

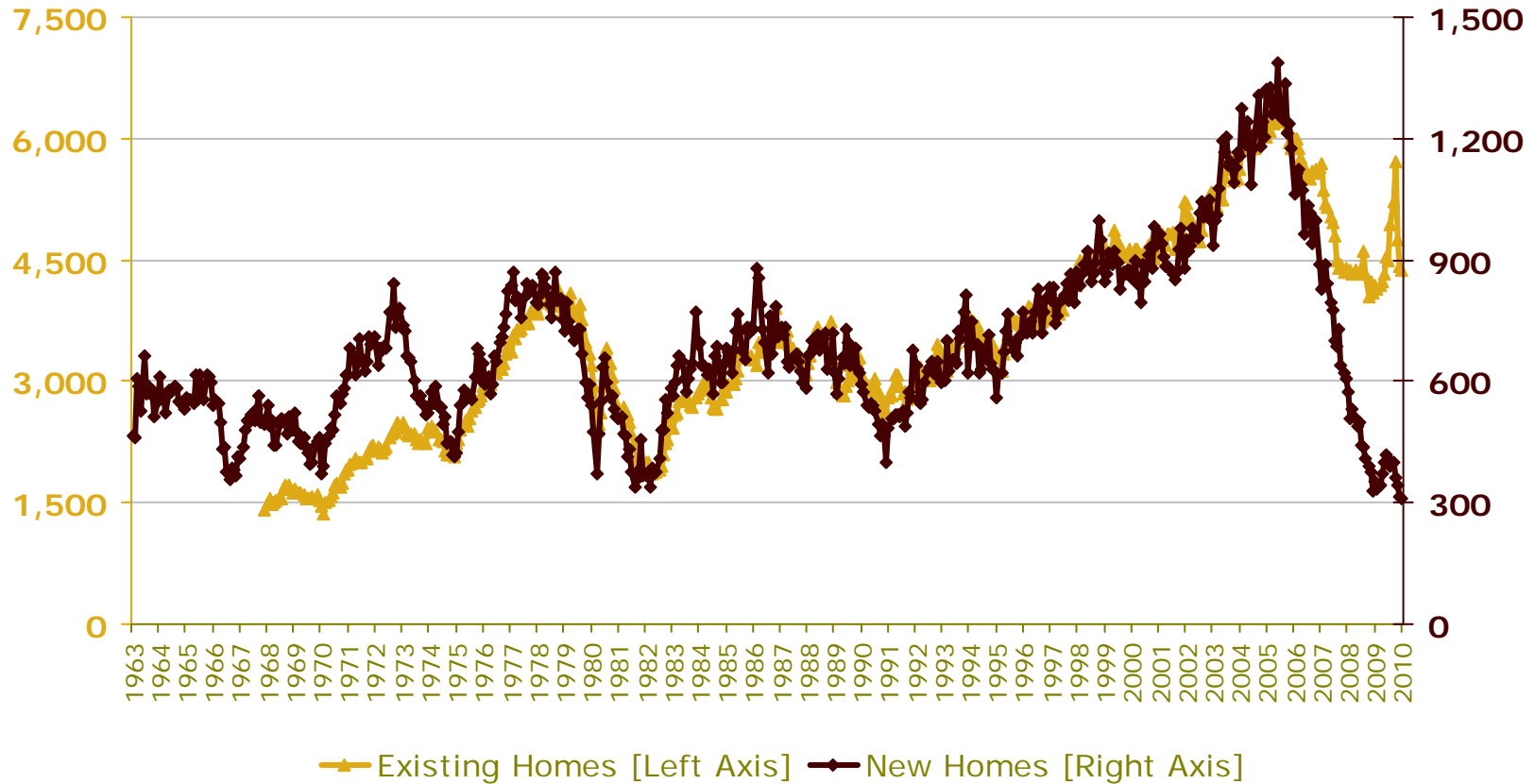
# The State of the Nation's Housing

Eric S. Belsky

Remodeling Futures Conference  
April 13, 2010

# Existing Home Sales Improved then Retracted, While New Home Sales Are Still in the Basement

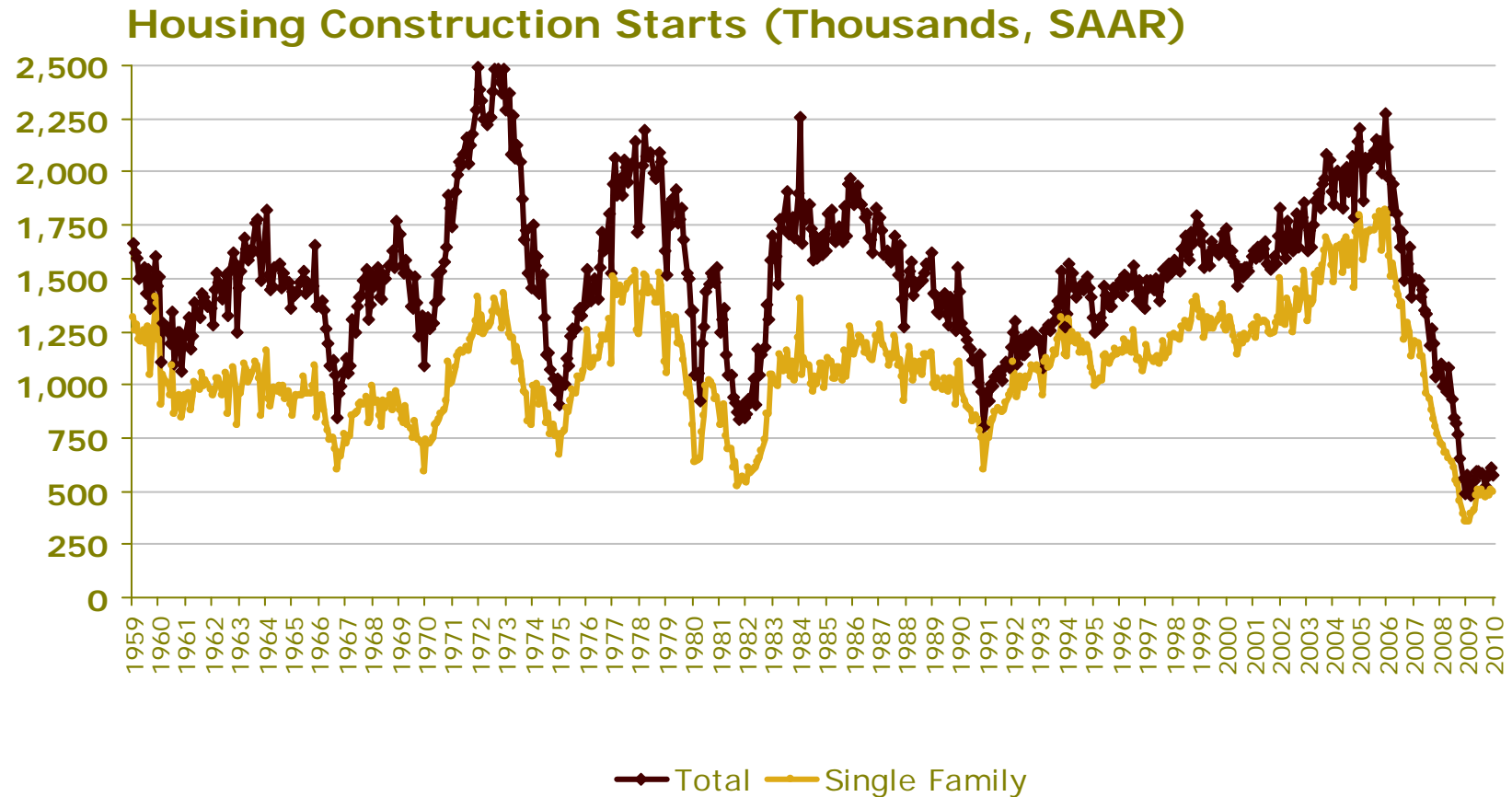
## Single Family Home Sales (Thousands, SAAR)



Sources: US Census Bureau; National Association of Realtors (R) through Feb 2010



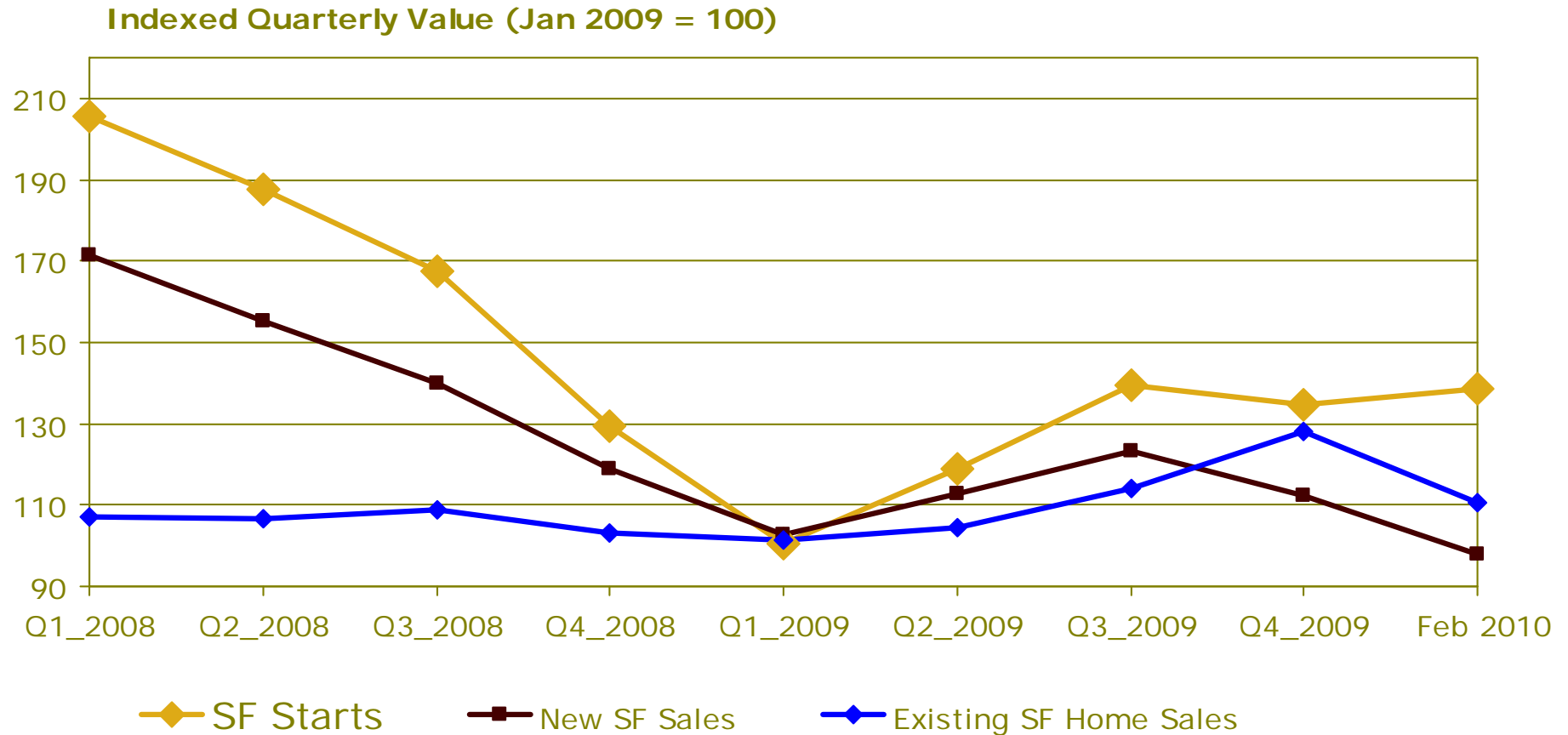
# Home Building May Have Bottomed, But At Very Low Levels



Source: US Census Bureau through February 2010

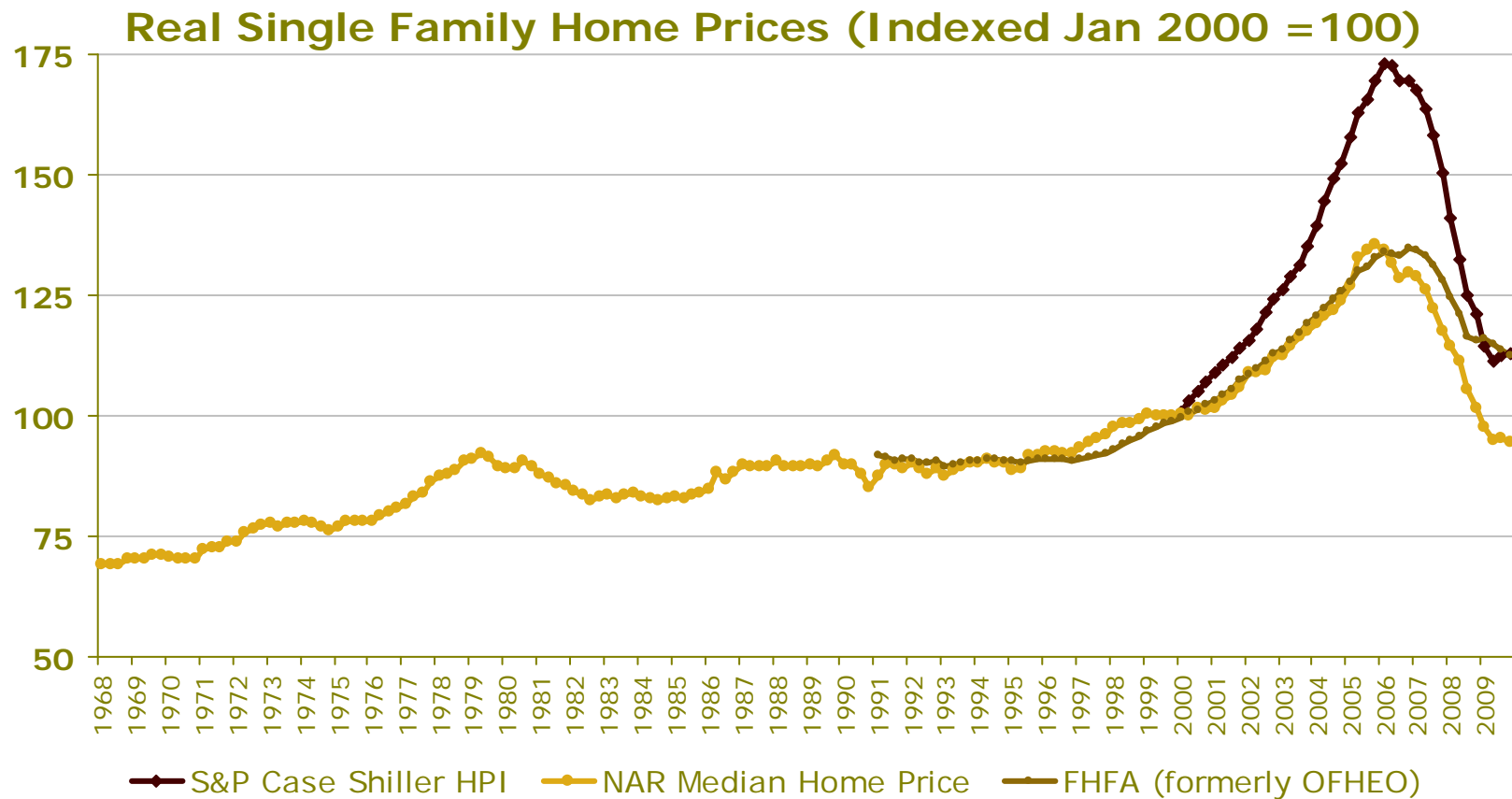


# Only Single Family Starts Sustained Its Rebound into 2010



Sources: US Census Bureau; National Association of Realtors.

# Home Prices May Be Stabilizing

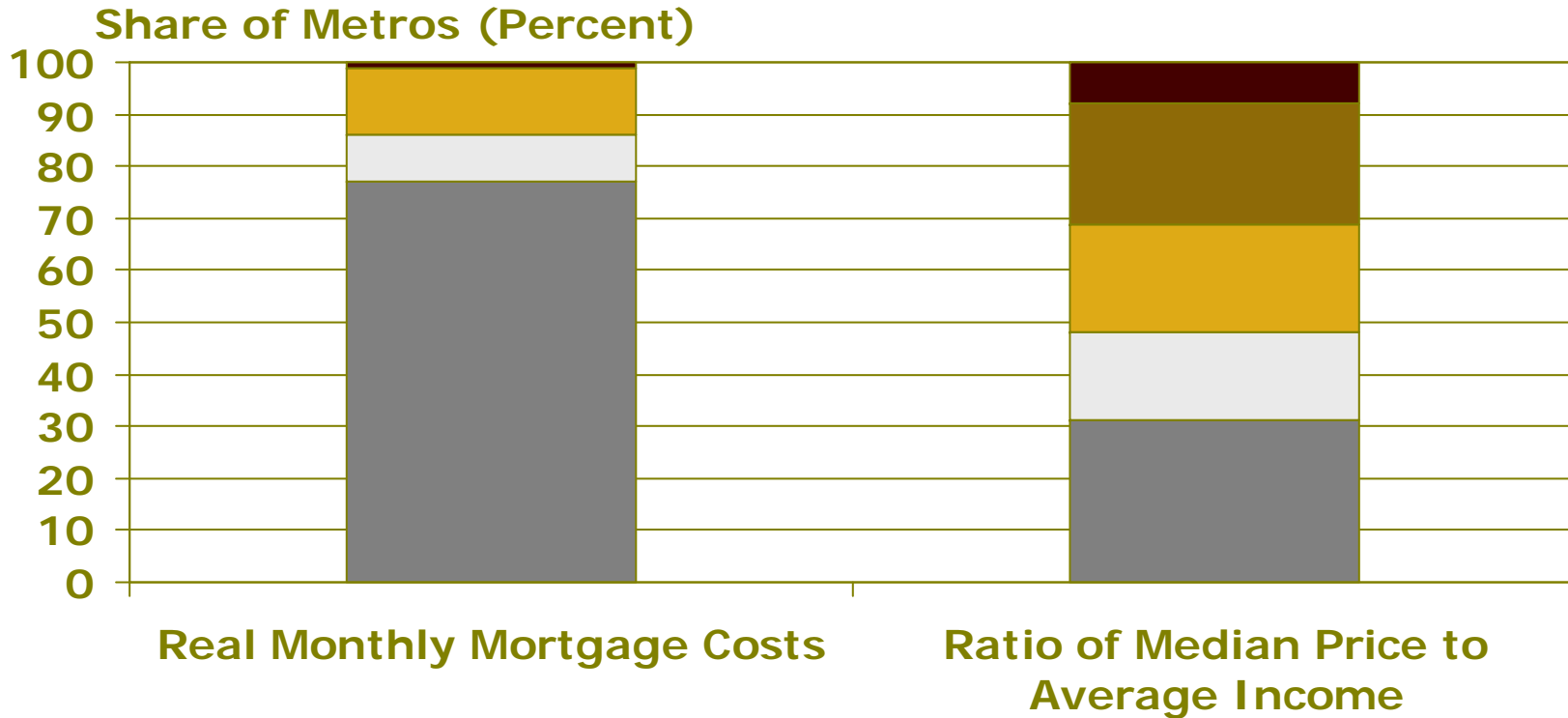


Note: All prices are seasonally adjusted and inflation adjusted using the CPI-U for All Items.

Sources: S&P/Case-Shiller 20-city composite house price index (SA); National Association of Realtors (R), median single family home price (SA, in thousands) ; Federal Housing Finance Agency, purchase-only house price index (SA).



# Housing Affordability Is the Biggest Plus - And Interest Rates Matter



**2009:4 Level Relative to 1989-2000 Average:**

- More than 10.0% Below
- 5.0 Below to 5.0% Above
- More than 20.0% Above

- -10.0 to -5.0% Below
- 5.0 to 20.0% Above

Notes: Monthly mortgage costs assume a 10% downpayment and Freddie Mac conventional 30-year fixed interest rates, and are adjusted for inflation by the CPI-U for All Items. Metro areas evaluated are the 79 metros in the National Association of Realtors® series for which there are data from every quarter 1989-2000 and 2009:3.

Sources: JCHS calculations using the National Association of Realtors®, Median Existing Single-Family House Price and Moody's Economy.com, Average Household Income.

Harvard University



**JOINT CENTER FOR HOUSING STUDIES**

# The Road to Recovery

[www.jchs.harvard.edu](http://www.jchs.harvard.edu)

Harvard University



**JOINT CENTER FOR HOUSING STUDIES**

Graduate School of Design | Harvard Kennedy School

Copyright 2010

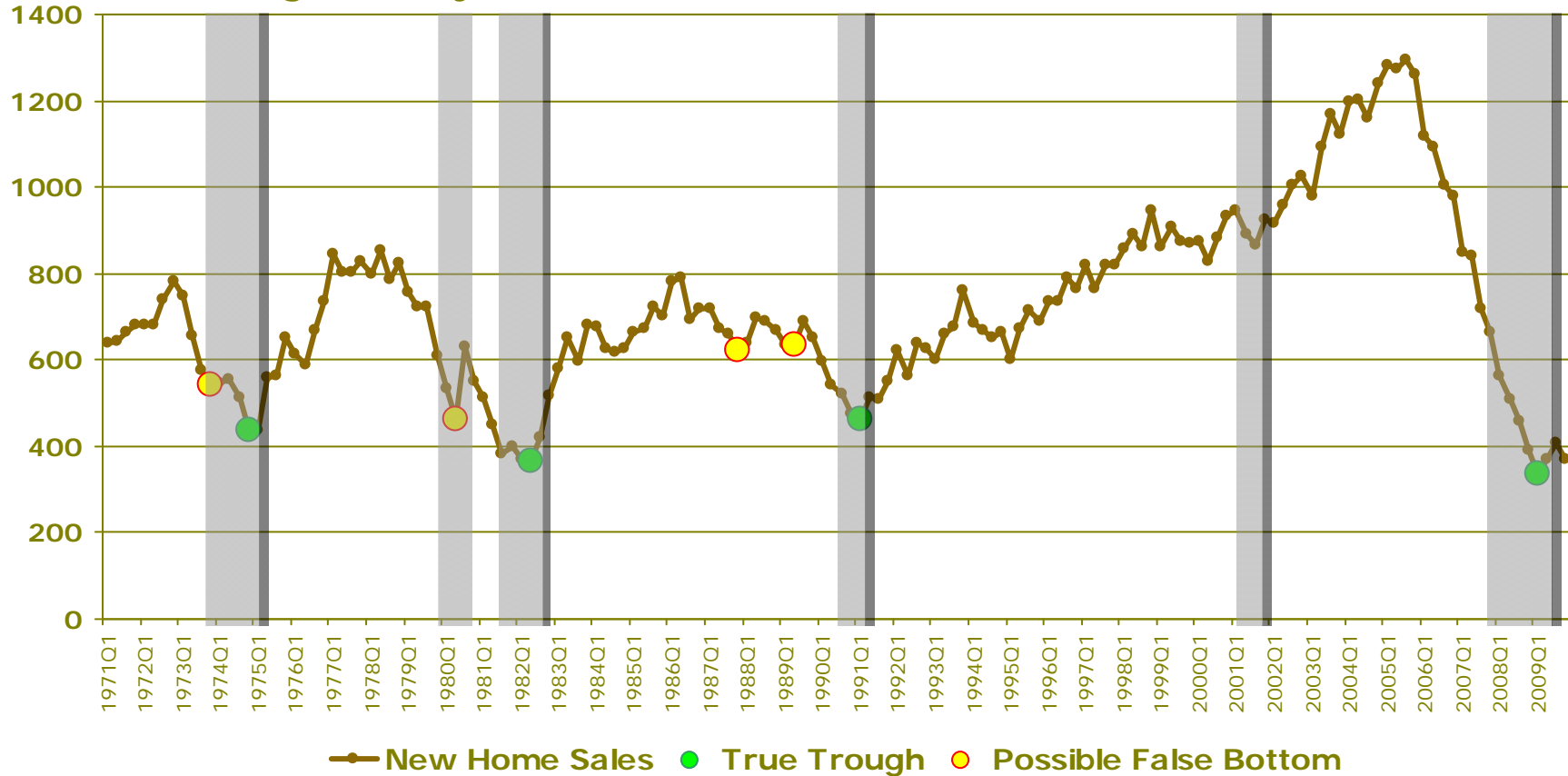
# Home Building Recoveries: The Top Line

- Takes sustainable turnaround in new home sales to bring single-family starts back – (it's the demand)
- New home sales are the “Punxsutawney Phil” of housing and economic recoveries
- Employment growth lags new home sale turnarounds, typically by two quarters
- Only 1 recovery of last 4 failed after GDP turned around coming out of a recession
- It took a Fed-engineered spike in interest rates to derail the recovery, small increases in rates or home prices have not



# Lasting Turnarounds in New Sales Started Just Before Sustained Turnarounds in GDP Growth

New Single Family Home Sales (000s, SAAR)



**Note: Lightly shaded areas mark official recessions. Darkly shaded areas mark beginning of sustained recoveries in real GDP at ends of recessions.**

Sources: US Census Bureau; US Bureau of Economic Analysis

Harvard University

**JOINT CENTER FOR HOUSING STUDIES**



# Signs of Lasting Turnarounds in New Home Sales

## Before Sales Bottom:



- Nominal mortgage rates were falling
- Real monthly payments were falling
- Inventory of new homes for sale were in decline several quarters

## After Sales Bottom:



- Real GDP turned positive two quarters after new sales trough



- Total employment hit bottom two quarters after new sales trough



- GDP growth remained positive for next 8+ quarters of sales recovery



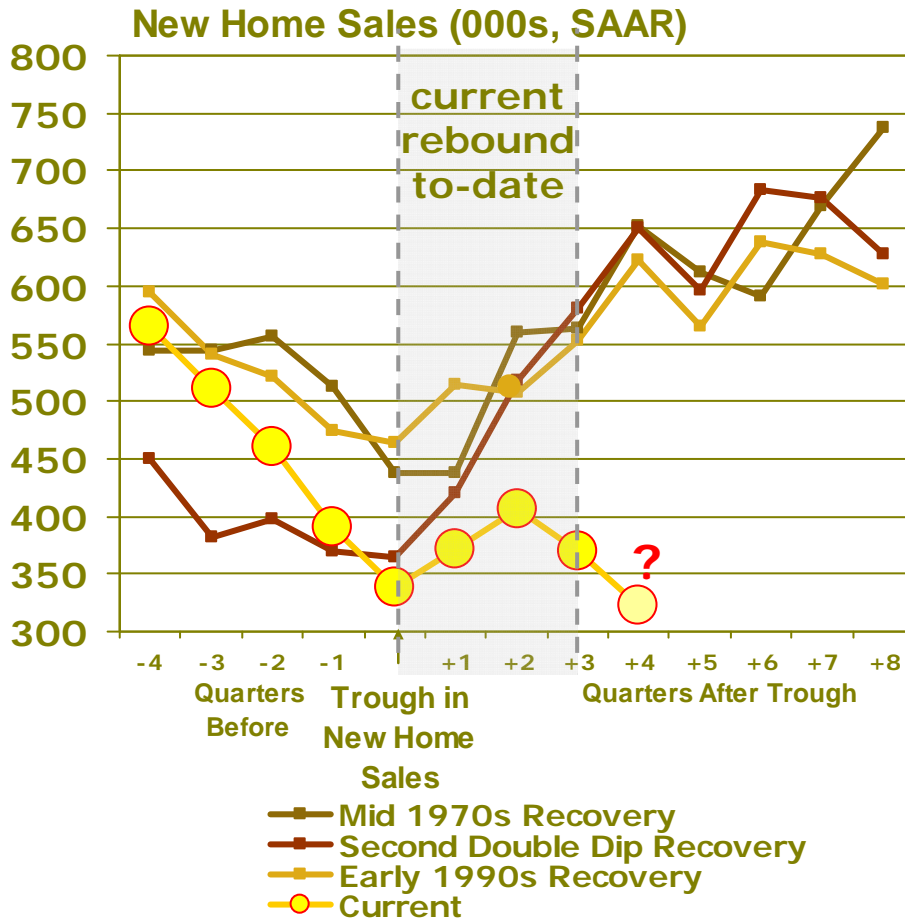
- Once employment turned, stayed positive at least 5 more quarters



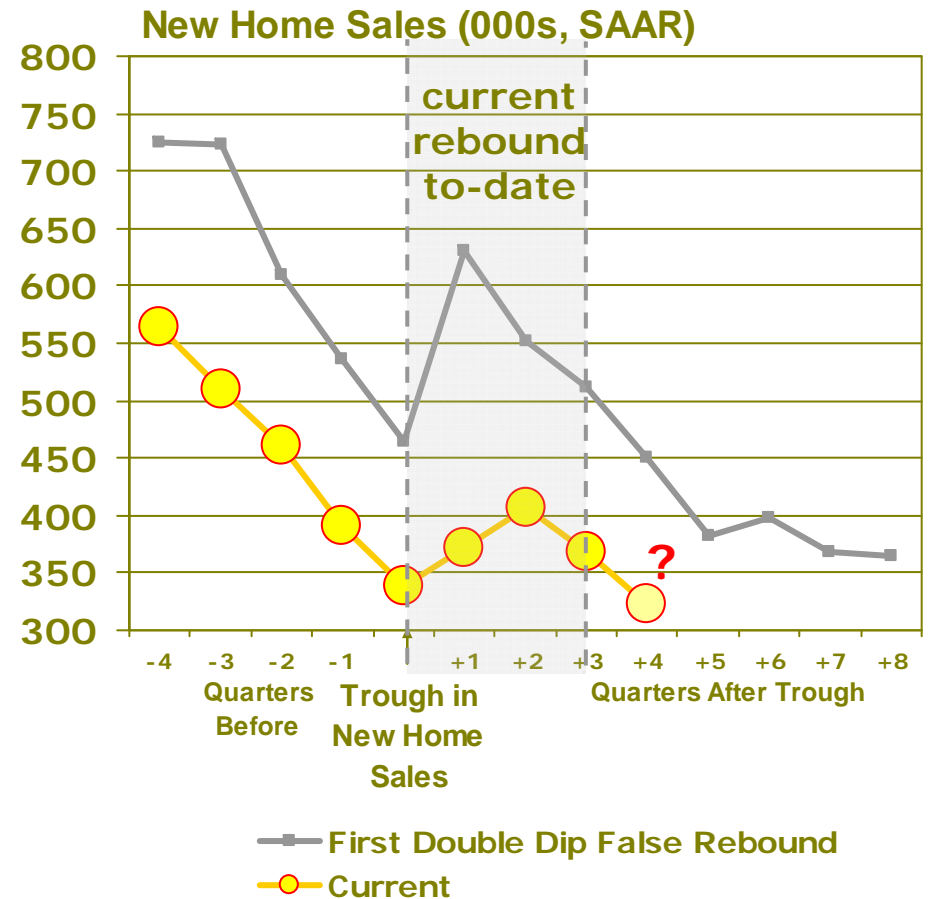
- Inventory of new homes bottomed 1-6 quarters after turnaround

# Past Rebounds in New Home Sales Lasted 4 Quarters Before Any Noticeable Declines, Failed Recovery Did Not

## Lasting Recoveries



## Failed Recovery



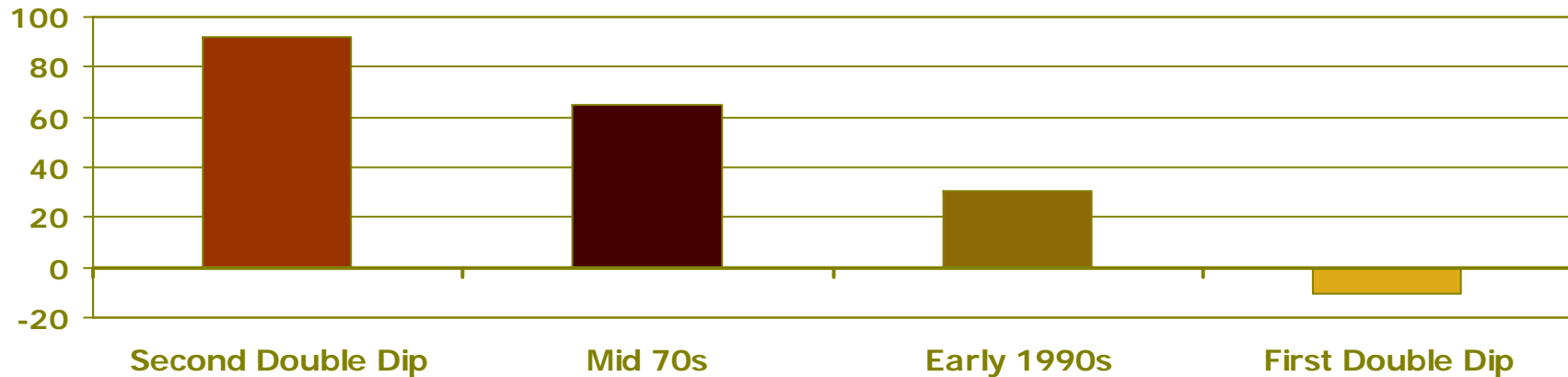
Source: JCHS tabulations of US Census Bureau data

Copyright 2010

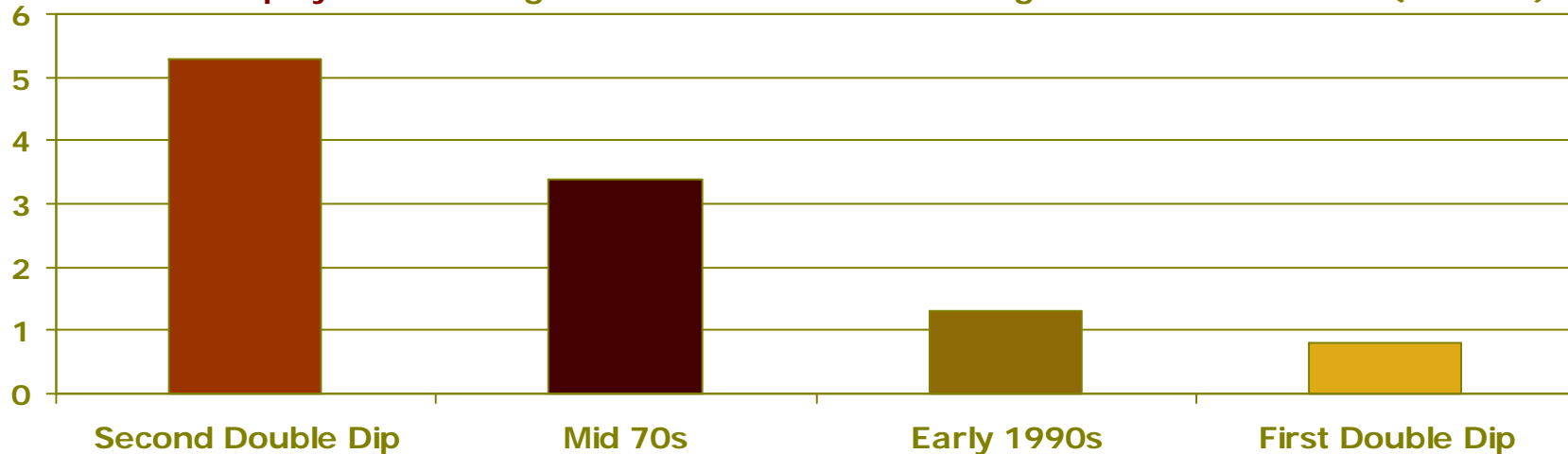


# Strength of Employment Growth Has Mattered Most to The Strength and Sustainability of Past Starts Recoveries

Growth in Total Starts Through First 8 Quarters after Trough in New Home Sales (Percent)



Growth in Employment Through First 8 Quarters after Trough in New Home Sales (Percent)

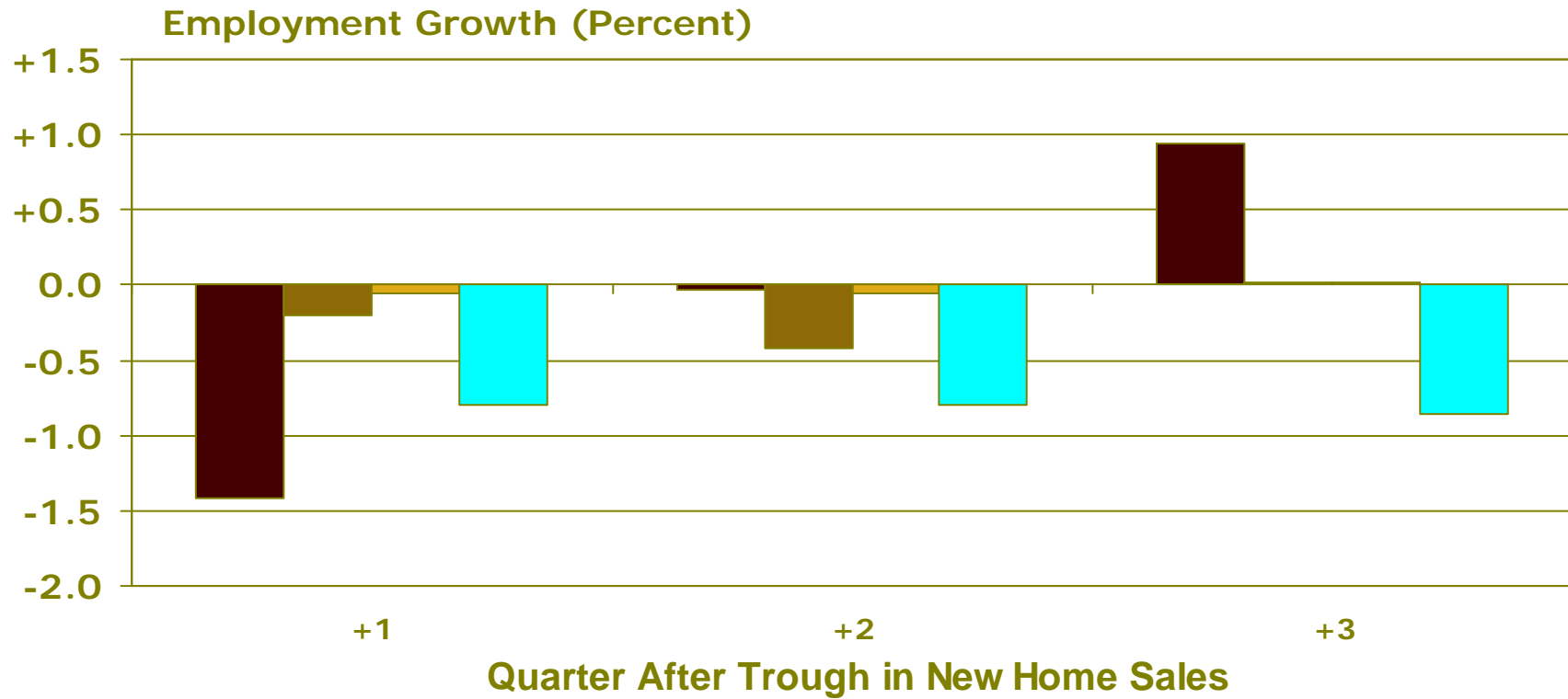


Harvard University

**JOINT CENTER FOR HOUSING STUDIES**



# Employment Losses This Recovery Are Staying Worse Longer



■ Mid 1970s Recovery  
 ■ Early 90s Recovery

■ Recovery After Second Double Dip  
 ■ Current

Note: Quarterly Employment Growth Rates Around Troughs in New Home Sales

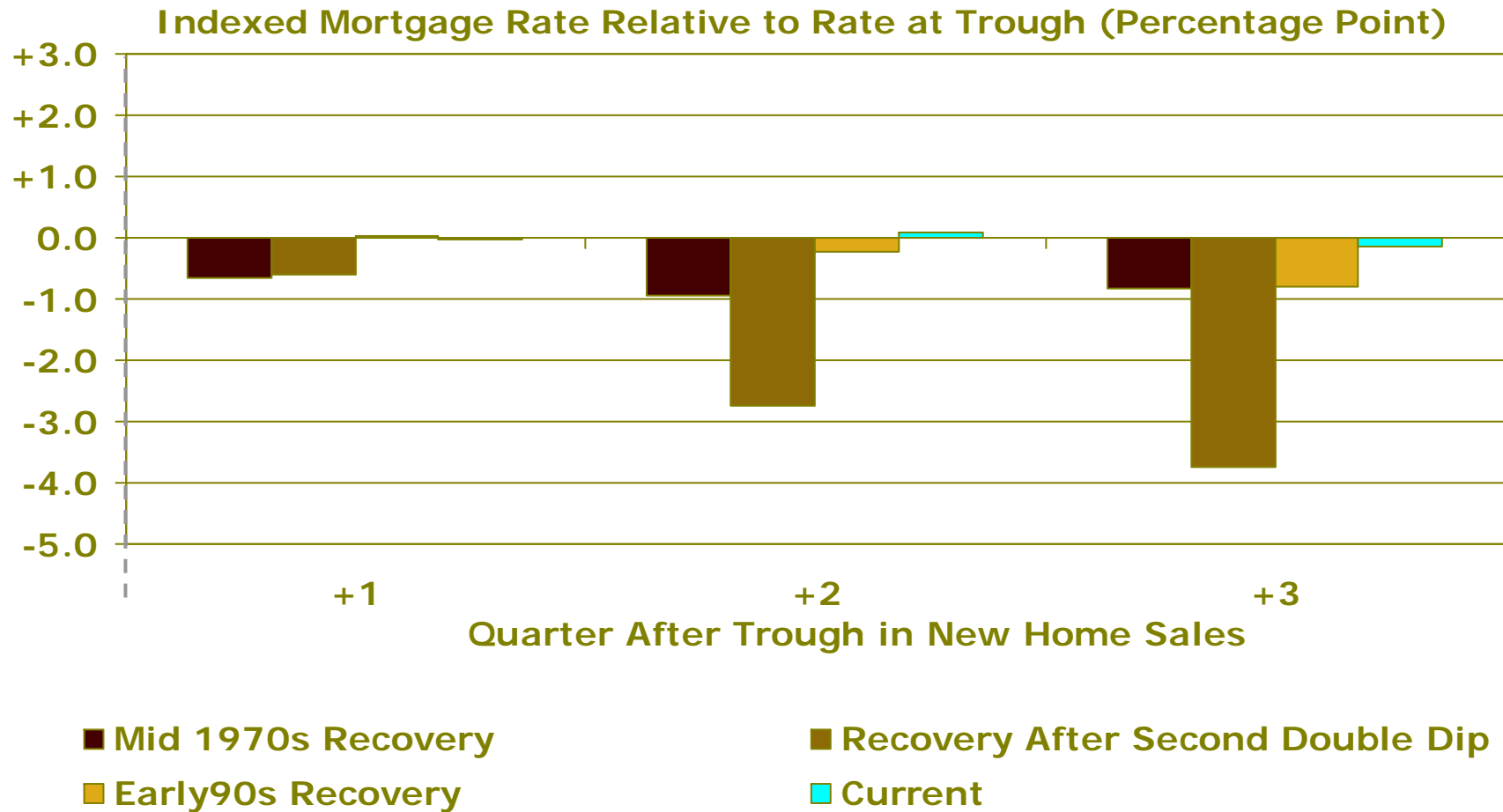
Source: JCHS Tabulations of US Census and BLS data

Harvard University

**JOINT CENTER FOR HOUSING STUDIES**



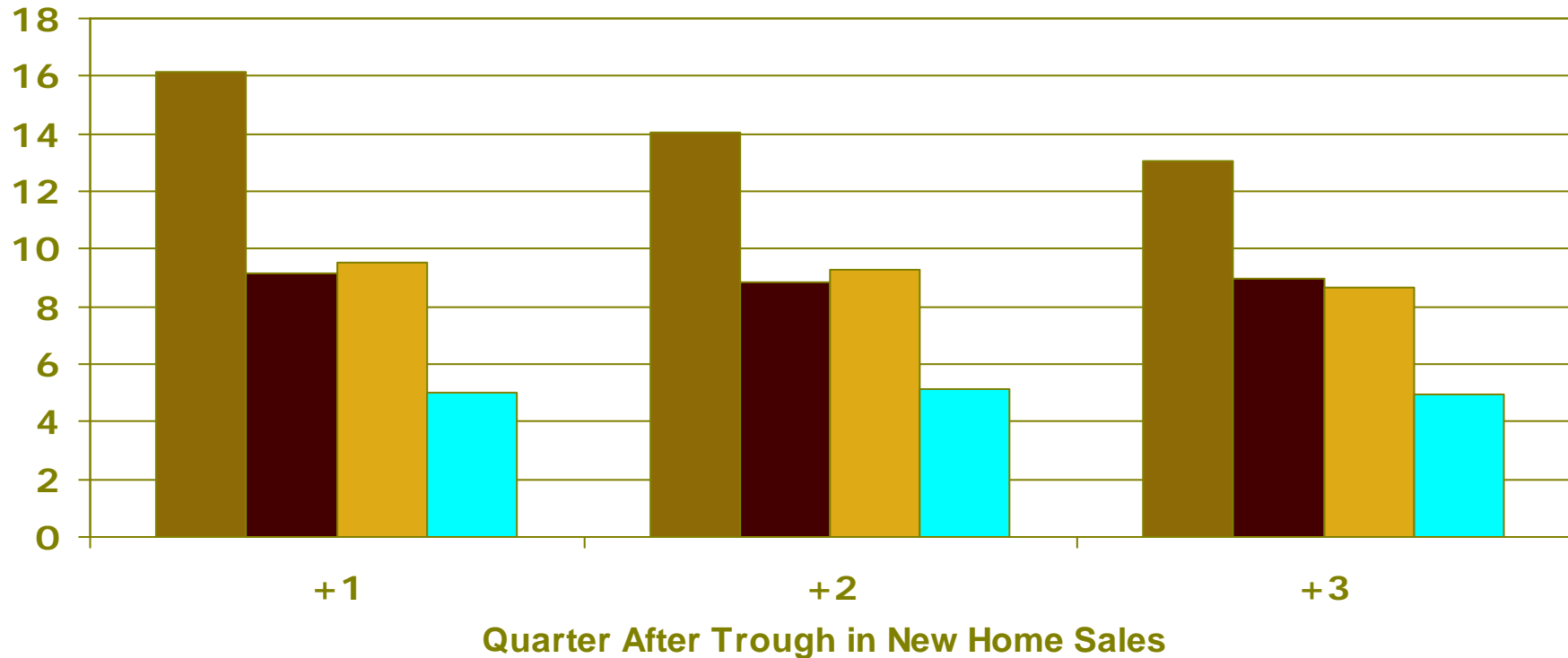
# Falling Mortgage Interest Rates Have Given Less Lift to Sales Following the Current Trough



Source: JCHS Tabulations of Freddie Mac 30 Year Fixed Conventional Conforming Mortgage Rates

## But Nominal Rates This Time Are At Very Low Levels

Nominal Mortgage Interest Rate (Percent)



■ Recovery After 80s 2nd Dip

■ Mid 1970s Recovery

■ Early 90s Recovery

■ Current

Source: JCHS Tabulations of Freddie Mac 30 Year Fixed Conventional Conforming Mortgage Rates

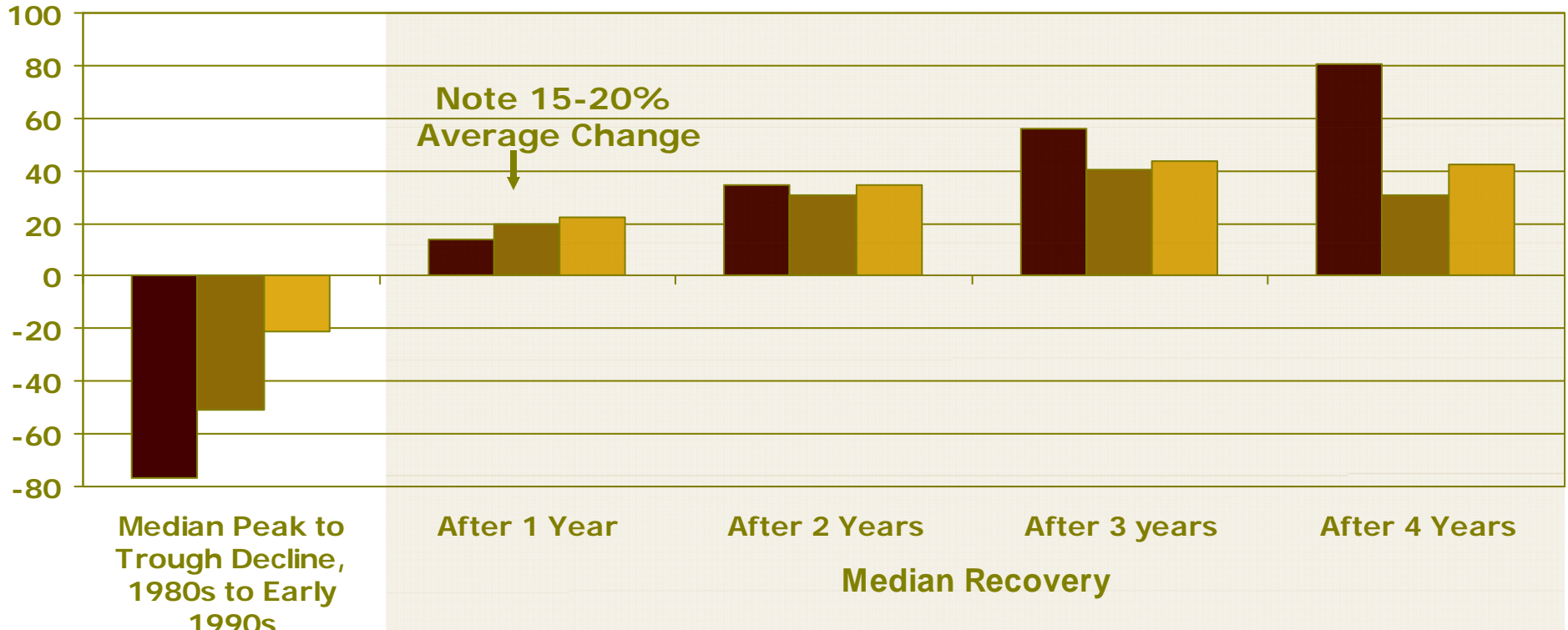
Harvard University

**JOINT CENTER FOR HOUSING STUDIES**



# Among Metros with Large Cyclical Permit Declines, It Took 3 Years Before Worst Decliners Saw Stronger Rebounds

Change in Annual Single Family Permits Among 50 Largest Markets with Declines >10% (Percent)



- Ten Worst Declines in Permitting
- All Other Metros
- Ten Smallest Declines in Permitting

Note: Includes the top 50 homebuilding markets in that cycle, as ranked by permits issued in 1986. But excludes four markets that had insignificant (less than 10%) cyclical declines.

Source: JCHS Tabulations of US Census Data

Copyright 2010

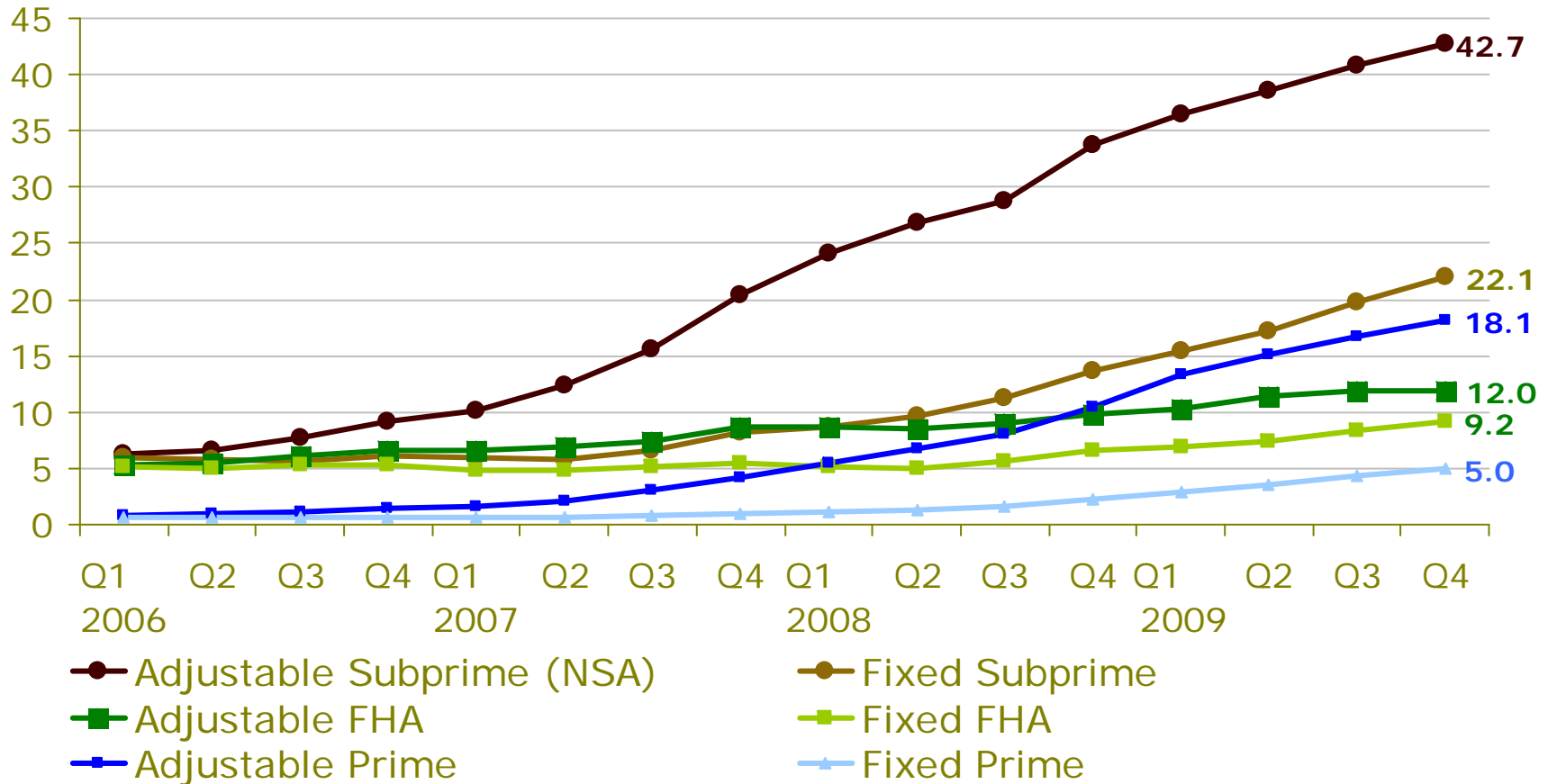


# Conclusions

- Key indicators of real turnaround in new home sales in place → except for timing of employment rebound
- Strength of the recovery is likely to depend on the timing and strength of job growth → key to watch
- The size of metro permit rebounds in the first years of last recovery were not related to size of prior declines
- The headwinds this time are strong and without precedent – high foreclosures/tightened standards
- Last quarter's decline in new home sales bears noting
- History is an imperfect guide, but it's all we get
- Consensus forecasts by others call for about 700,000-750,000 starts in 2010 and 1.0-1.15 million in 2011

# The Pipeline of Serious Delinquencies Is Still Rising

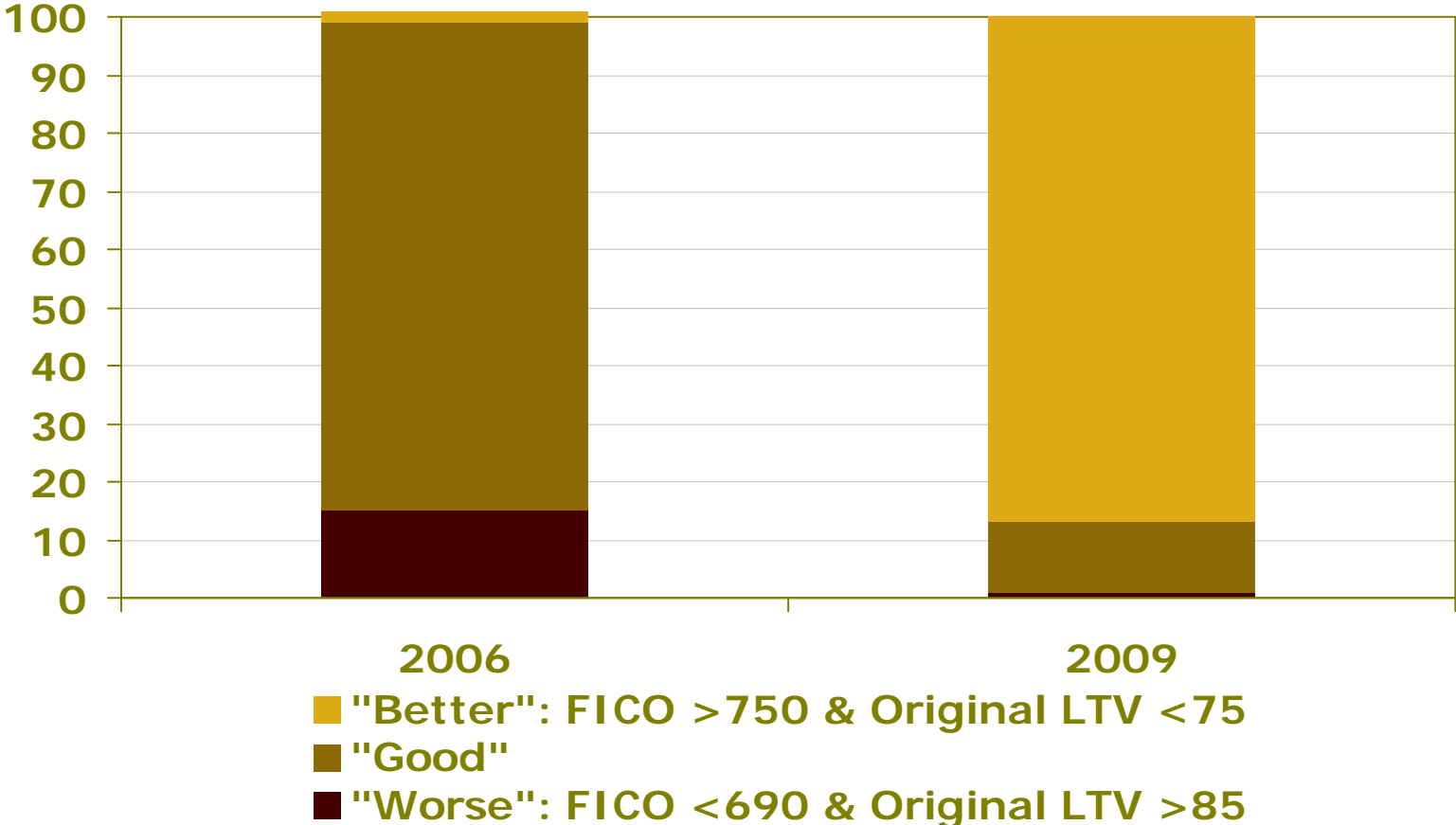
Share of Loans 90+ Days Delinquent or In Foreclosure (%)



Source: Mortgage Bankers Association

# Lending Standards Even in the Prime Market Have Tightened Dramatically

## Share of GSE Originations (Percent)



Note: "Good" Loans Defined as all other loans not having high LTV & low FICO nor Low LTV & High FICO.  
Source: Barclays Capital. *GSEs: Back to the Future*, US Interest Rates Strategy, 11 December 2009.

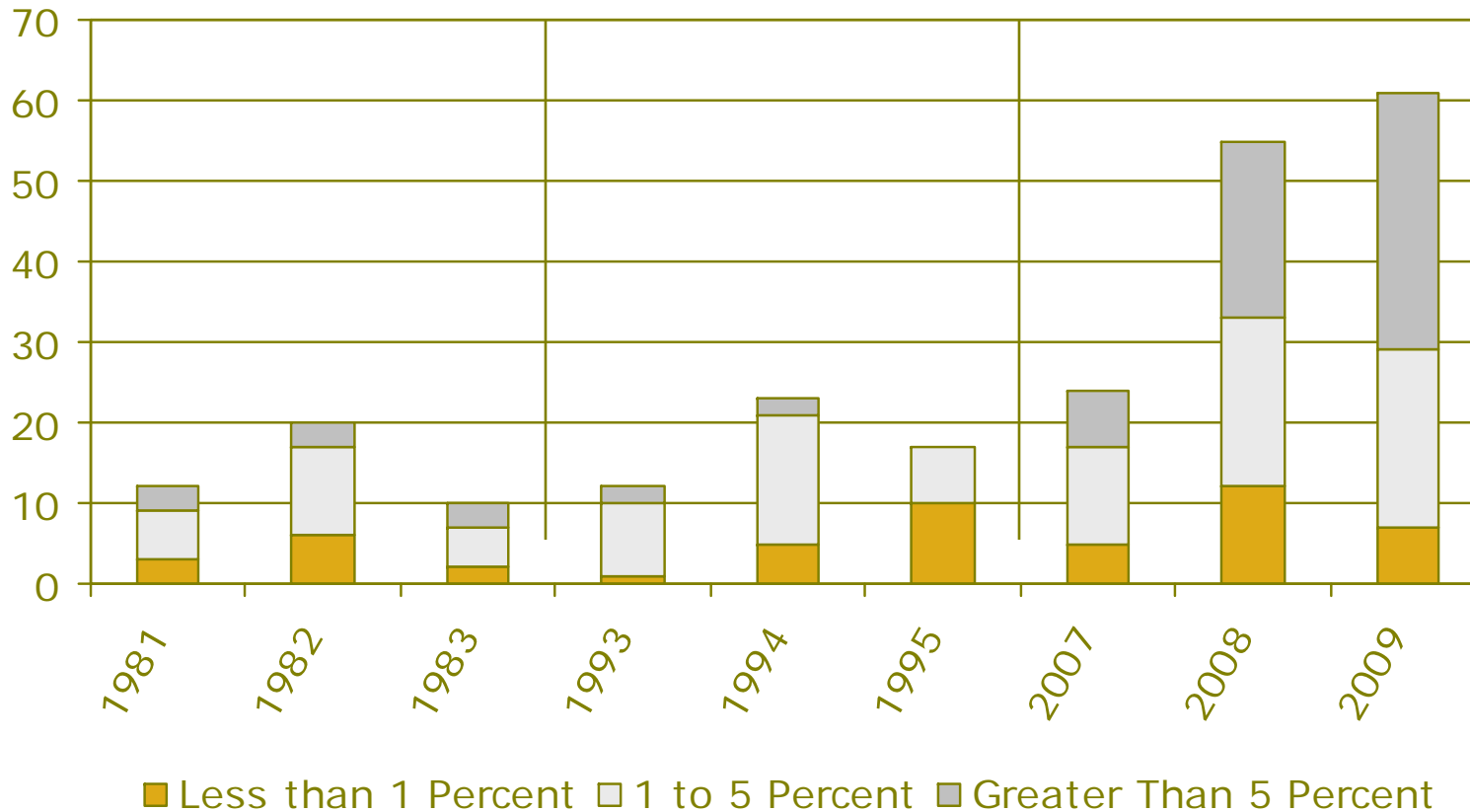
Harvard University



**JOINT CENTER FOR HOUSING STUDIES**

# Nominal Annual Price Declines Have Been More Severe and Widespread than Any in Recent History

Share of the 73 Metros Covered by CMHPI since 1975



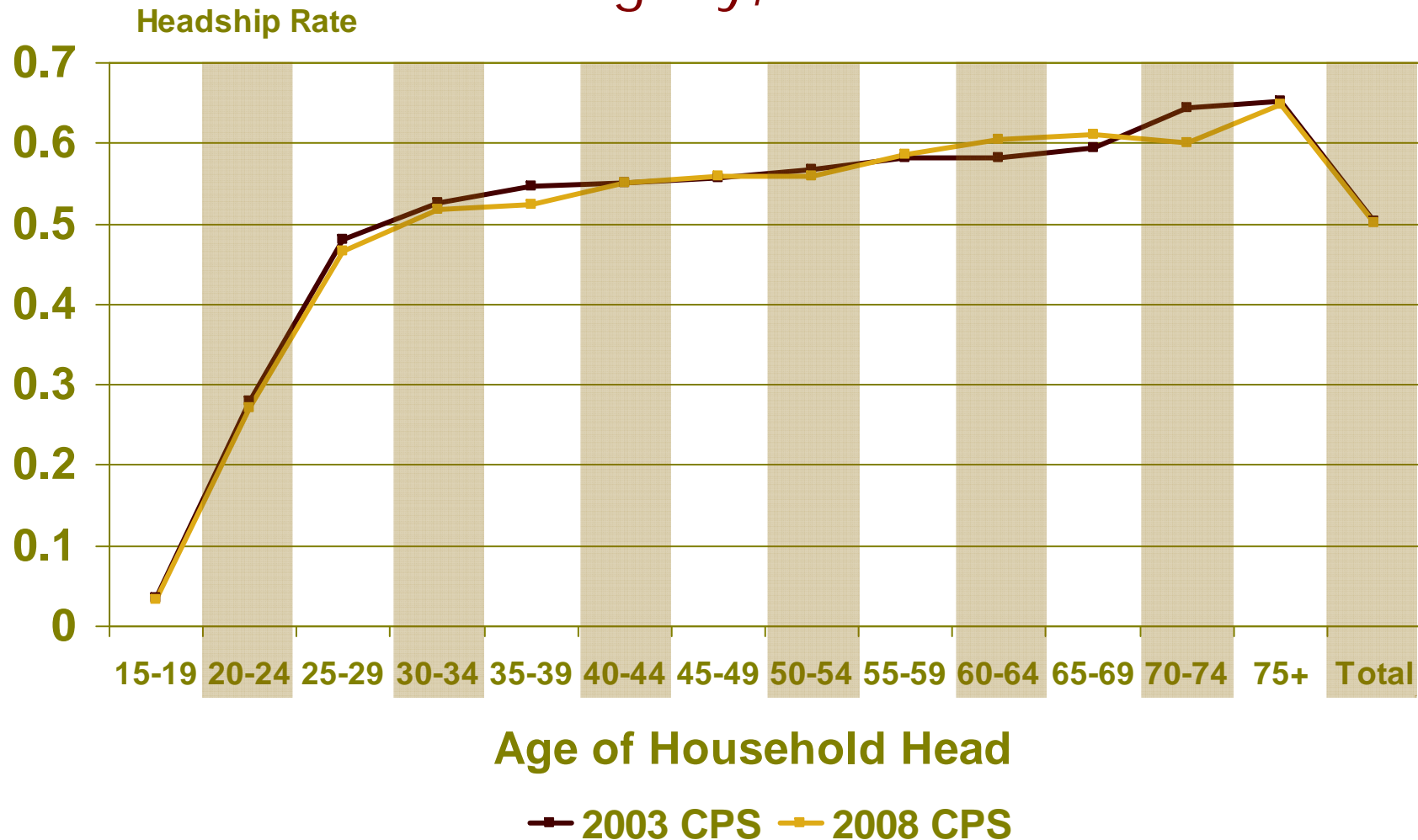
Note: Metros included are the 73 Metros fully covered by CMHPI data since 1975. Annual values are averages of quarters.

Source: JCHS tabulations of Freddie Mac CMHPI data.

# Estimating Long-Run Demand

- Estimates are of *long-run sustainable demand* – *not a prediction of actual completions and placements*
- Actual construction influenced by under or over supply entering and exiting the period
- Household growth projected under two immigration assumptions and with headship rates held constant
- Two methods used for vacancies and net removals
  - Each projected separately and conservatively
  - Using average ratio of completions plus placements to household growth for ten-year periods ending 1994-1998 (which contains the 87-91 housing cycle)

# Recently Headship Rates for Younger Adults have Declined Slightly and Older Adults Have Increased Slightly, but...

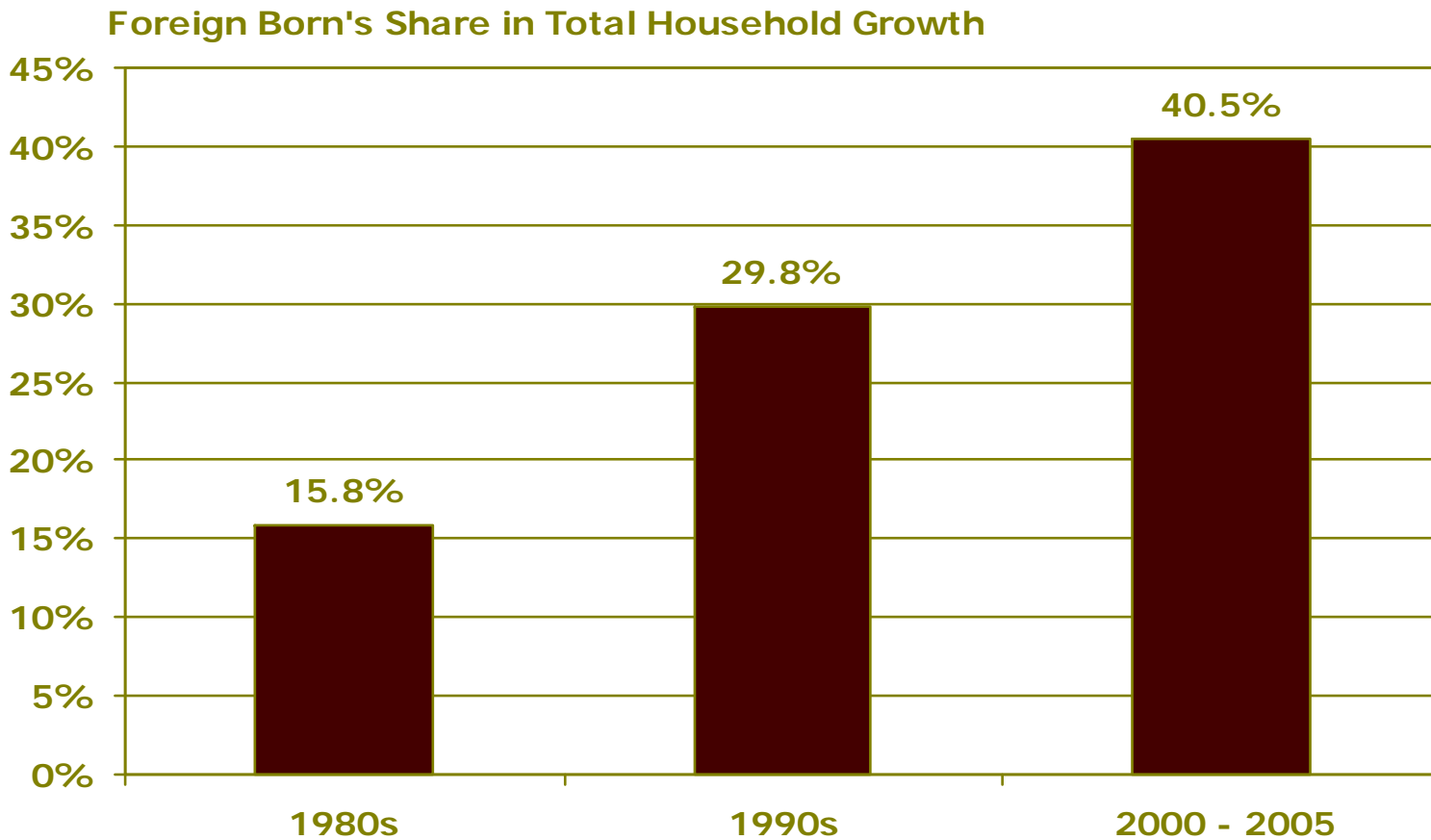


Source: Masnick, George S. and Eric S. Belsky. 2009. "Household Projections in Retrospect and Prospect: Lessons Learned and Applied to New 2005-2025 Projections." Harvard University JCHS Working Paper 09-01, Harvard University

**JOINT CENTER FOR HOUSING STUDIES**

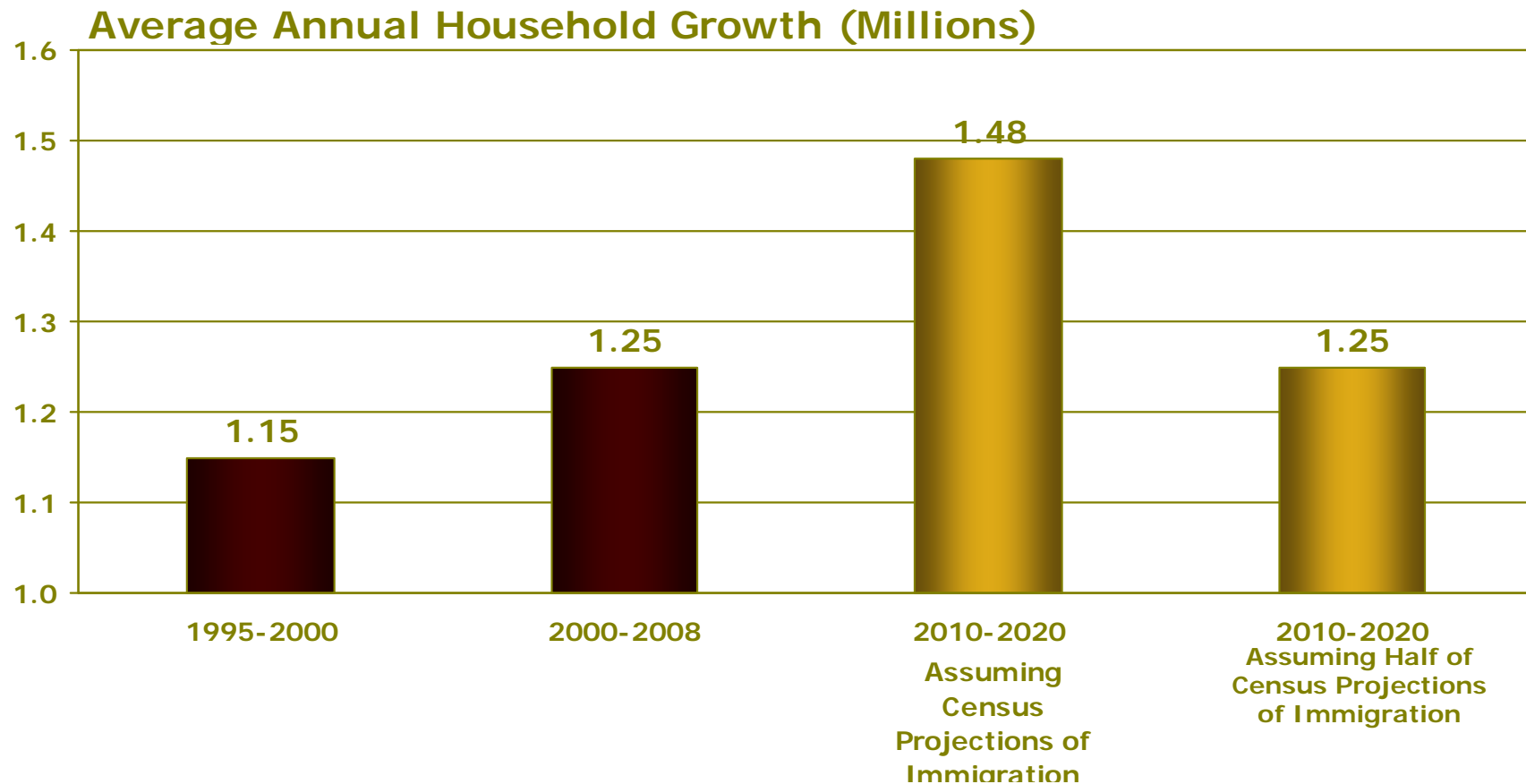


# Immigration Has Become an Increasingly Important Driver of Household Growth



Source: JCHS tabulations of the 1980, 1990 and 2000 decennial Censes, and the 2005 American Community Survey.

# Household Growth Is On A Higher Path But Immigration Is The Key Wildcard



Notes: To adjust for rebenchmarking, household growth in 2002-2003 is assumed to be the same as the average annual growth in 2000-2005. JCHS projections using 2008 US Census Bureau Population projections.

Sources: US Census Bureau, Housing Vacancy Survey; JCHS Working W09-5.



# Summary of Findings

- Projection of separate elements yields 2010-2020 estimates of between 17.2 (low immigration) and 19.7 million (high immigration)
- The historic ratio of completions and placements to household growth yields 2010-2020 estimates of between 17.1 and 20.2 million
- Important caveats:
  - Projections of demand for single and multifamily homes completed + manufactured homes placed
  - Assumes enter and exit the period in market balance
  - Odds of being in perfect balance in both periods low
  - No ironclad measures of when markets are in balance
- Think of as underlying current of demand



# Impact of Entering Oversupply Assumptions on Projections for 2010-2020

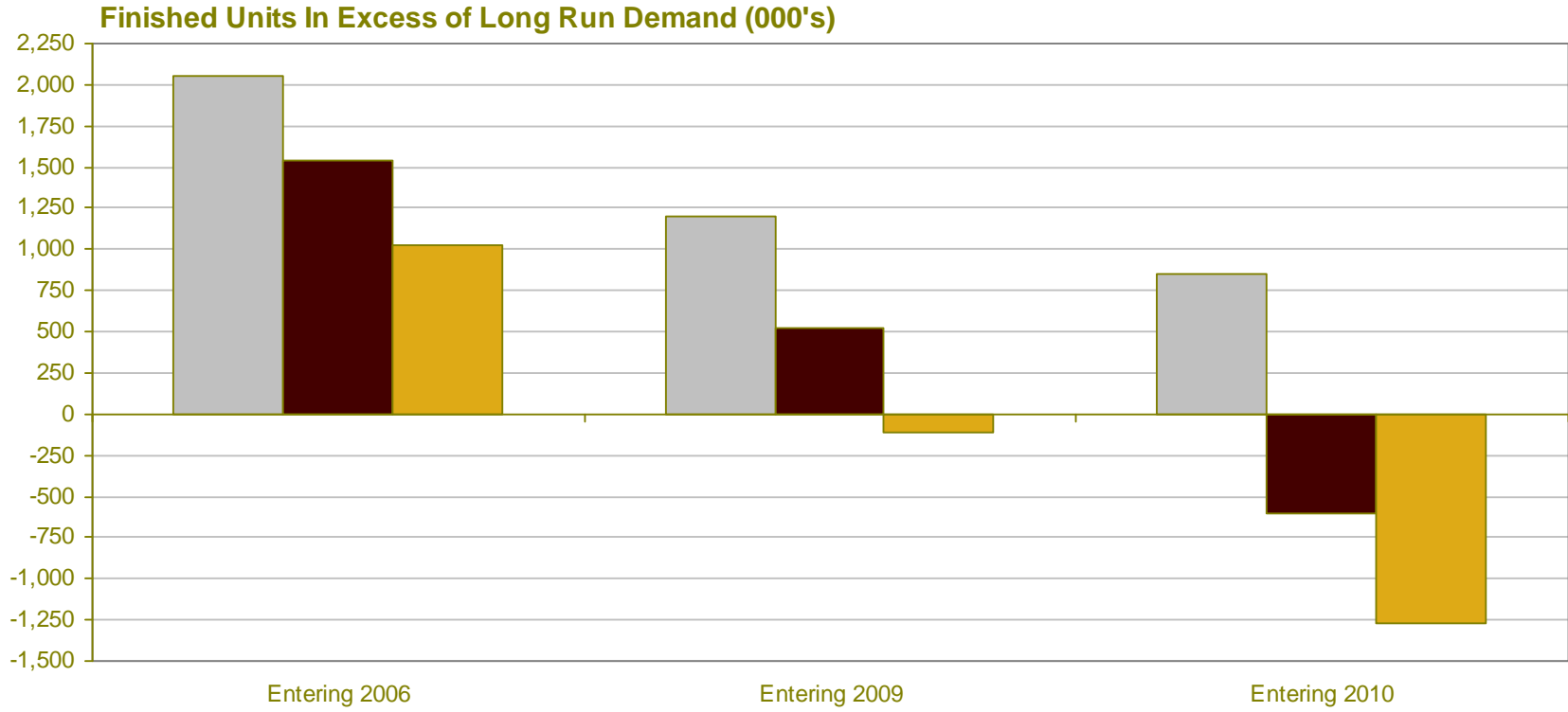
(With Markets Assumed to be in Equilibrium by 2020)

<b>Assumed Oversupply Entering 2010</b>	<b>Average Annual Completions &amp; Placements 2010-2020 needed to maintain long-run average</b>
<b>Baseline</b>	<b>1.72 - 1.97 Million</b>
<b>500 Thousand</b>	<b>1.67 – 1.92 Million</b>
<b>1.0 Million</b>	<b>1.62 – 1.87 Million</b>
<b>1.5 Million</b>	<b>1.57 – 1.82 Million</b>

Notes: Ranges of annual average completions needed to maintain long-run average 2010-20 determined by applying both JCHS 2009 low and high household projections.

Sources: US Census Bureau, JCHS Household Projections, JCHS Working Paper W09-5; JCHS Working paper W07-7.

# Had Actual Demand Held Up to Long-Run Levels, Oversupplies Entering 2006 Would Have Been Worked Off



- Completions & Manufactured Home Placements
- Accumulated Excess Units - Conservative Demand Estimate
- Accumulated Excess Units - Aggressive Demand Estimate

Notes: Finished Units are the sum of housing completions and manufactured home placements.

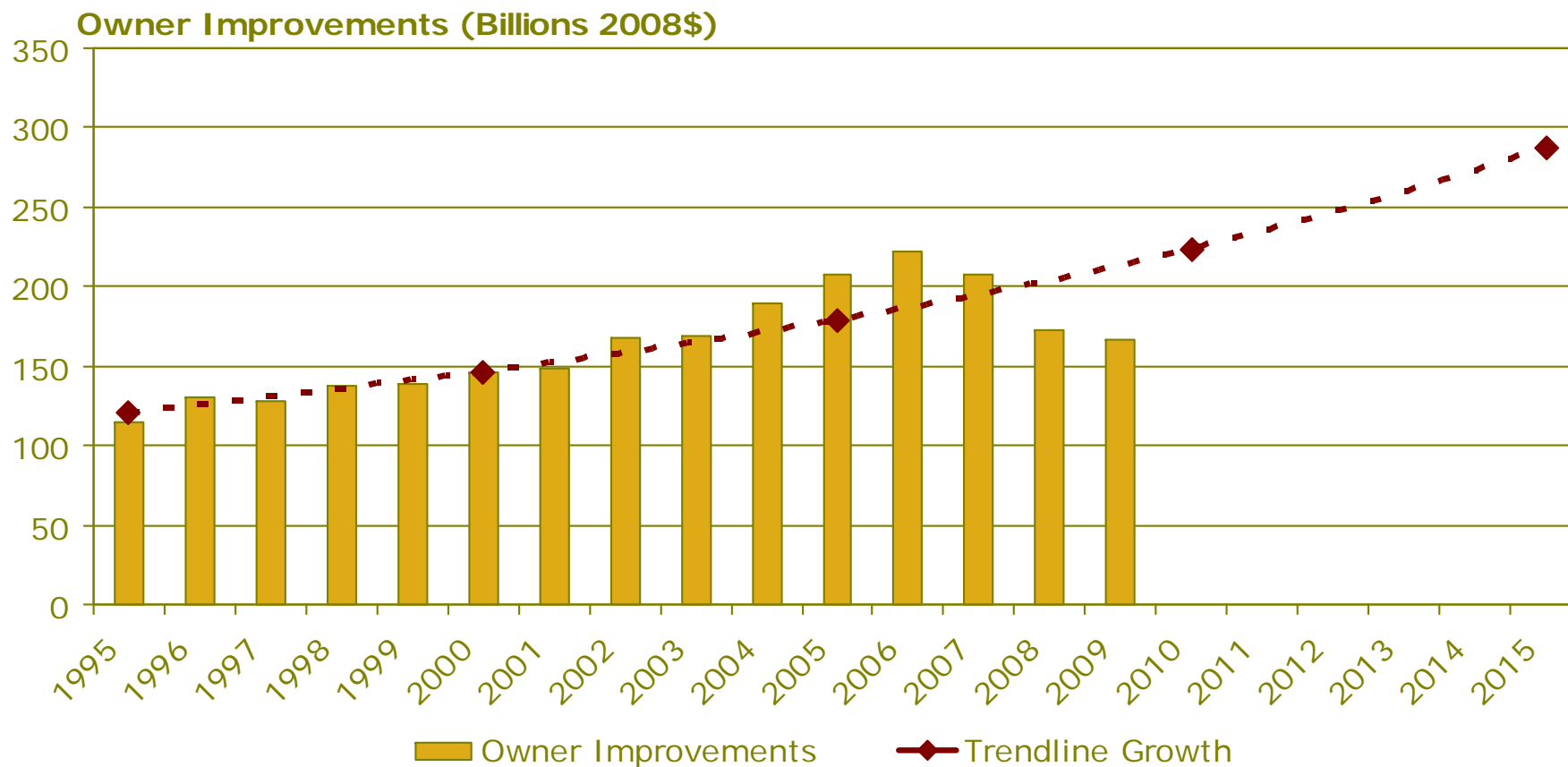
Sources: JCHS Calculations of data from the US Census and JCHS Research Note N09-1.



**JOINT CENTER FOR HOUSING STUDIES**

Graduate School of Design | Harvard Kennedy School

# Owner Improvement Growth Exceeded Expectations 2000-2006 But Now Below Trend Line



Note: Trendline growth calculated by applying low-immigration series 2009 JCHS household growth projections by age, hhtype and minority status to 1995-2000 percentage growth in AHS average owner investment within those categories.

Sources: JCHS tabulations of data from the US Census Bureau, American Housing Survey, and JCHS Household Projections; JCHS Working Paper W07-6.

Harvard University

**JOINT CENTER FOR HOUSING STUDIES**

