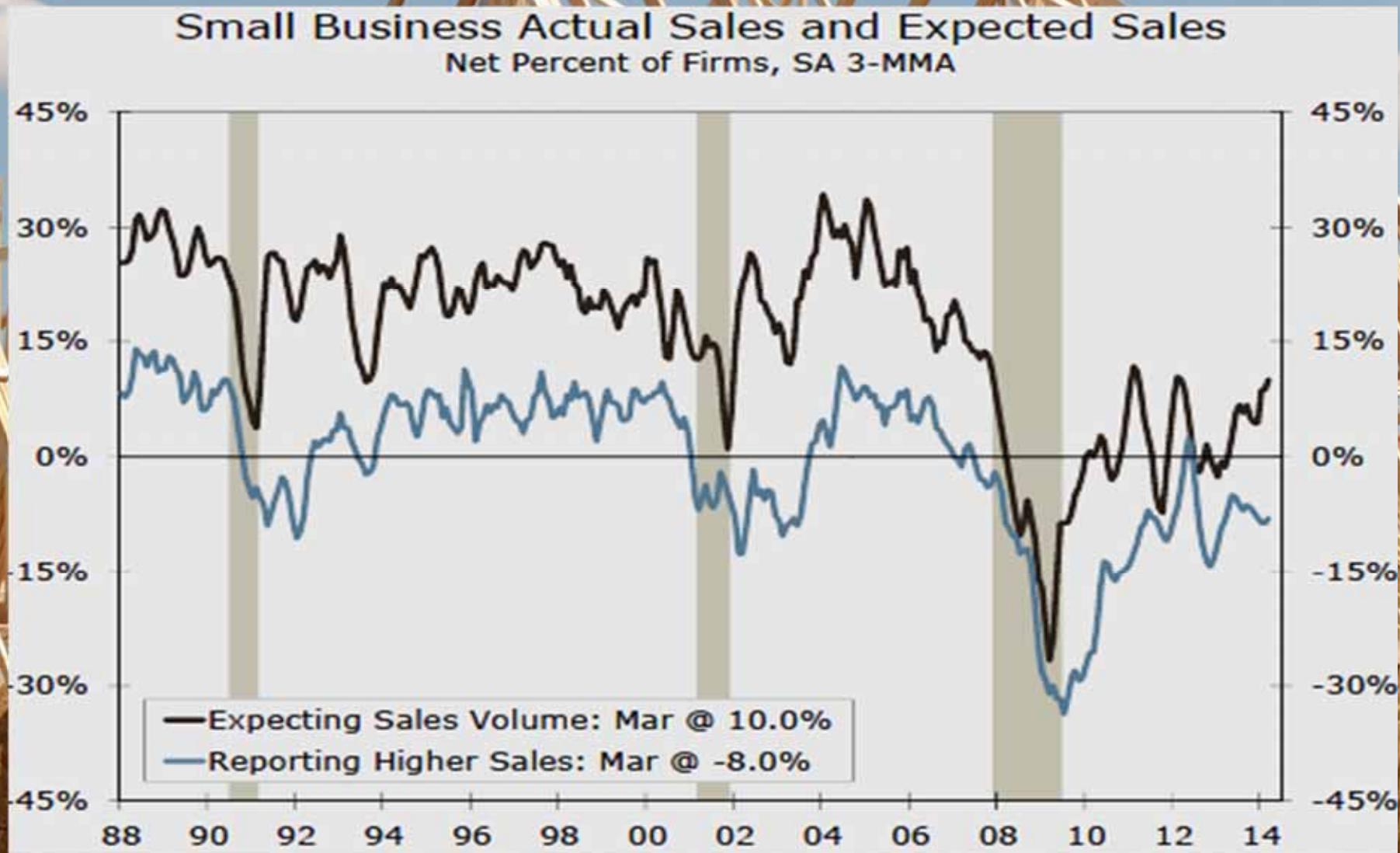
Firms Expecting Economy to Improve  
Net % of Firms Expecting Economy to Improve Over the Next 6 Mo.



Source: National Federation of Independent Business and Wells Fargo Securities, LLC

Source: <https://wellsfargo.mworld.com/econ/alerts.asp>; 4/8/14

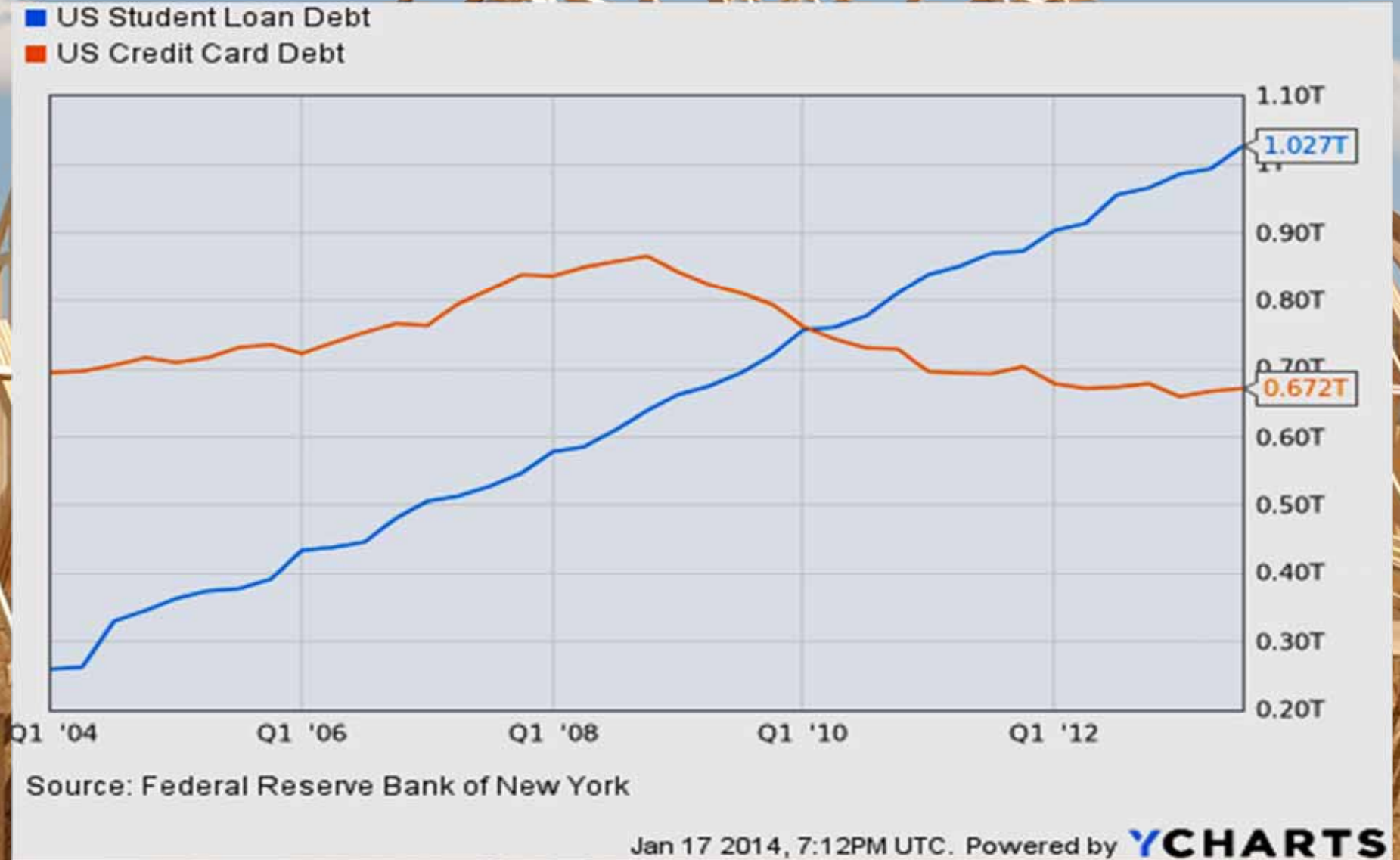
# United States Housing



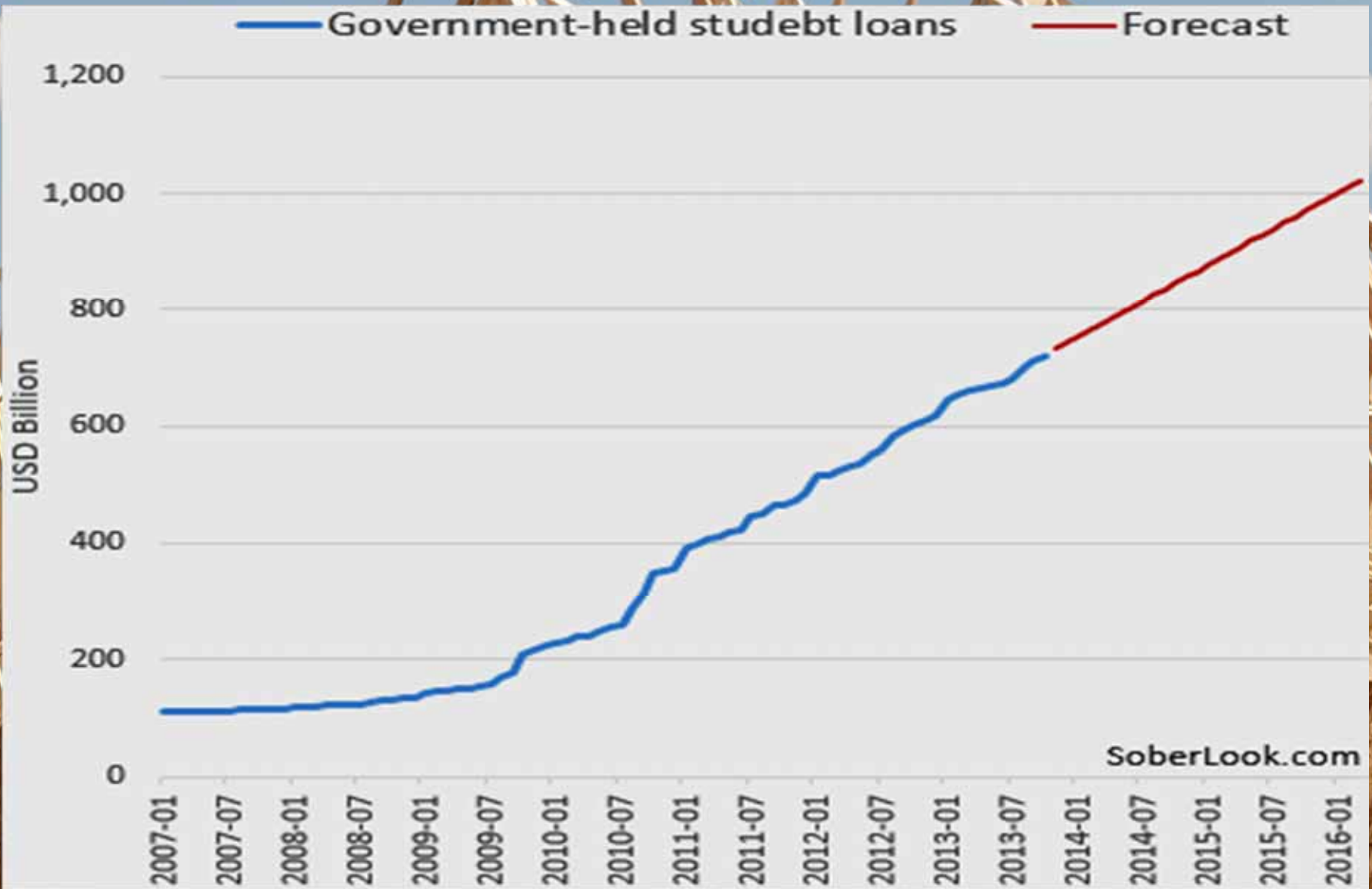
Source: National Federation of Independent Business and Wells Fargo Securities, LLC

Source: <https://wellsfargo.mworld.com/econ/alerts.asp>; 4/8/14

# United States Housing



# United States Housing



Source: <http://soberlook.com/2013/12/one-of-these-things-is-not-like-other.html?safe=on>; 12/31/13

# United States Housing

FRED 

— M1 Money Stock



Source: Board of Governors of the Federal Reserve System  
2014 research.stlouisfed.org

Source: <http://research.stlouisfed.org/fred2/series/M1>

# United States Housing

FRED 

— Velocity of M2 Money Stock



Source: Federal Reserve Bank of St. Louis

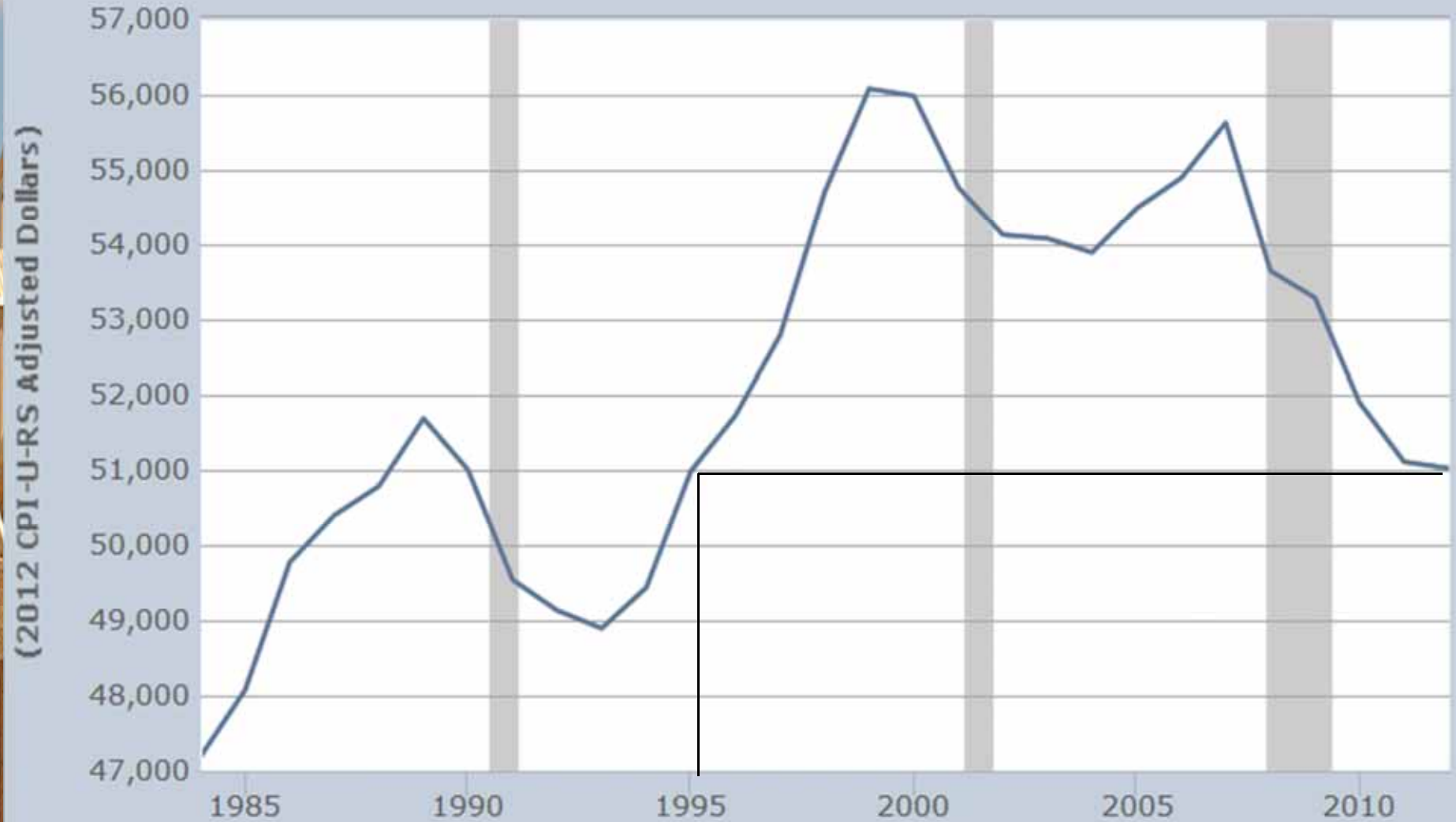
2014 research.stlouisfed.org

Source: <http://research.stlouisfed.org/fred2/series/M2V>

# United States Housing

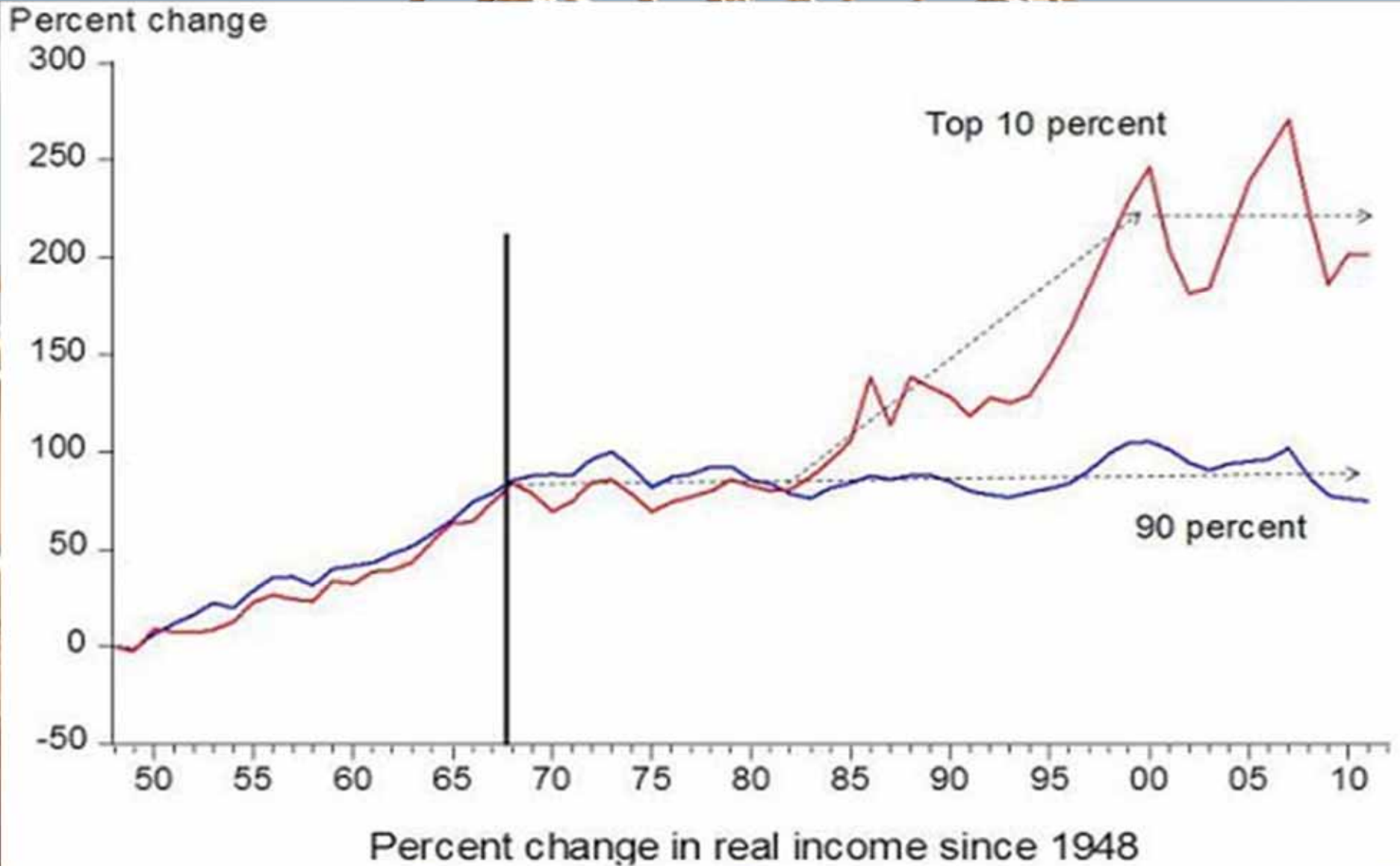
**FRED** 

— Real Median Household Income in the United States



Source: <http://research.stlouisfed.org/fred2/series/M2V>

# United States Housing





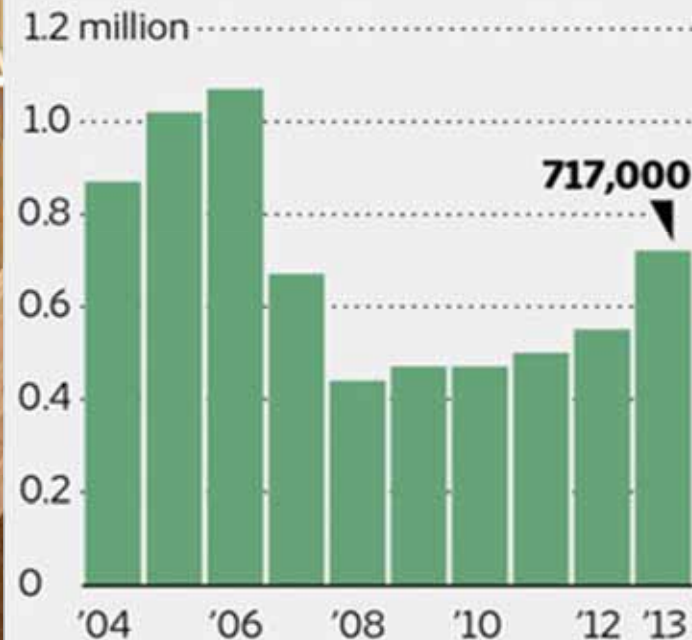
# United States Housing

## 'Wealth Effect' Drives Vacation-Home Sales

### For Recreational Use Only

Sales of U.S. vacation homes rebounded strongly in 2013 amid the stock-market boom, shaking off several years of sluggishness.

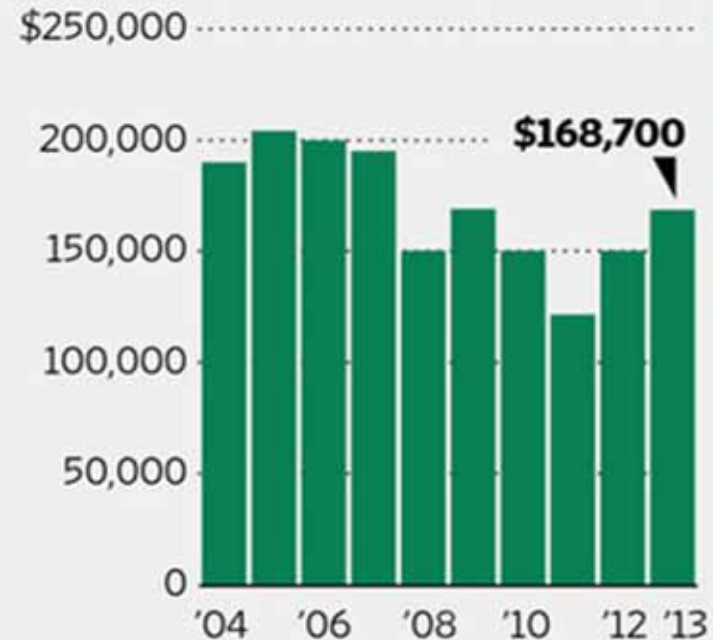
Vacation property sales\*



\*New and existing homes

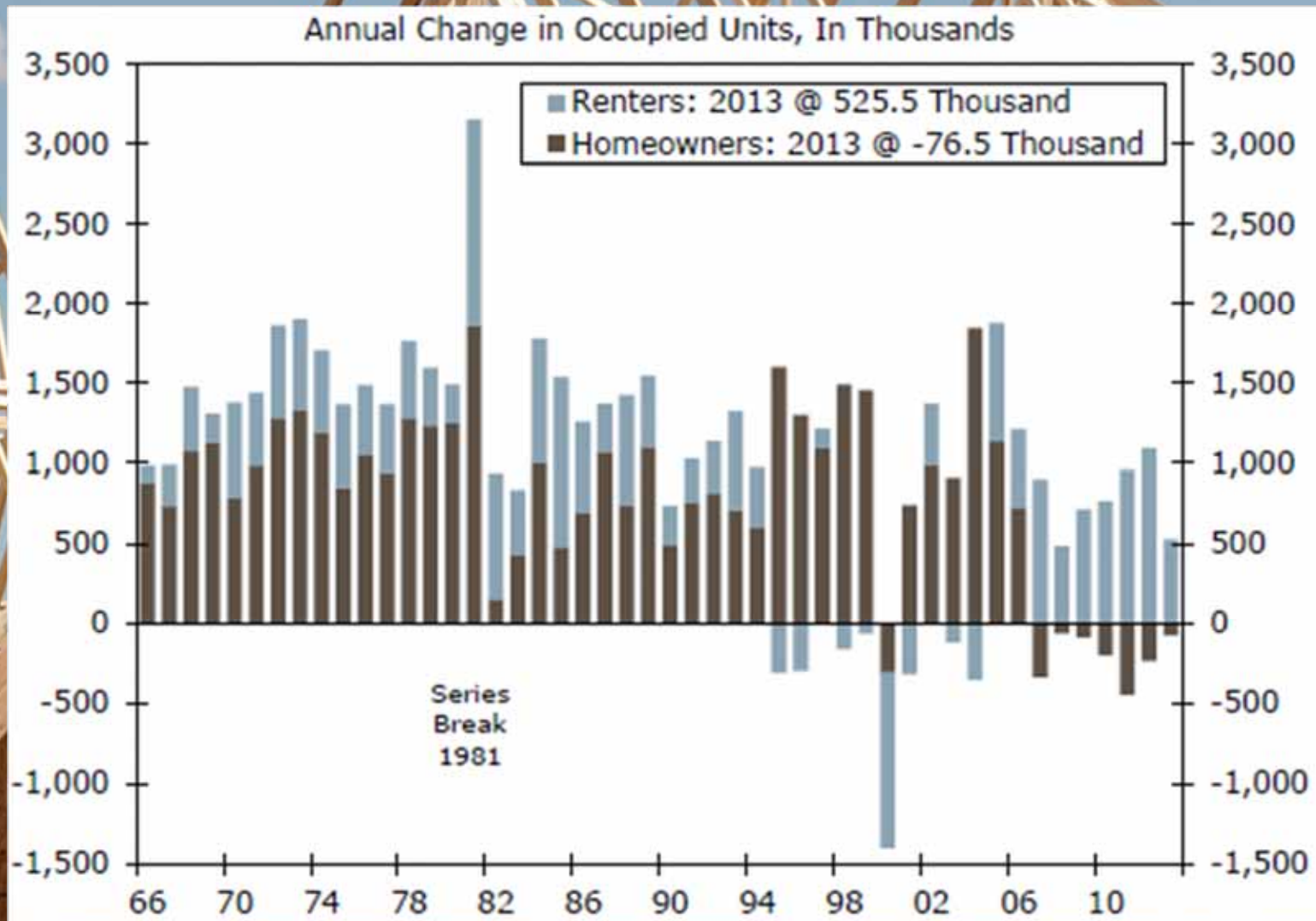
Source: National Association of Realtors

Median sale price



The Wall Street Journal

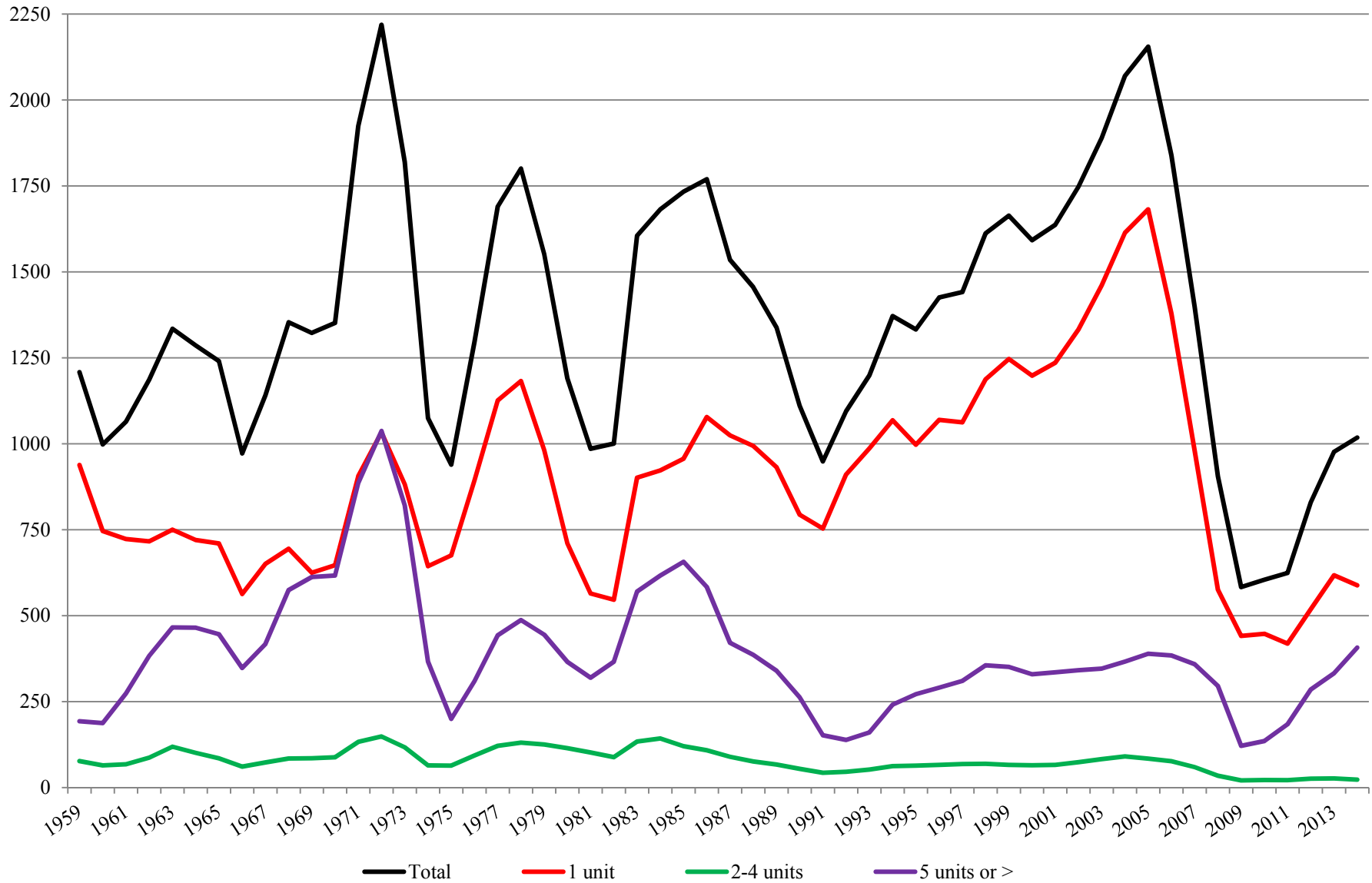
# United States Home Owners vs. Renters



Source: U.S. DOC and Wells Fargo Securities, LLC

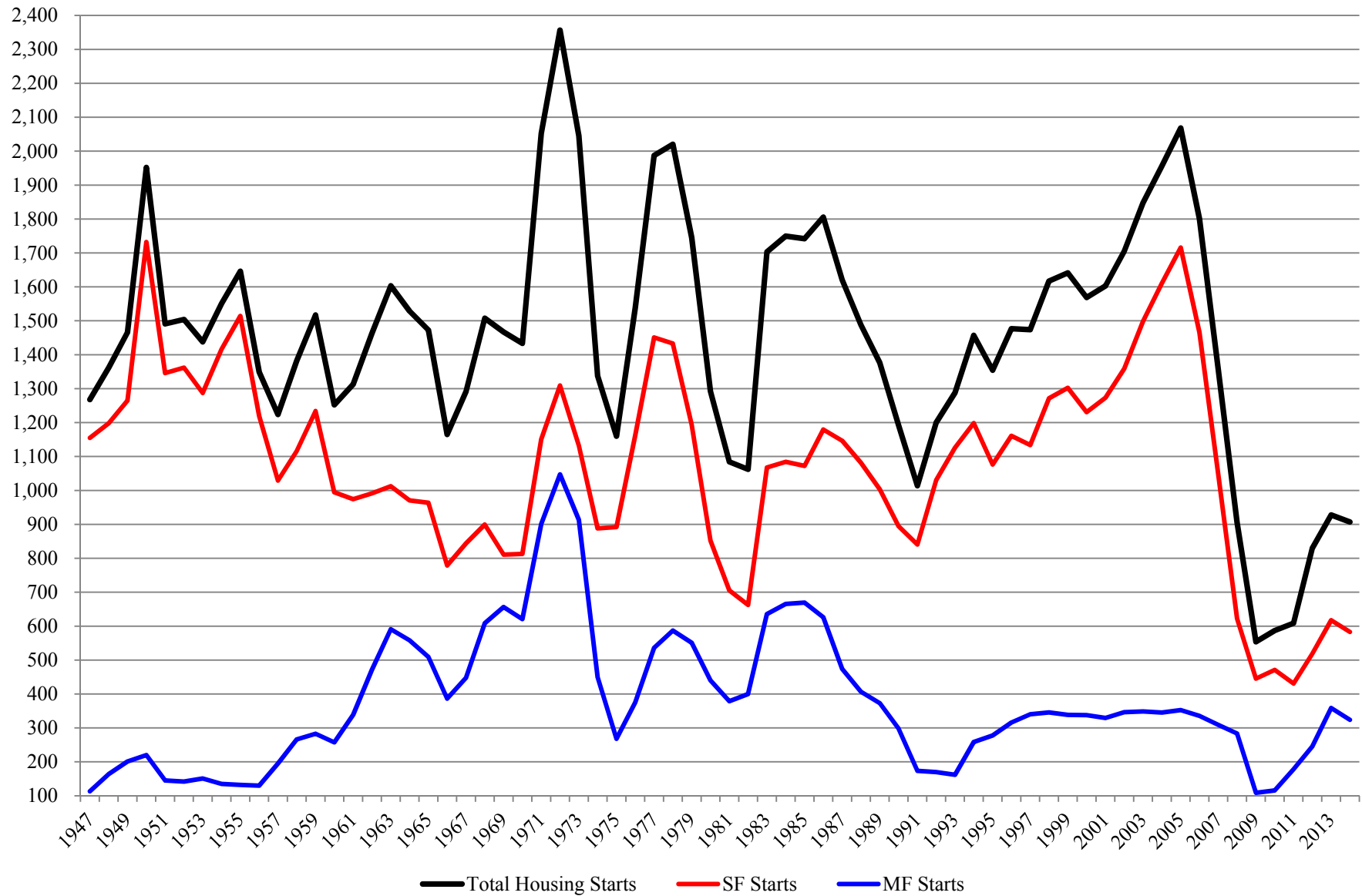
Source: <https://wellsfargo.mworld.com/econ/alerts.asp; 4/8/14>

# United States Housing Permits



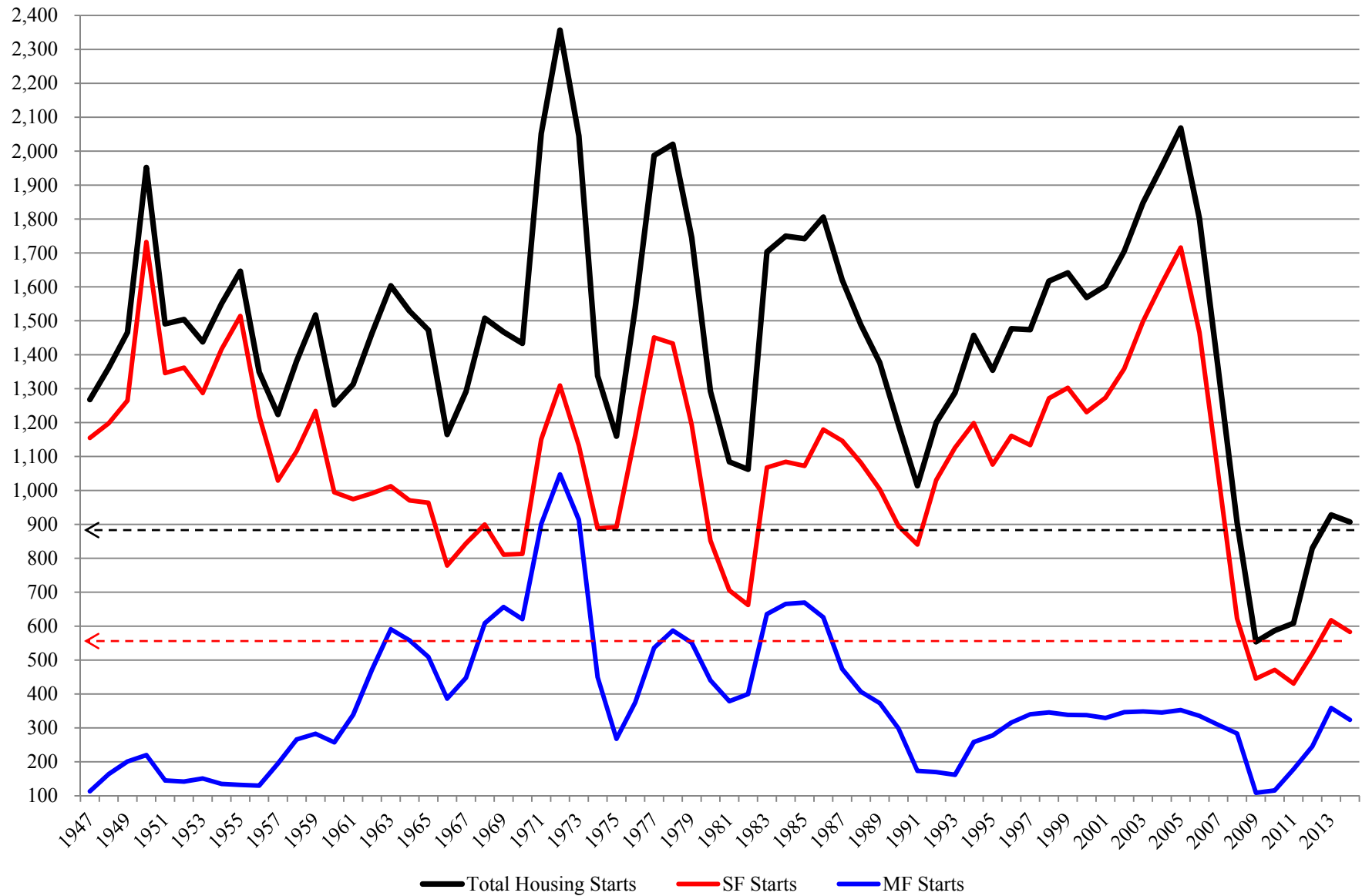
Source: US DOC

# United States Housing Starts



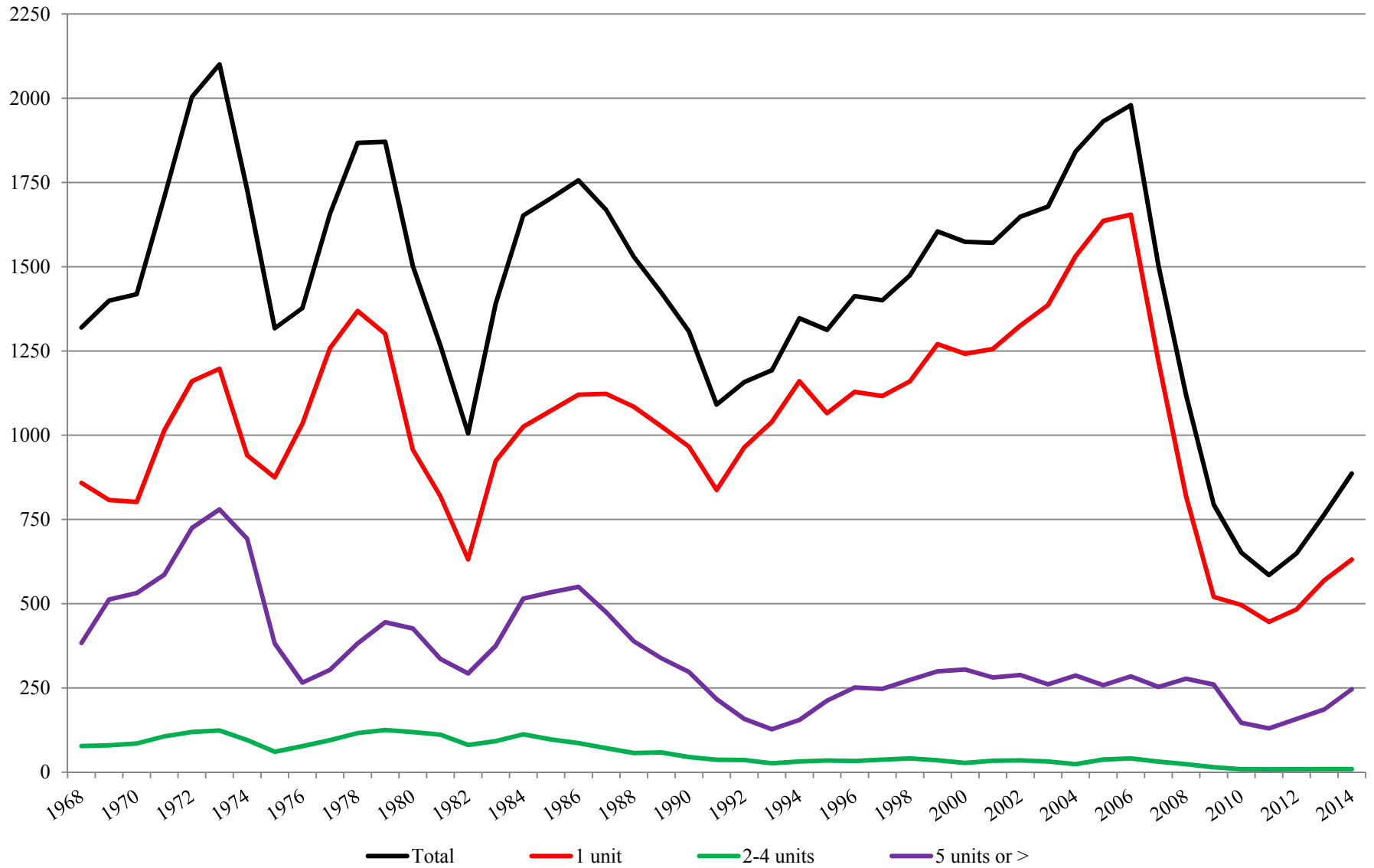
Source: US DOC

# United States Housing Starts



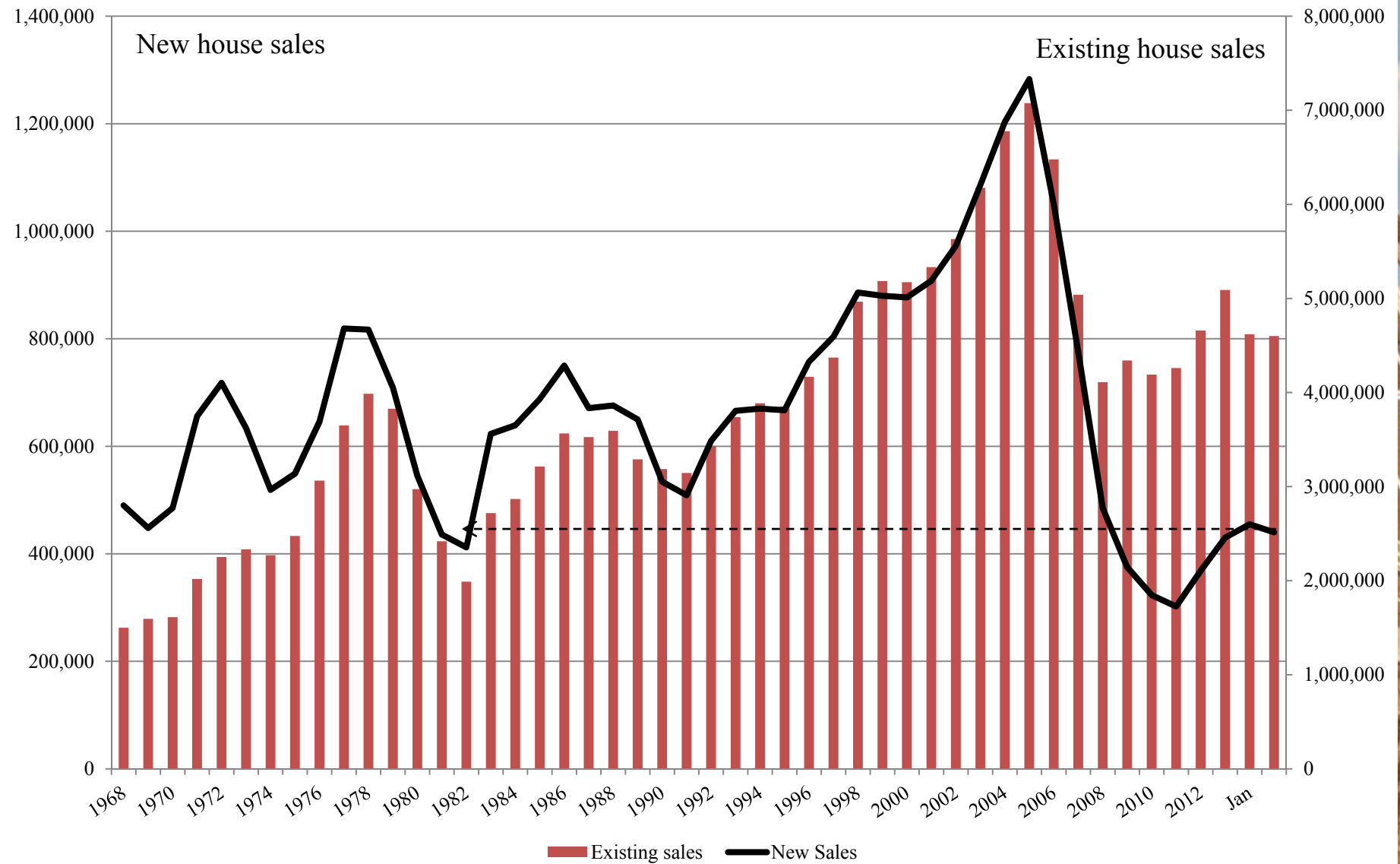
Source: US DOC

# United States Housing Completions



Source: US DOC

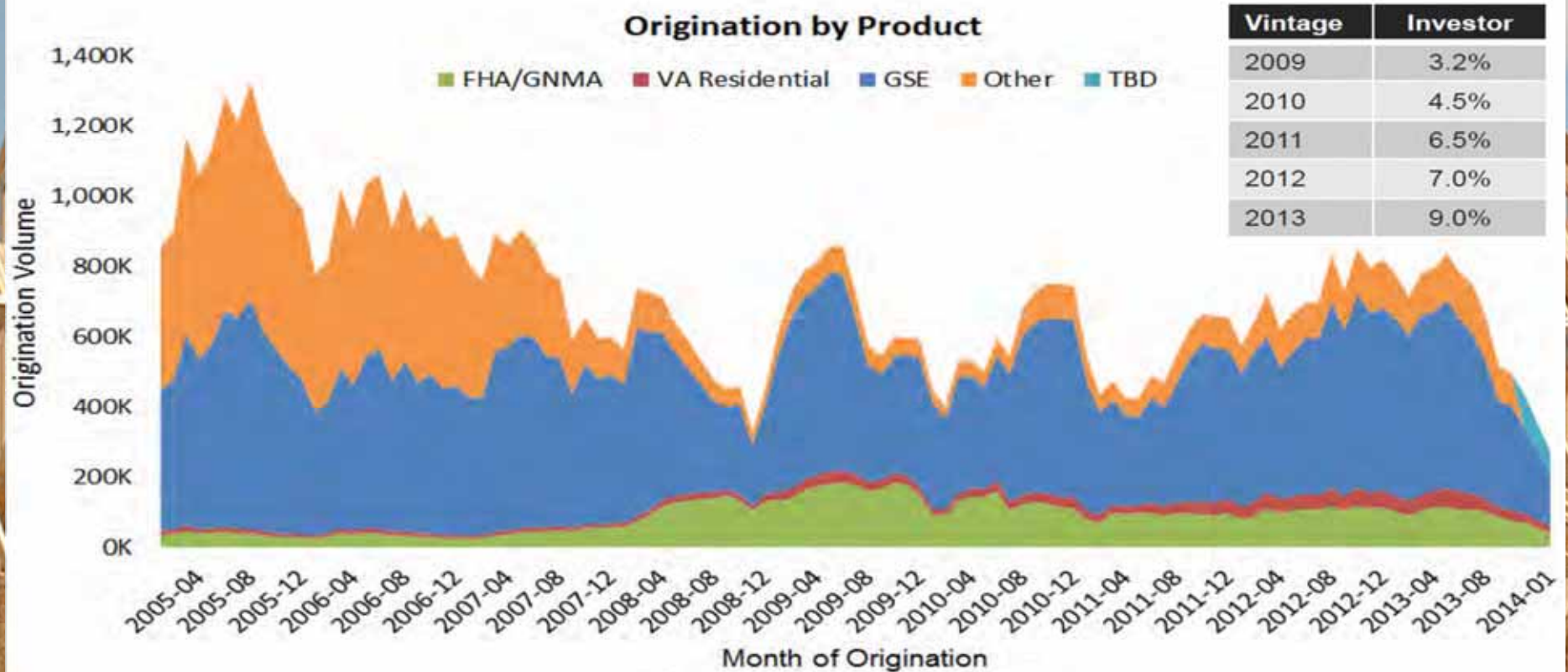
# United States Housing Sales



Source: US DOC and NAR

# United States Housing

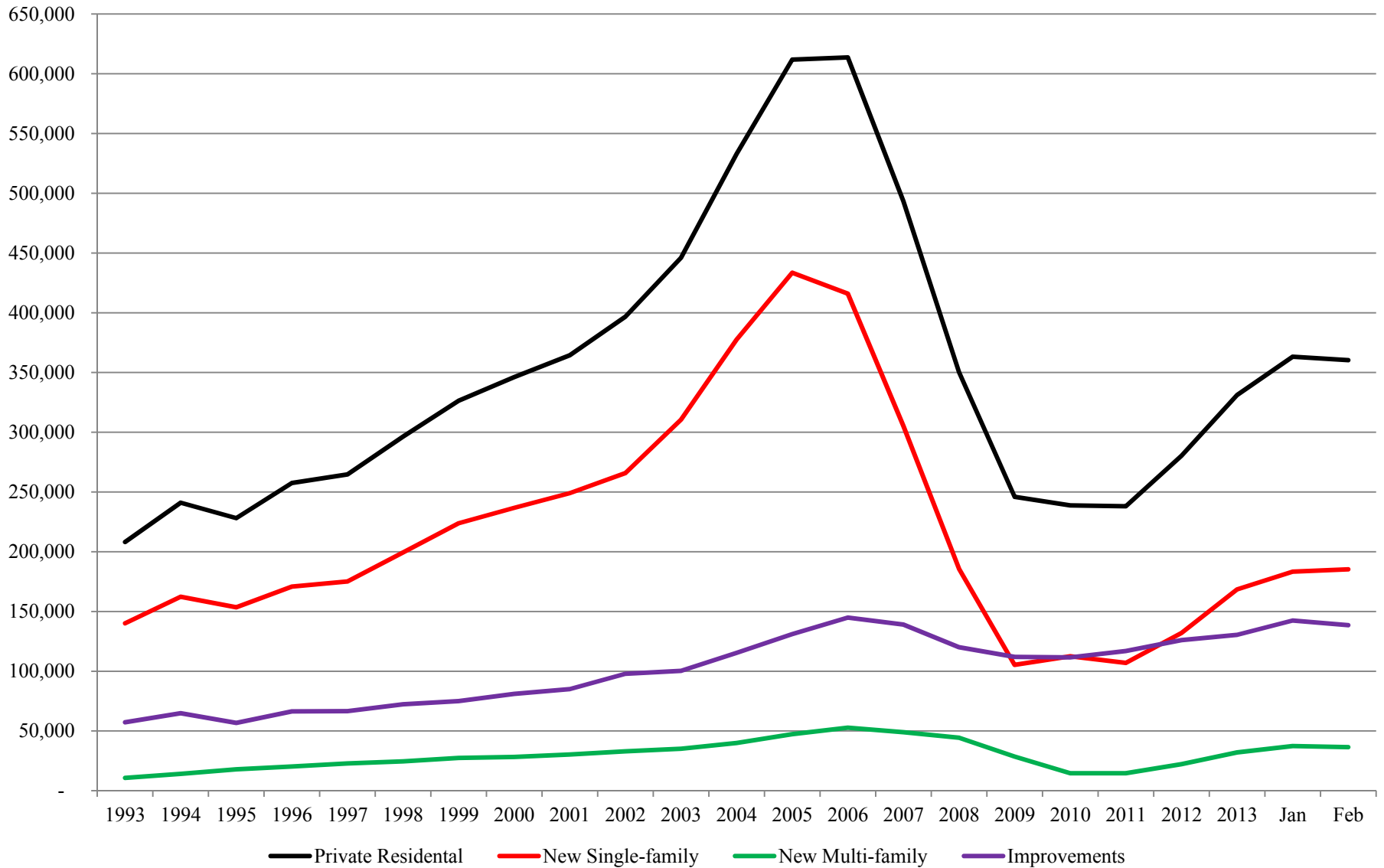
**Monthly origination volume is the lowest on record**



“February's data showed the continued trend of declining origination activity we've been observing since mid-2013, with monthly **originations falling to their lowest recorded point since at least 2000**. In spite of this decline, residential real estate sales have remained strong due at least in part to investor activity and the fact that cash sales account for almost half of all transactions. In addition, while total transaction levels were flat on a YoY basis, traditional sales were up almost 15% from last year as the share of distressed transactions continues to decrease.” -- Herb Blecher, Black Knight Financial Services

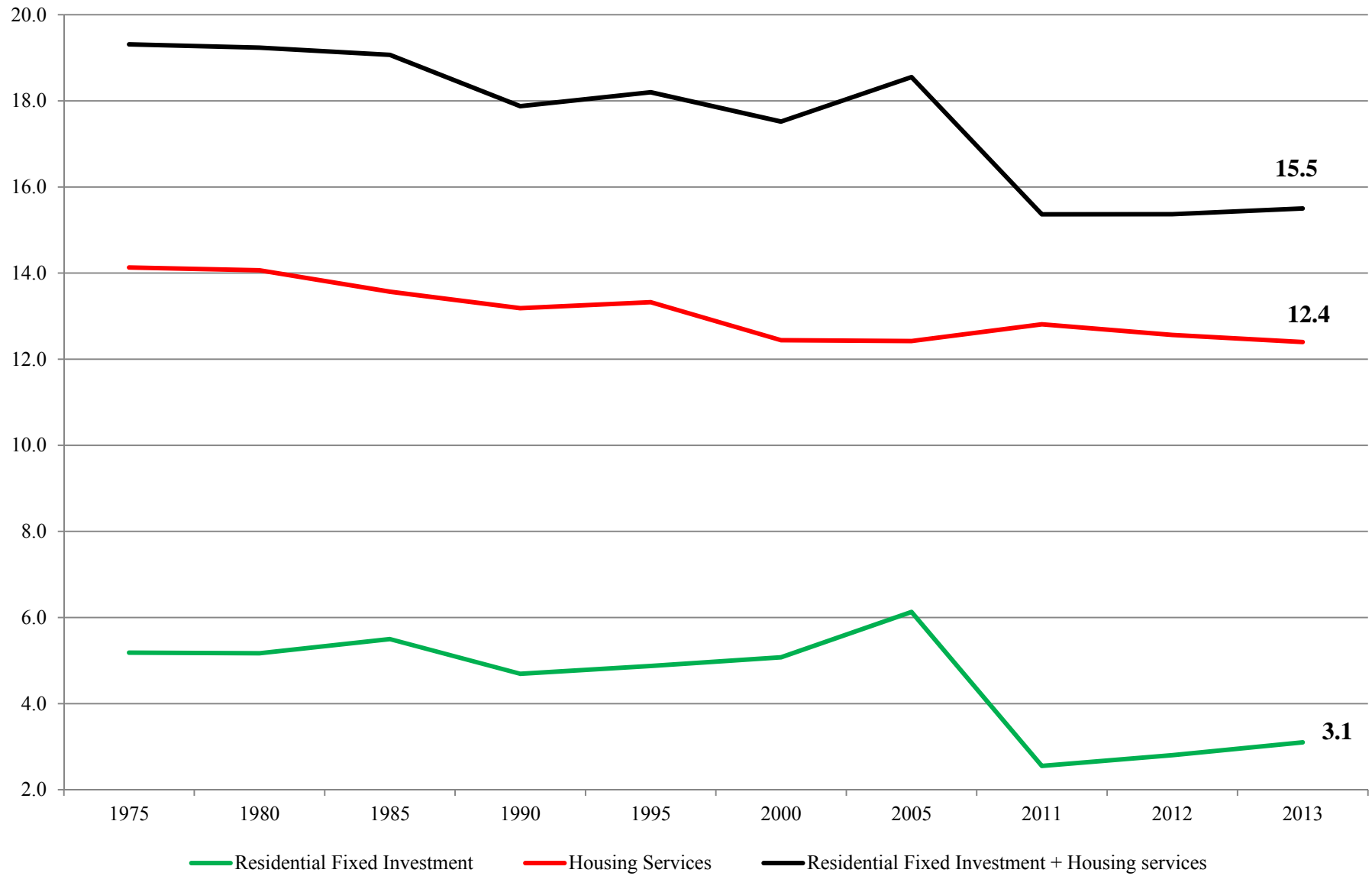


# United States Construction Spending



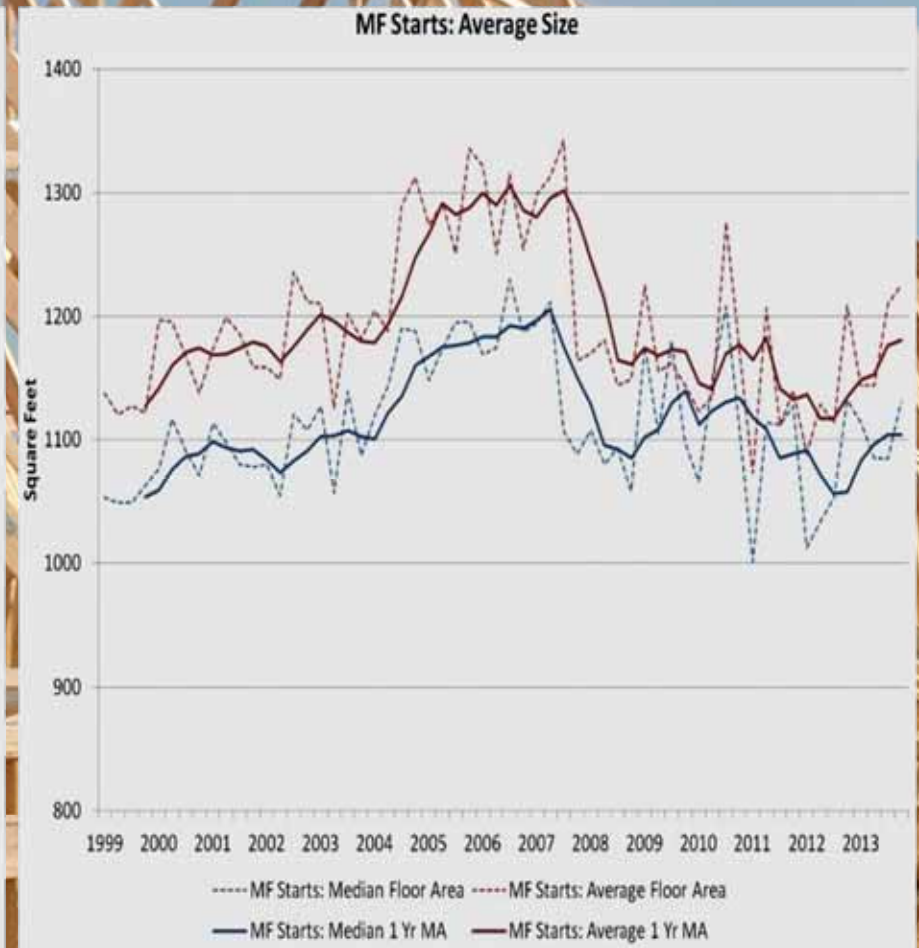
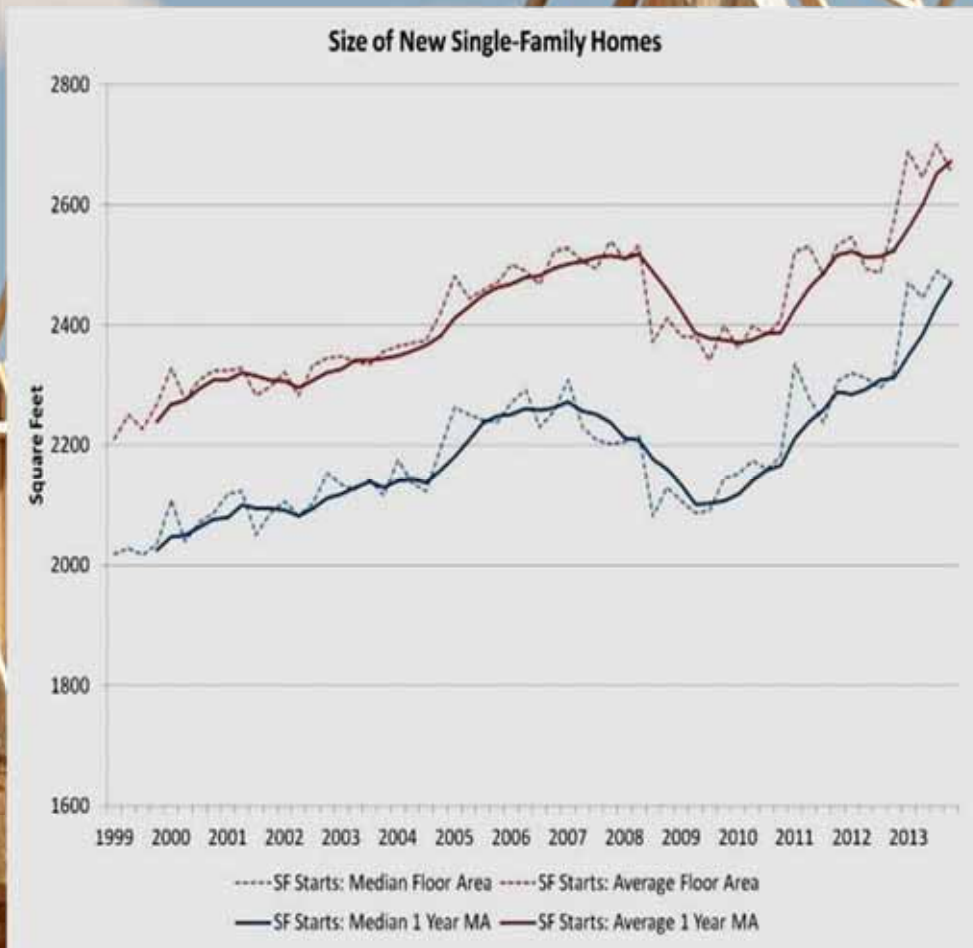
Source: US DOC

# United States: Housing and GDP



Source: US DOC

# United State Housing Size

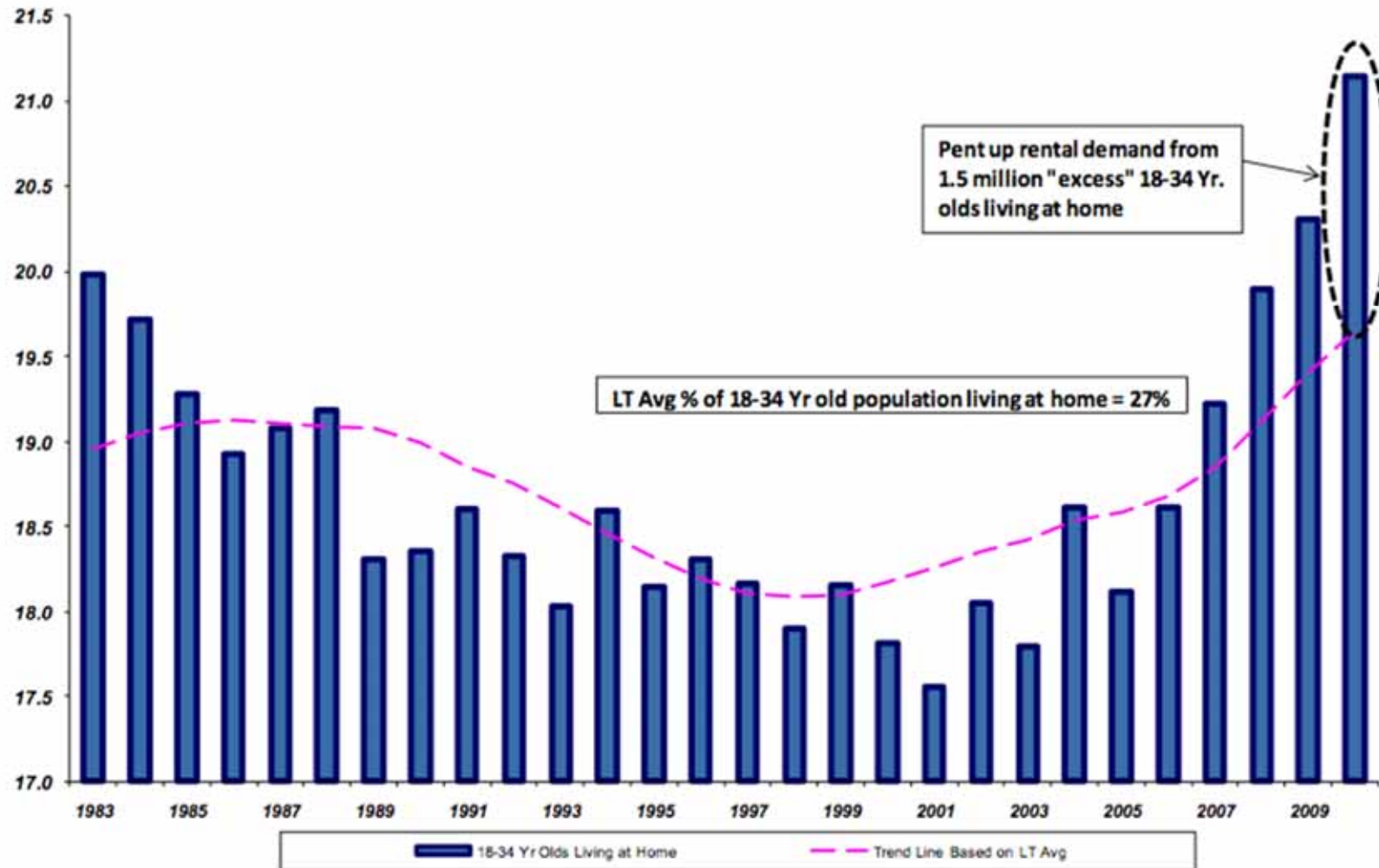


# Future U.S. Housing Demand

## Deferred Renters/Owners Will Drive Demand

HARVEST  
CAPITAL STRATEGIES

### 18-34 Year Olds, in millions

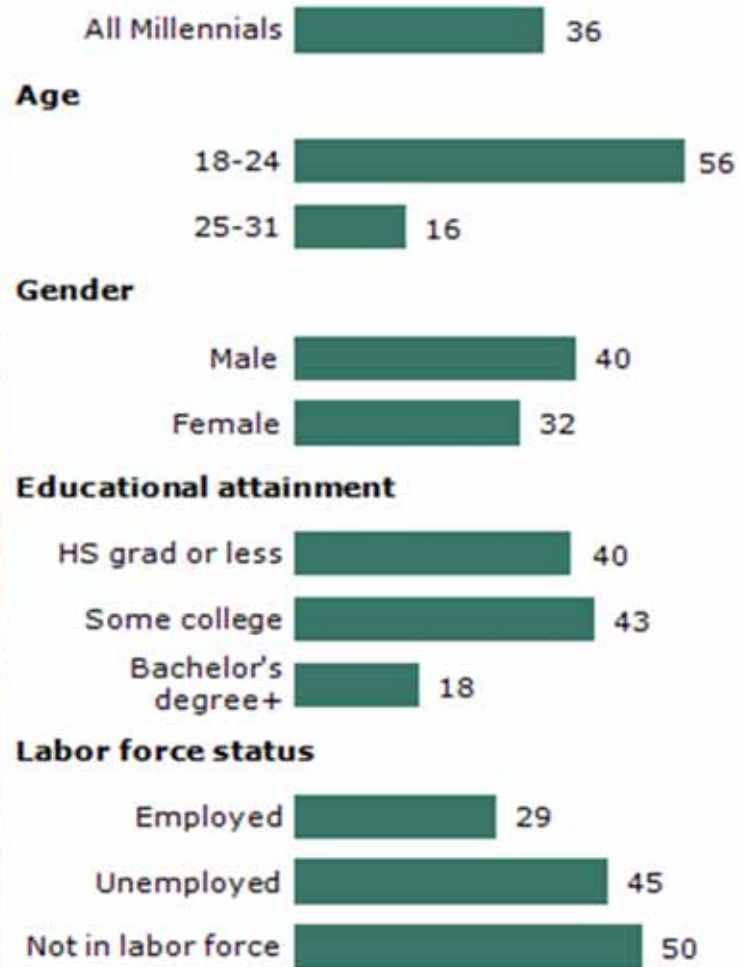


Source: U.S. Census Bureau, Raymond James & Associates, Inc.

# Future U.S. Housing Demand

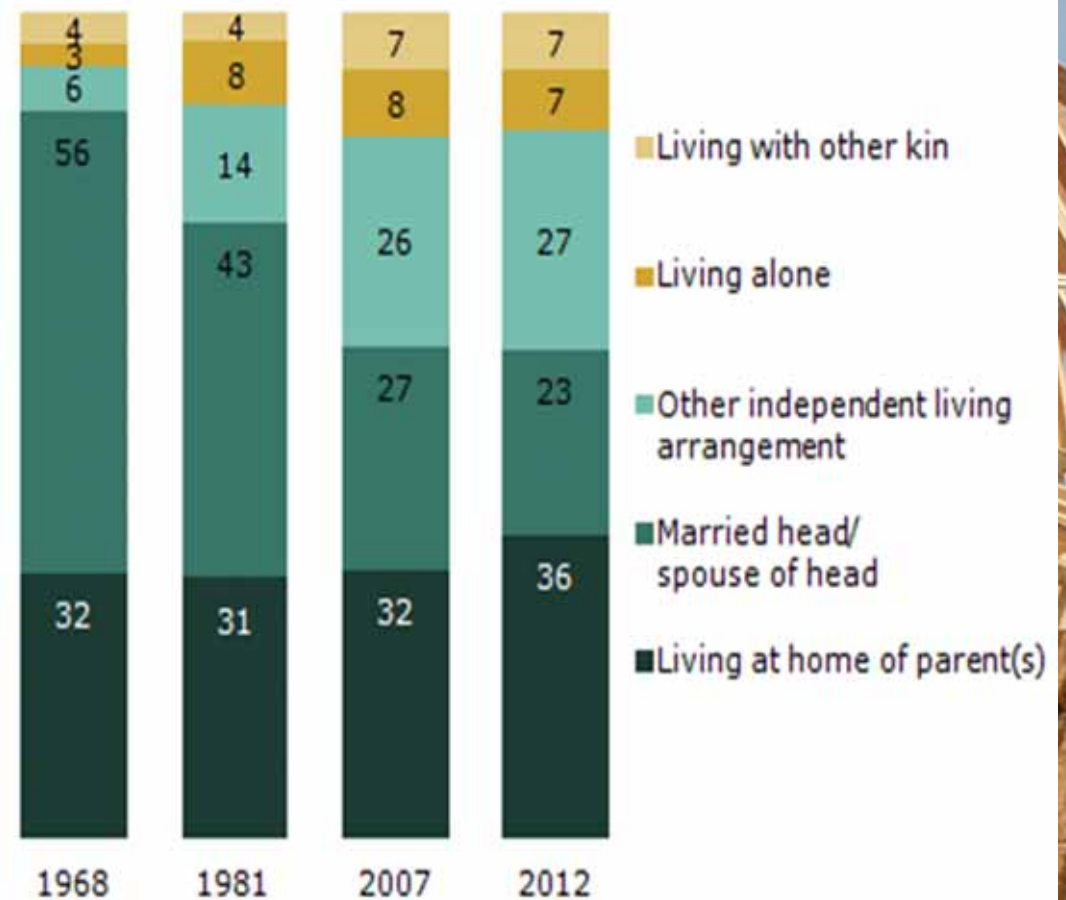
## Millennials Living at Home, 2012

% of adults ages 18 to 31 living at the home of their parent(s)



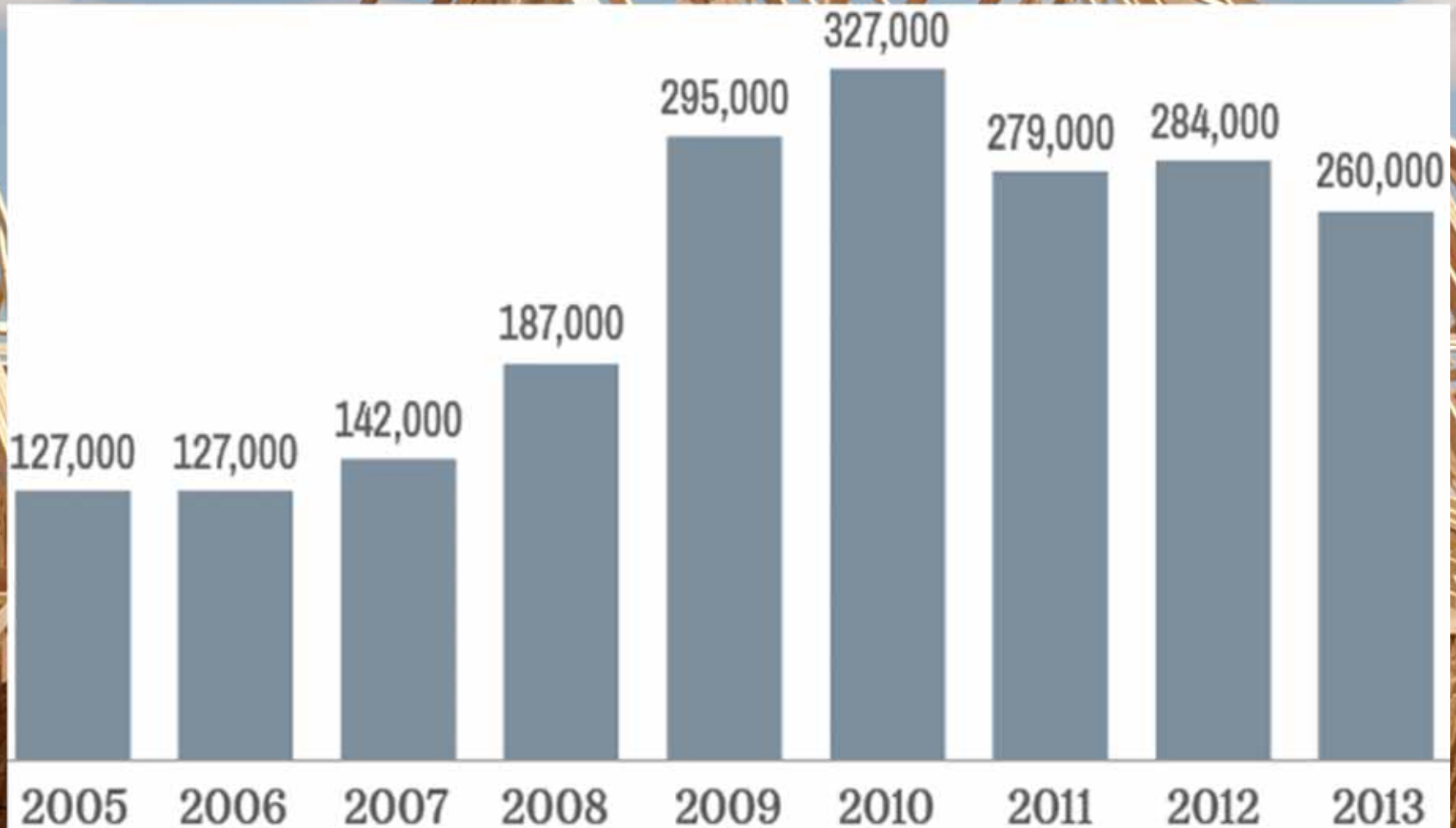
## Living Arrangements of Young Adults, 1968-2012

% of adults ages 18 to 31 in each arrangement



# Future U.S. Housing Demand

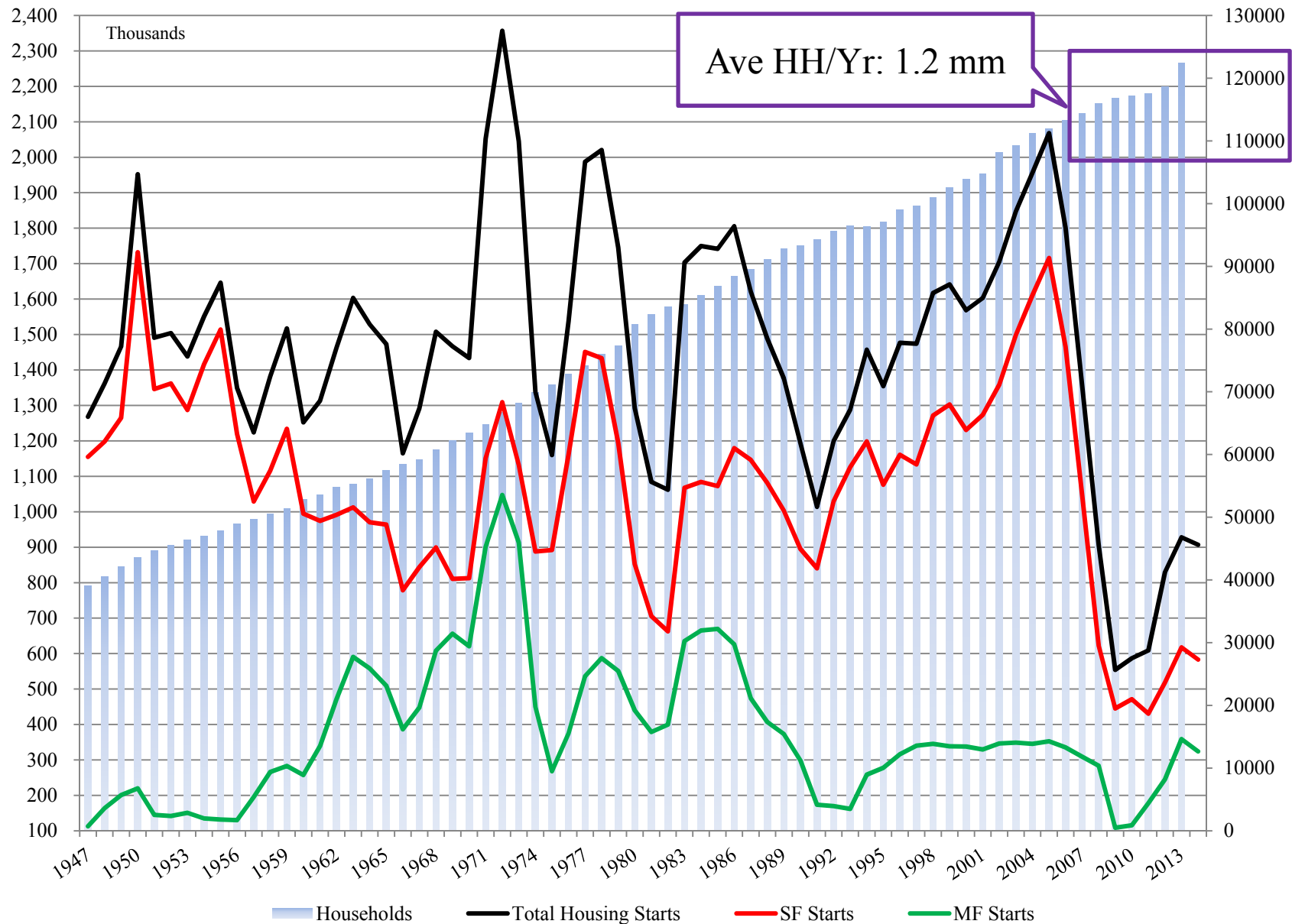
“260,000 Graduates In Minimum Wage Jobs”



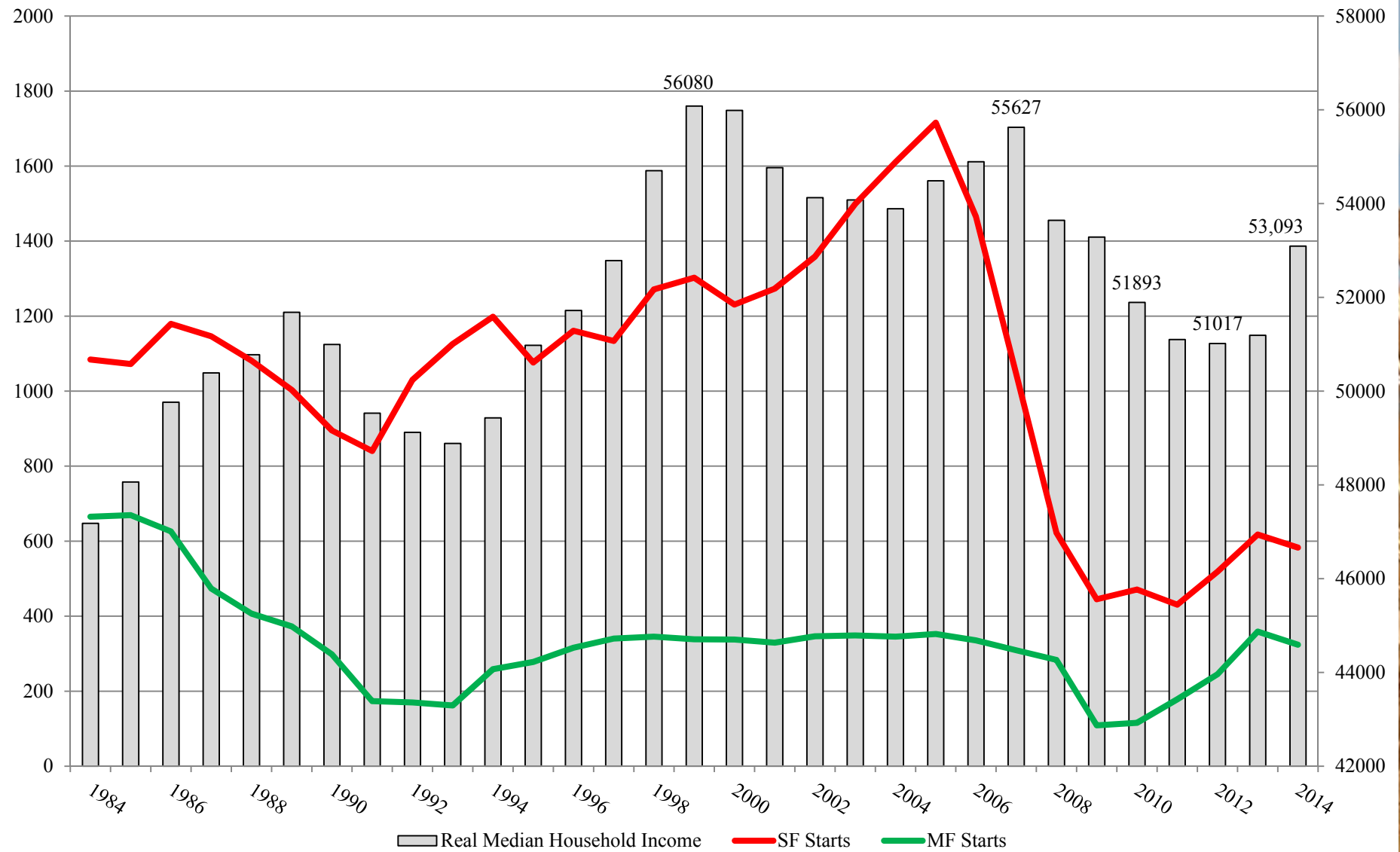
Source: Source: US Bureau of Labor Statistics

Source: [http://money.cnn.com/2014/03/31/news/economy/minimum-wage-college-graduates/index.html?iid=HP\\_River](http://money.cnn.com/2014/03/31/news/economy/minimum-wage-college-graduates/index.html?iid=HP_River); 3/31/14/

# U.S. Households and Housing Starts



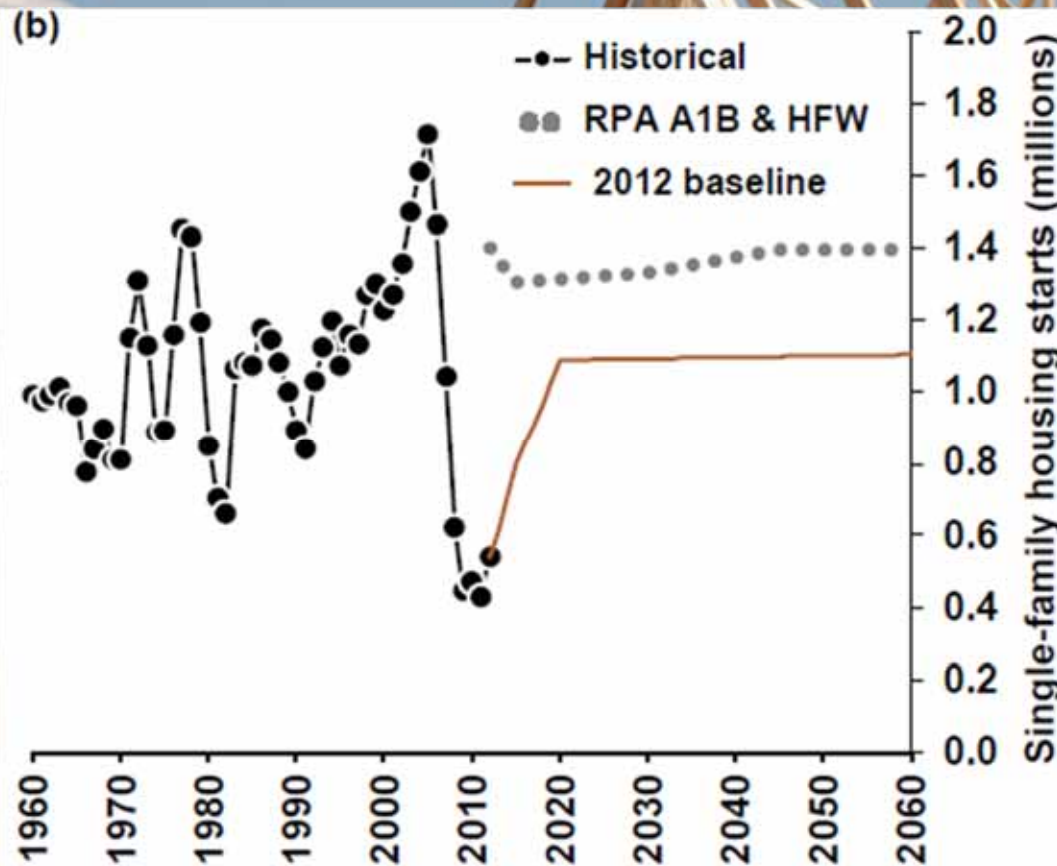
# U.S. Housing: Income and Starts



Source: <http://research.stlouisfed.org/fred2/series/M2V>; Sentier Research



# Projected U.S. Single-Family Starts



“... a gradual rebound in single-family housing starts, reaching the logarithmic trend line by 2020:

**± 1.1 million**

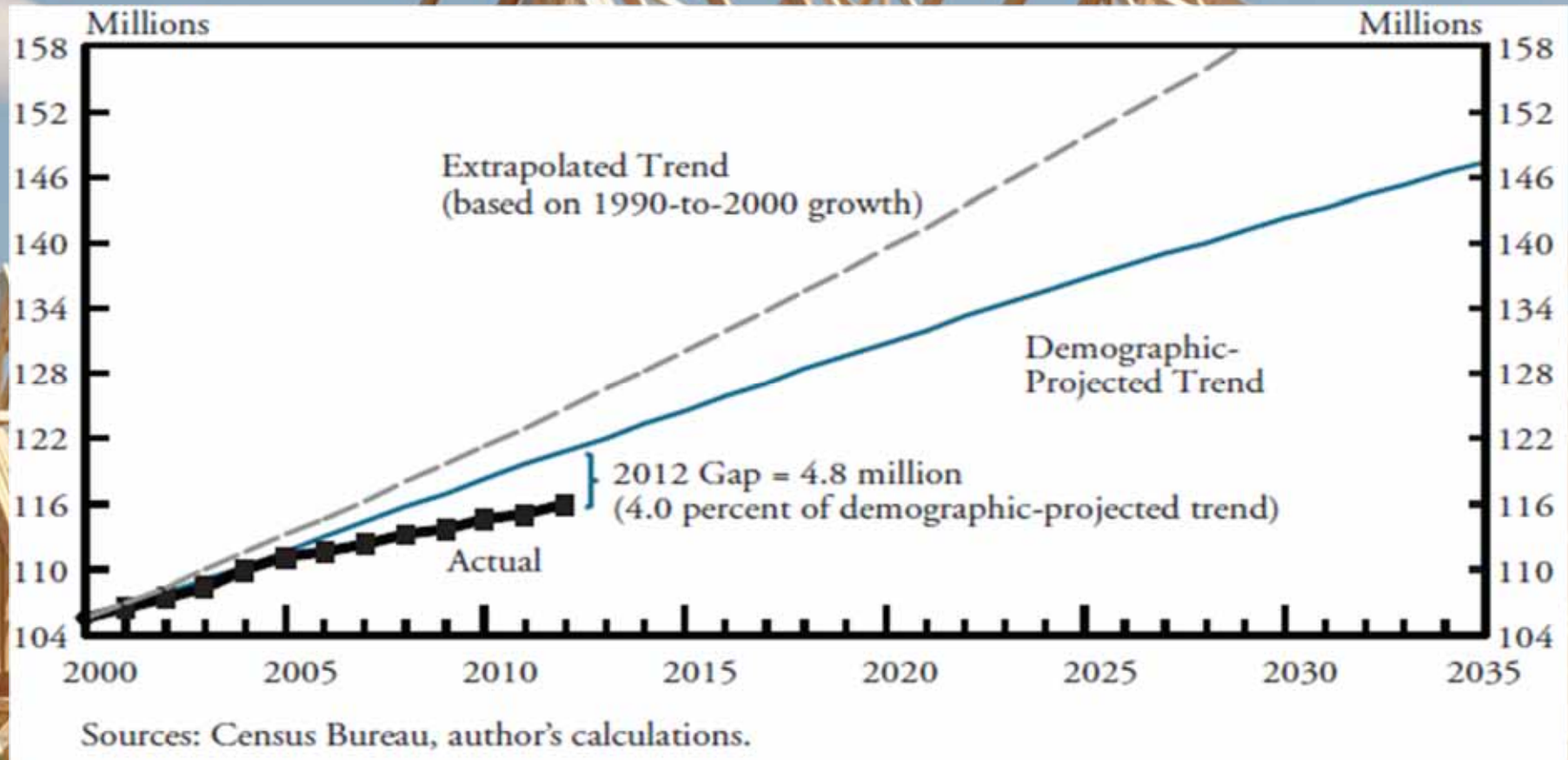
close to the long-run historical norm and within the range of current housing expectations

but much lower than recent RPA scenarios with similar or higher population growth.”

Structural change in the housing market include:

- a dramatic correction in median wealth of U.S. households as home values declined
- declining home ownership rates.

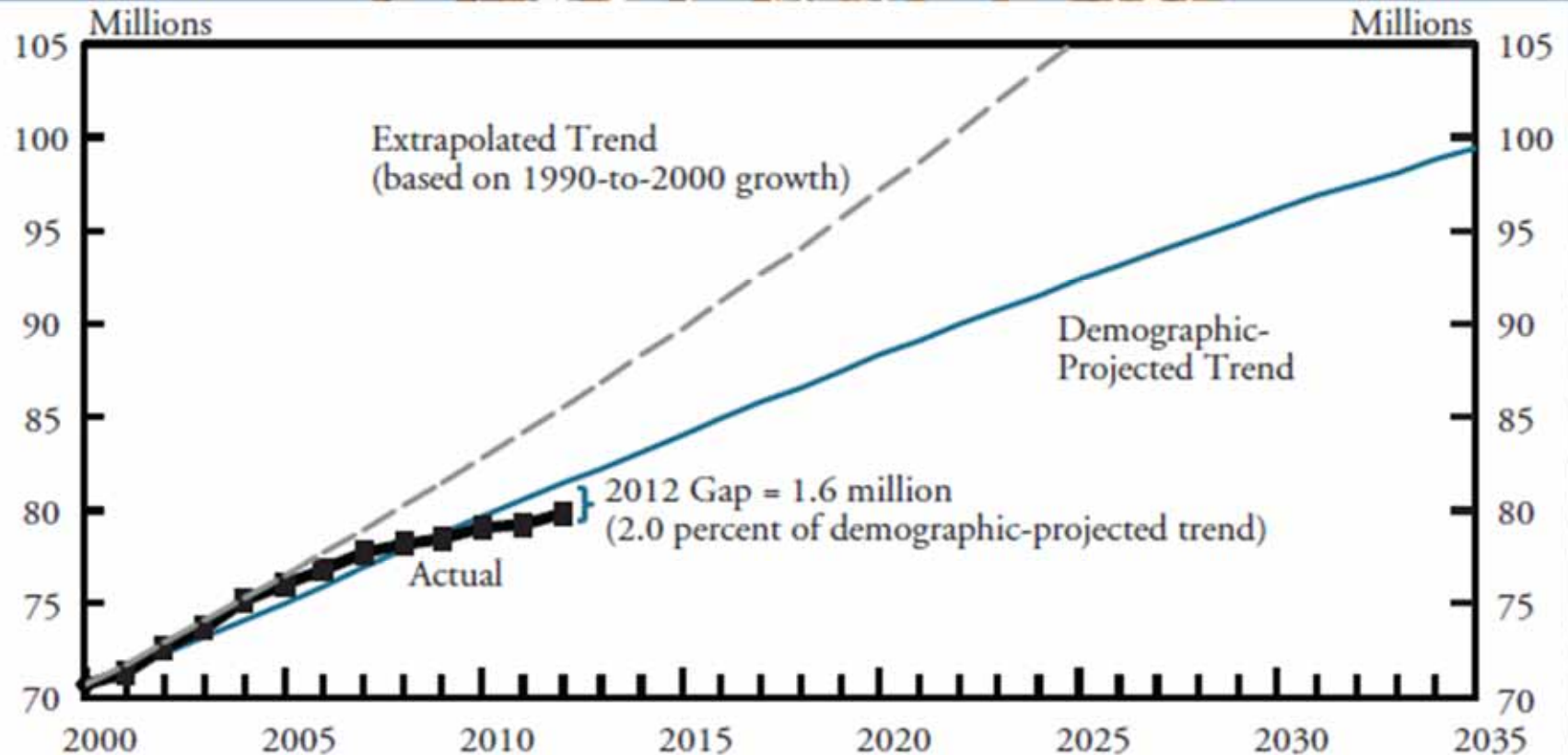
# Projected U.S. Households



Structural change in the housing market include:

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# Occupied U.S. Single-Family Housing Units

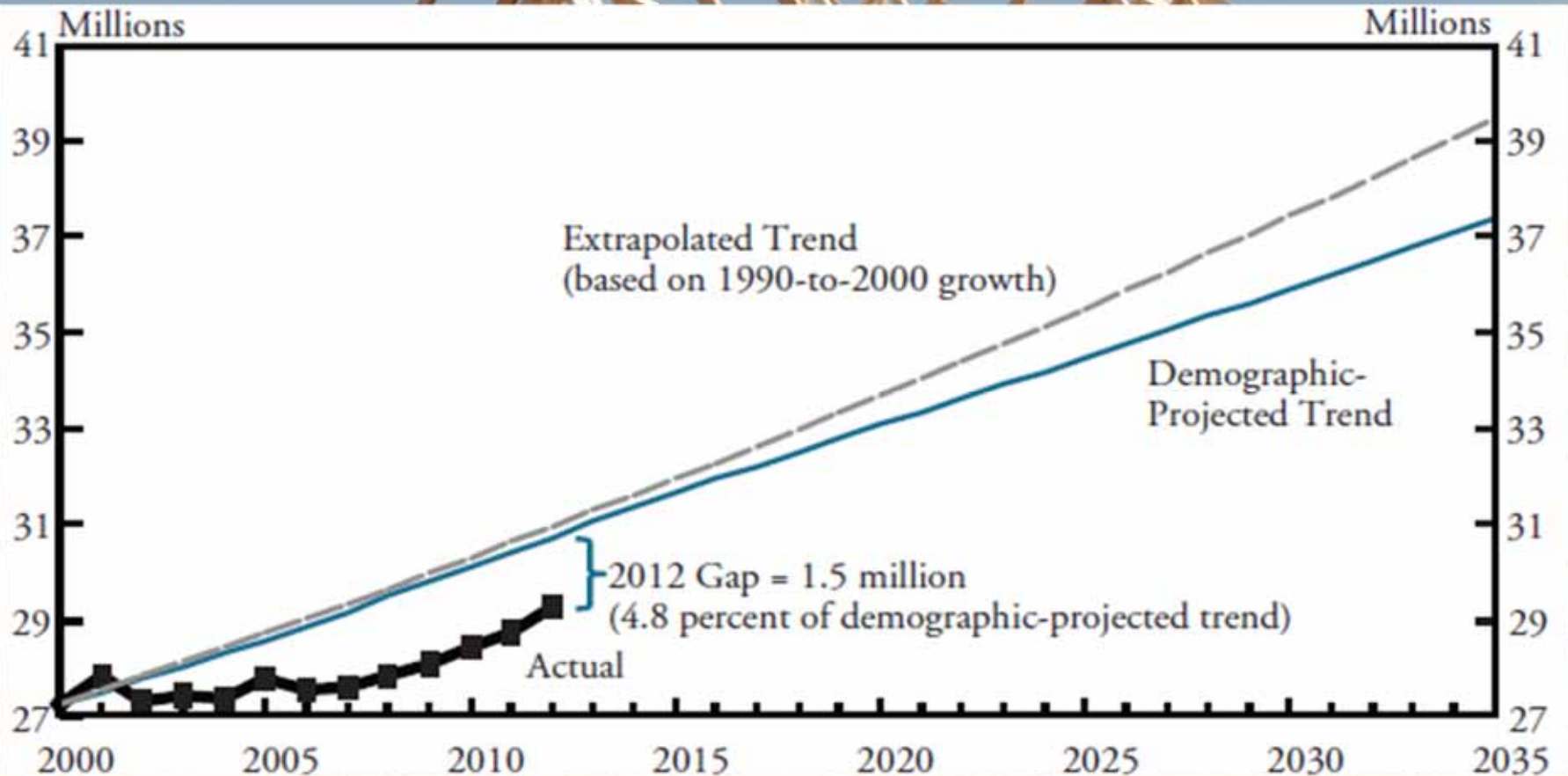


Sources: Census Bureau, author's calculations.

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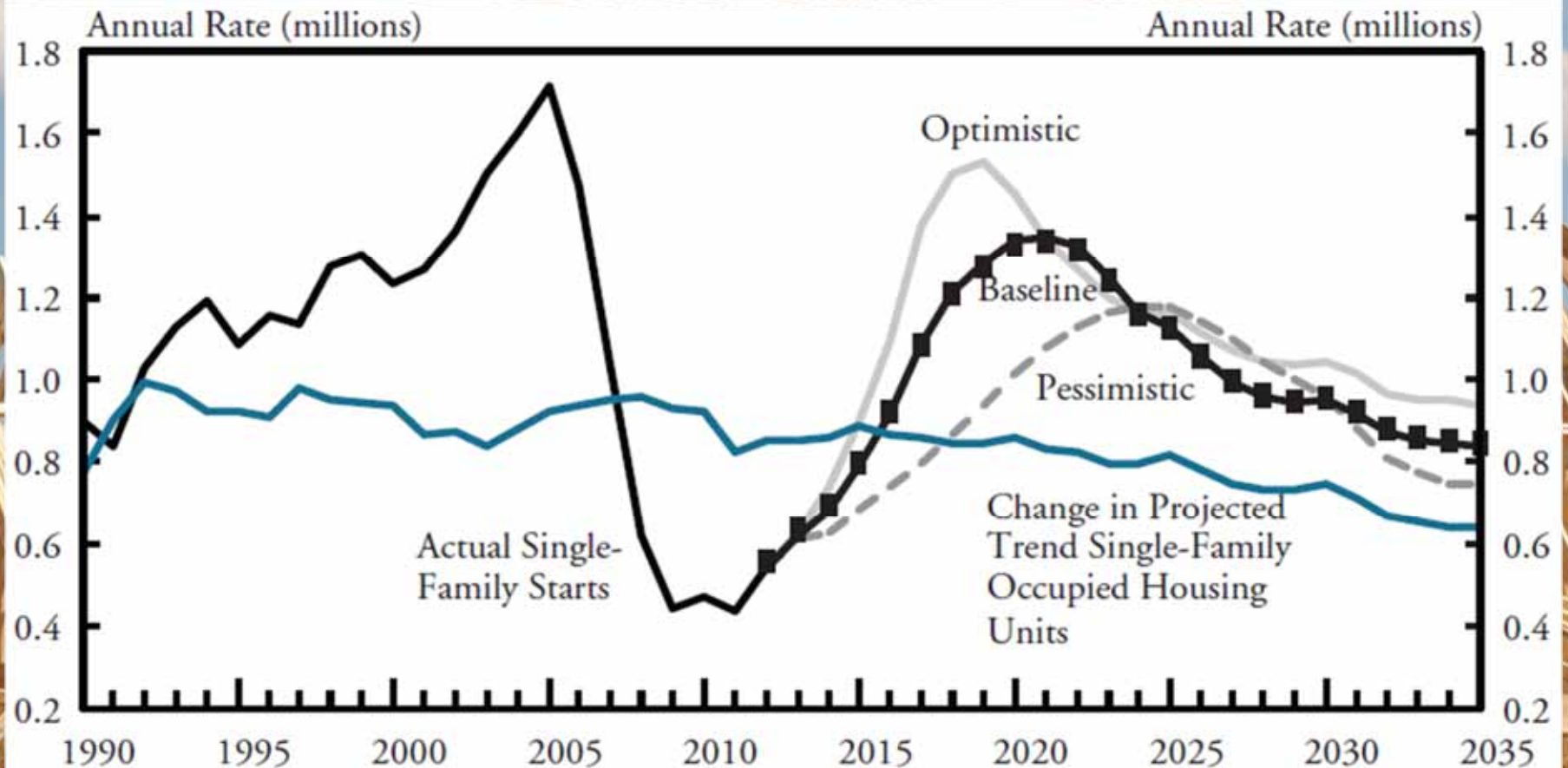
# Occupied U.S. Multi-Family Housing Units



Structural change in the housing market include:

- a dramatic correction in median wealth of U.S. households as home values declined
- declining home ownership rates.

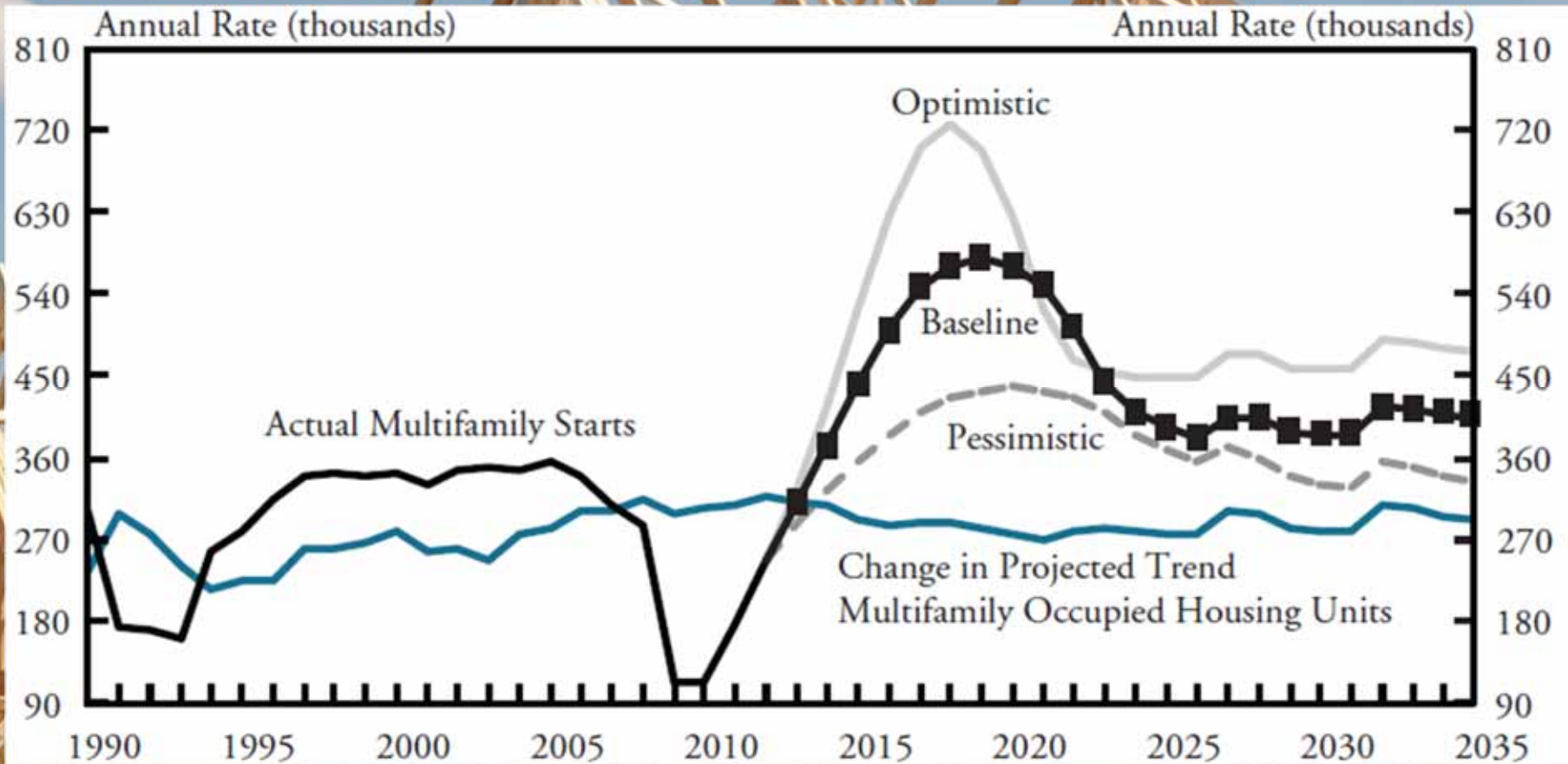
# Projected U.S. Single-Family Starts



Structural change in the housing market include:

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# Projected U.S. Multi-Family Starts



Structural change in the housing market include:

- a dramatic correction in median wealth of U.S. households as home values declined
- declining home ownership rates.

# Threats to Housing

## World Debt or “Leverage”

Nothing really has changed – interest rates are lower; yet debt keeps increasing

China – hard or soft landing?

U.S. economy stalls or heads lower?

- No recovery in real medium income
- Burdensome and increased costs due to new lending regulations

There is “no” Eurozone recovery

Other world events?

# Conclusions

European housing market → muddling along

Canada – keeping an apparent steady pace

For the Eurozone (and U.S.) housing markets to improve – both economies need to improve in conjunction with real median incomes increasing

United States

- New and existing regulations
- Rising energy and raw material prices
- Economic uncertainty
- Continued consumer “blahs”
- Decline in “real” median incomes

The **BIG** question? → Will the U.S. housing market continue its sluggish increase

“While there are positive trends in the housing market, Administration officials caution that the economy is still healing from the Great Recession. While there is good news in the March Scorecard, it's clear the housing market is still in the recovery phase of the cycle.”<sup>3</sup>

-- Kurt Usowski, Deputy Assistant Secretary for Economic Affairs, U.S.  
Department of Housing and Urban Development



# Questions?

Thank you

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