

# Residential Real Estate, Demographics, and the Economy

Presented to:  
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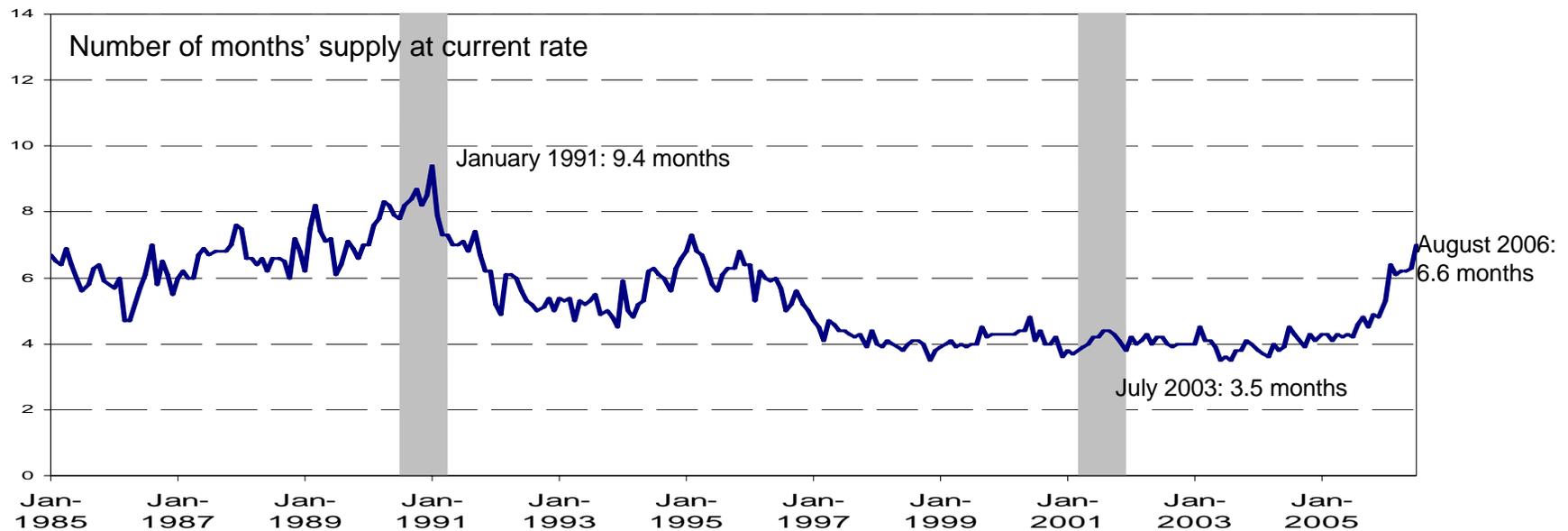
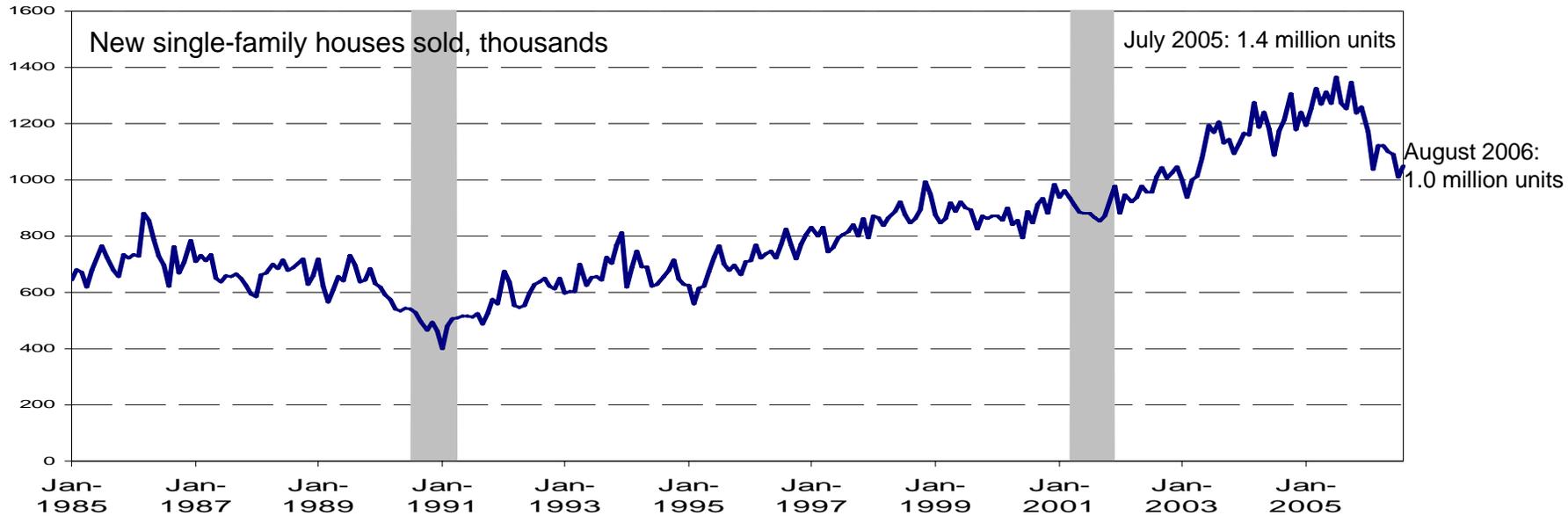
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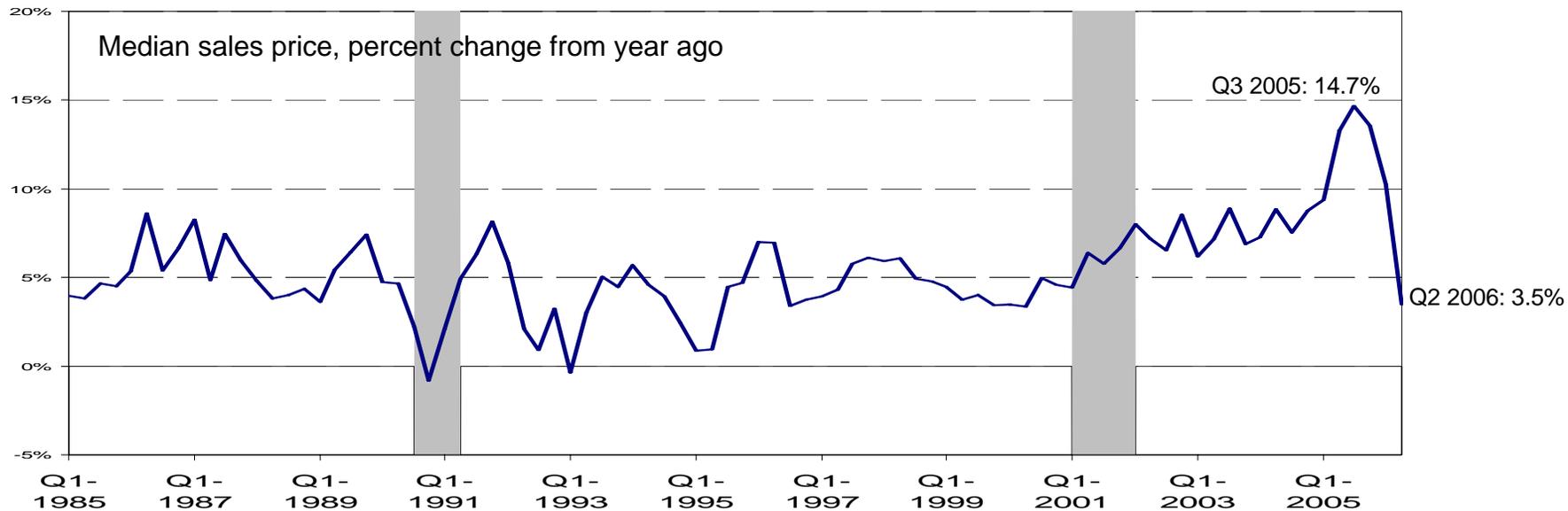
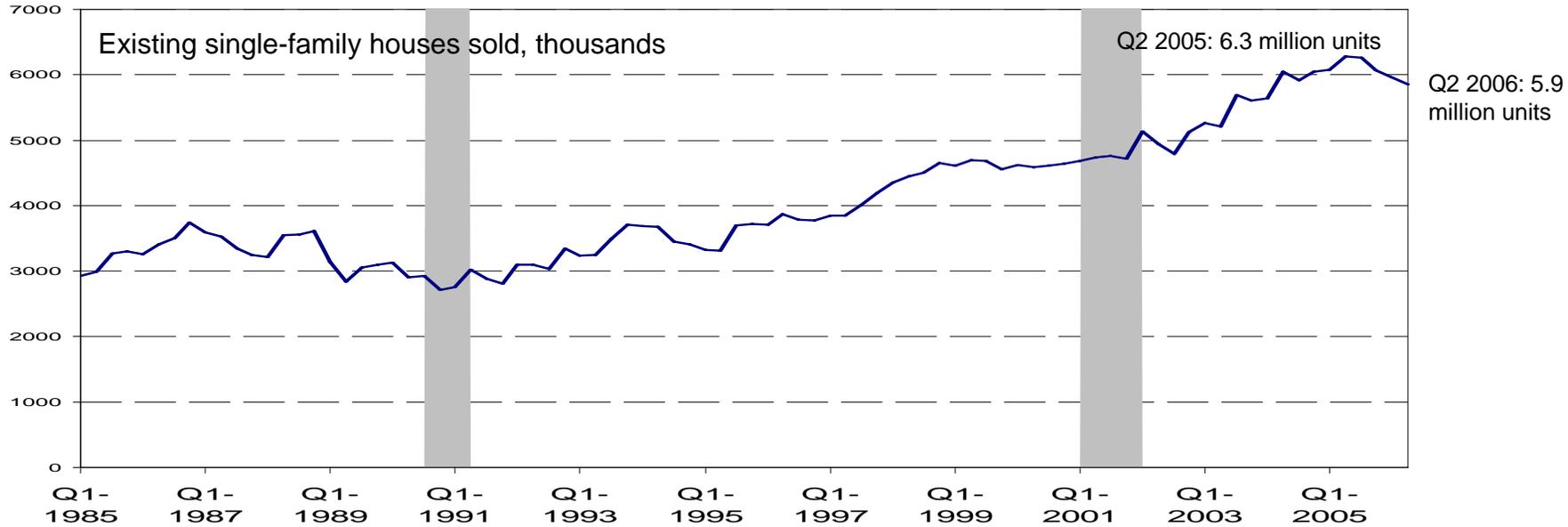
# Overview

- Housing markets have weakened across the nation.
- It is not clear how a “correction” will play out, though a major decline in prices is unlikely.
- New England’s current housing cycle looks similar to national.
- New England population trends pose longer-term risks for housing market.

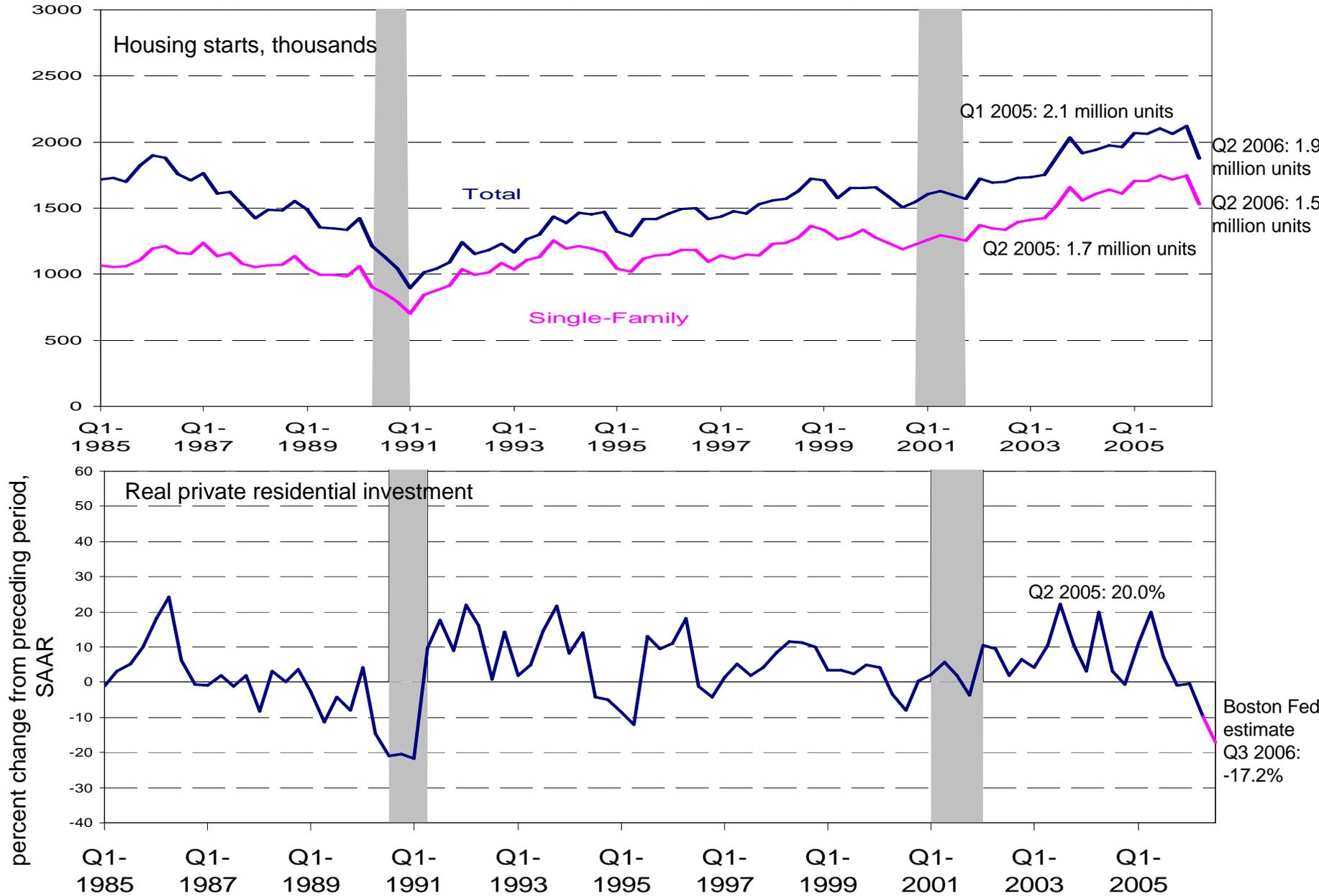
# Nationwide new home sales are down... inventories of unsold homes are rising.



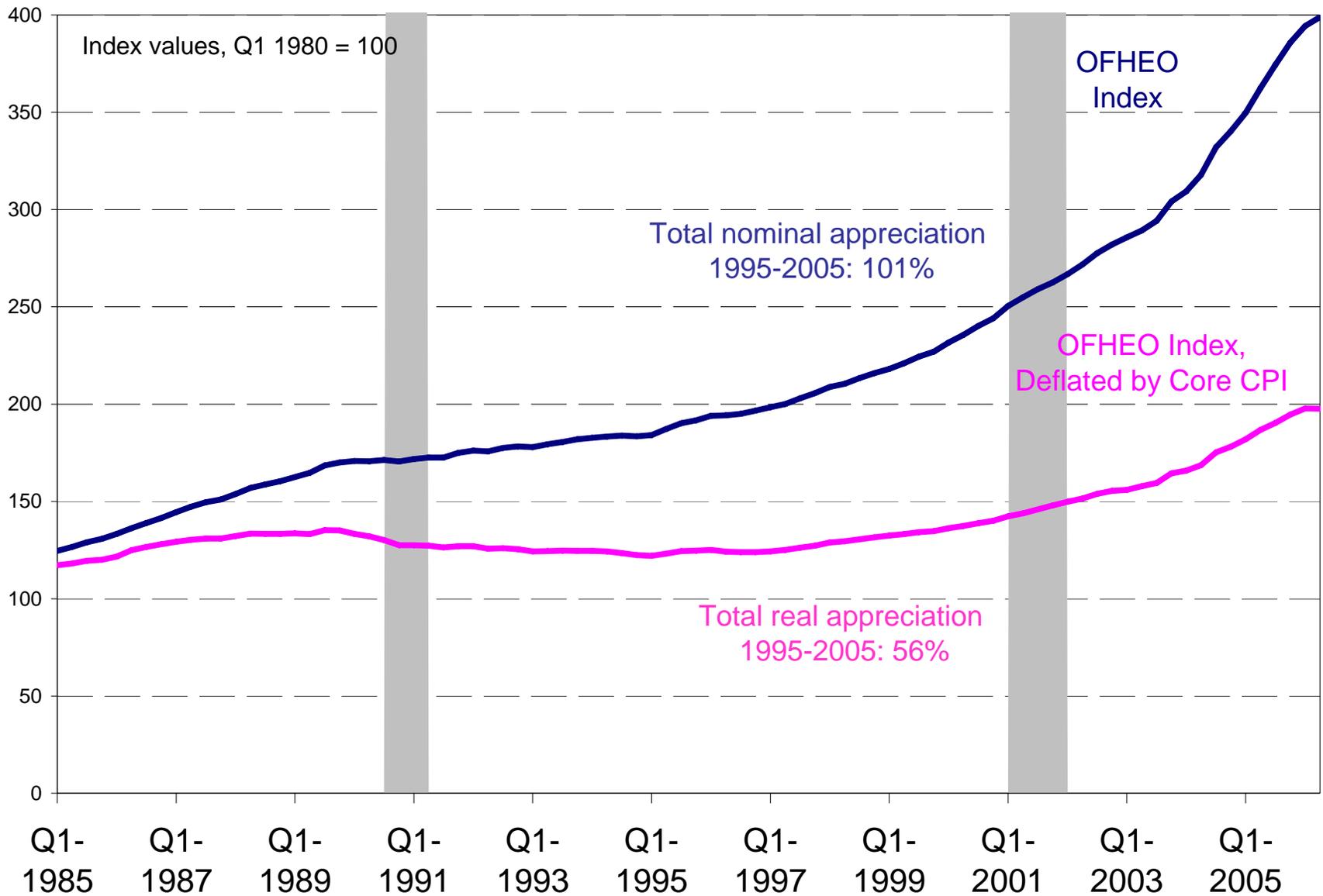
# Sales of existing homes have fallen ... median selling prices have stopped escalating.



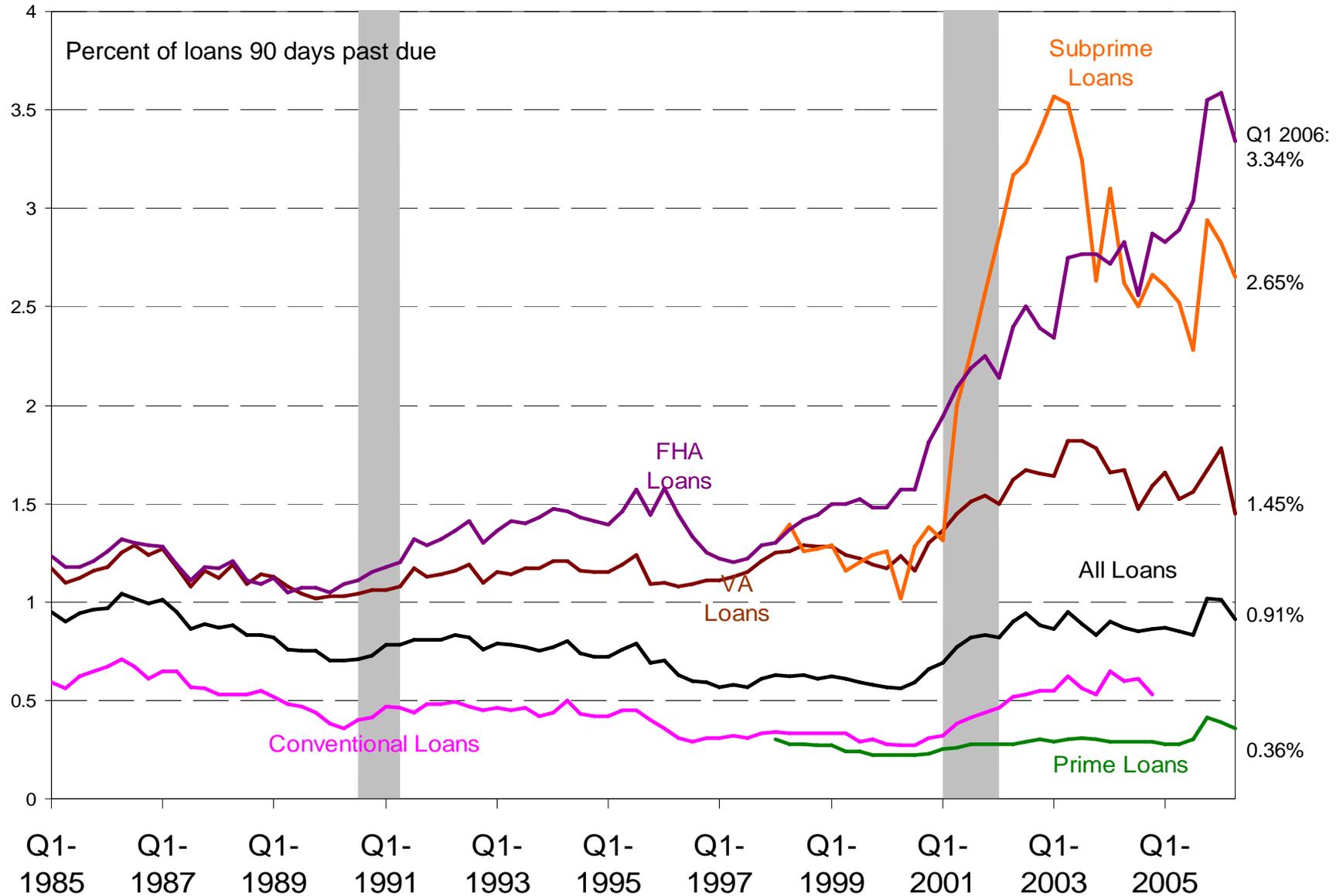
# Home builders are curtailing construction ... overall housing investments are slowing.



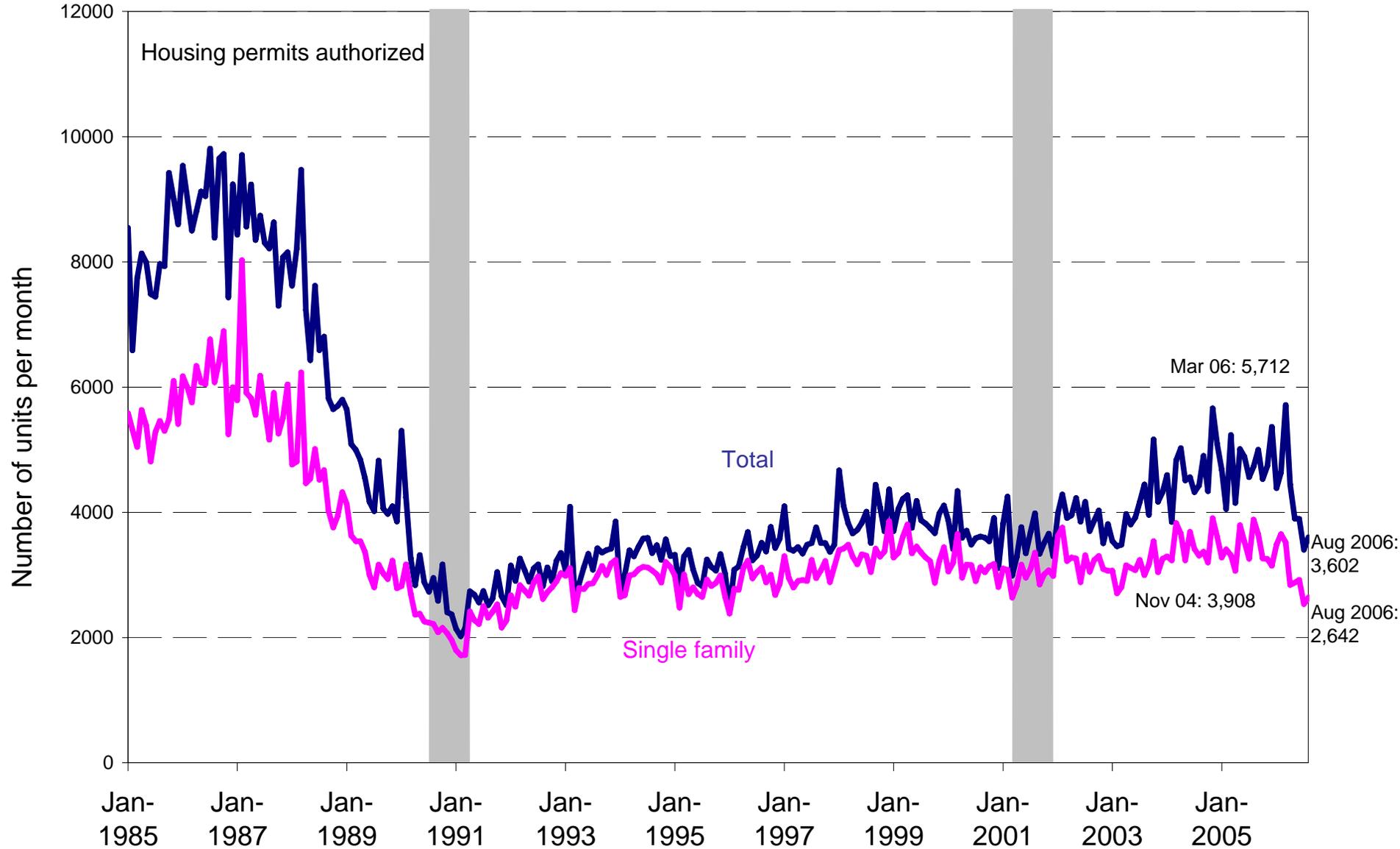
# Housing wealth has stopped increasing.



# Mortgage delinquencies are high in the subprime category.



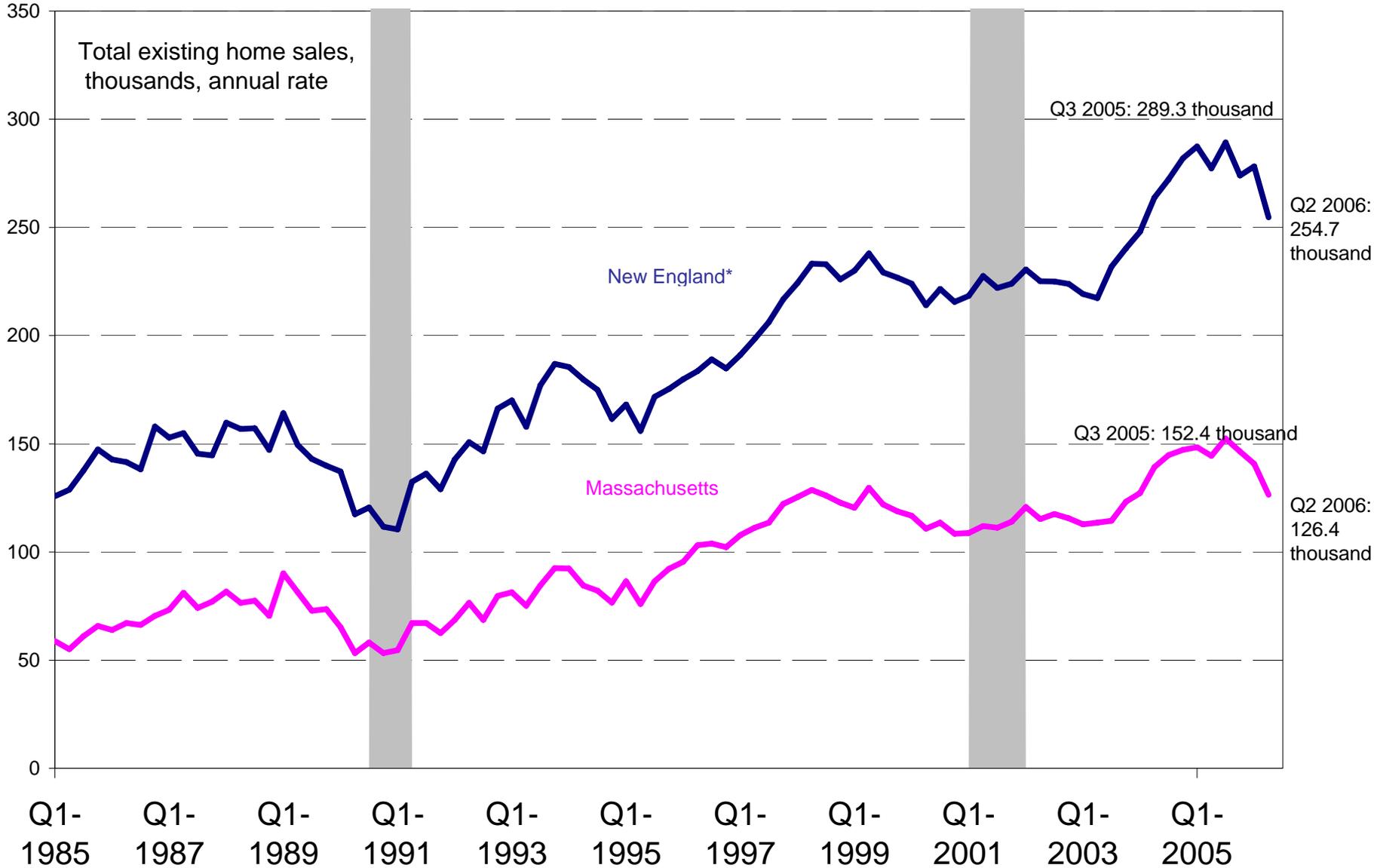
# Housing construction is slowing in New England.



## The number of single-family permits authorized is down in all New England states

	January 2005 - August 2005	January 2006 - August 2006	Percent Change, 2005 - 2006
Connecticut	5,827	4,906	-16%
Maine	5,359	4,687	-13%
Massachusetts	9,320	7,963	-15%
New Hampshire	4,305	3,596	-16%
Rhode Island	1,216	1,062	-13%
Vermont	1,878	1,821	-3%
<b>New England Total</b>	<b>27,905</b>	<b>24,035</b>	<b>-12%</b>
<b>United States</b>	<b>1.2 million</b>	<b>1.0 million</b>	<b>-12%</b>

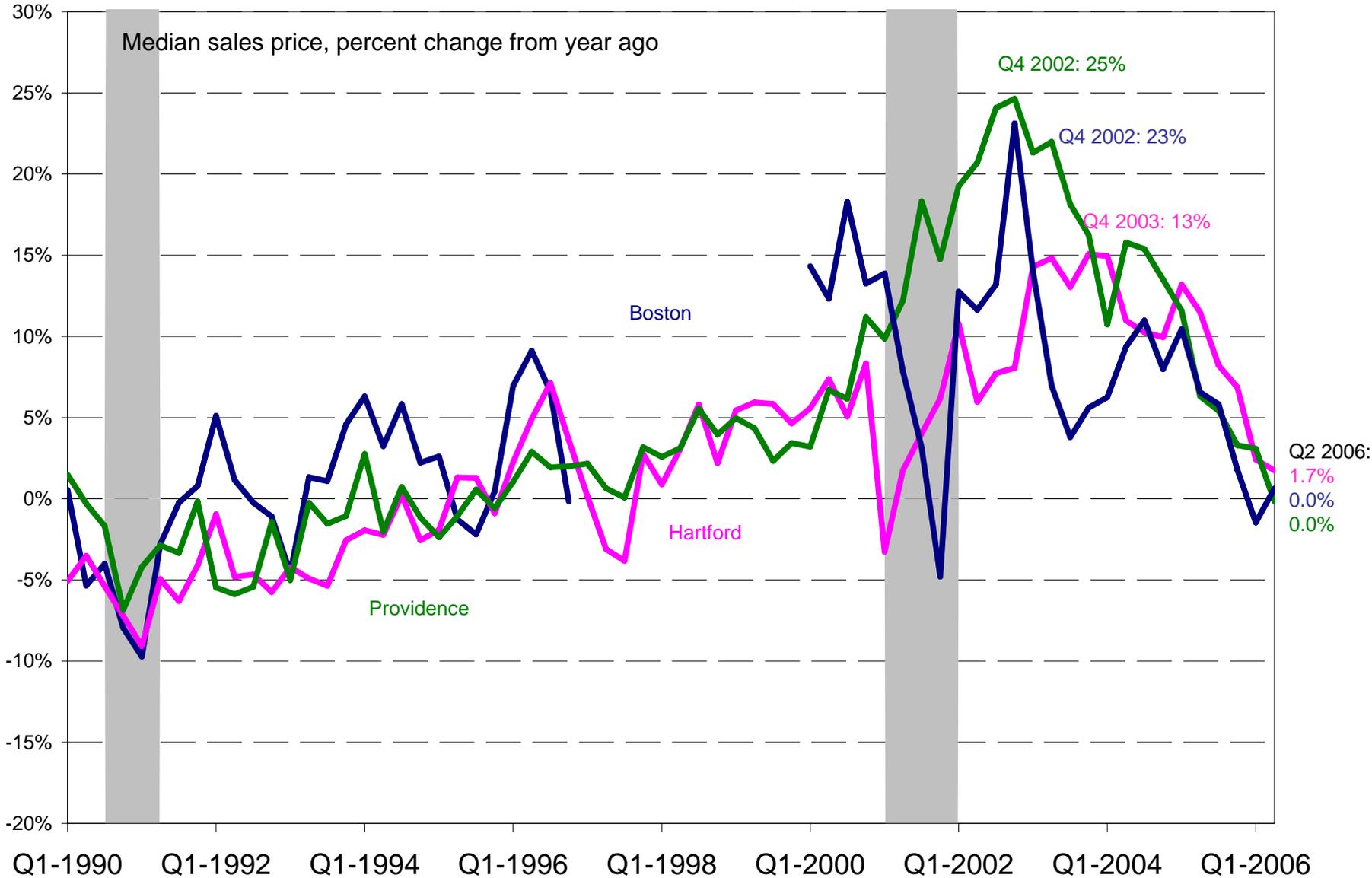
# Existing home sales are falling in New England, especially in MA and RI.



\*New England total excludes New Hampshire and Vermont, as data for these states is not available in all periods.

Source: National Association of Realtors

# Median selling prices are similar to last year's levels.



OFHEO estimates that house prices are now falling in  
Massachusetts, Maine, and the industrial Midwest.

Percent change in OFHEO index,  
Q1 2006 – Q2 2006

States with largest gains		States with largest declines	
Washington	+15.5%	Michigan	-2.8%
Utah	+15.9%	Massachusetts	-1.7%
Idaho	+16.0%	Maine	-0.8%
Oregon	+17.0%	Ohio	-0.2%
New Mexico	+18.0%	Indiana	-0.2%

Some New England states have a large and growing share of subprime loans.

### Subprime loan share of mortgage originations

	2003	2004	Change
Connecticut	10.2%	17.2%	+7.0%
Maine	10.6%	10.7%	+0.1%
Massachusetts	8.0%	15.8%	+7.8%
New Hampshire	9.6%	12.6%	+3.0%
Rhode Island	14.0%	25.3%	+11.3%
Vermont	4.5%	8.0%	+3.5%
United States	9.9%	14.8%	+4.9%

# Why is the national housing market correcting?

Two views:

#1 Prices got too high relative to incomes.  
Housing bubbles have to burst.

#2 Prices rose because interest rates got so low.  
Now interest rates have risen.

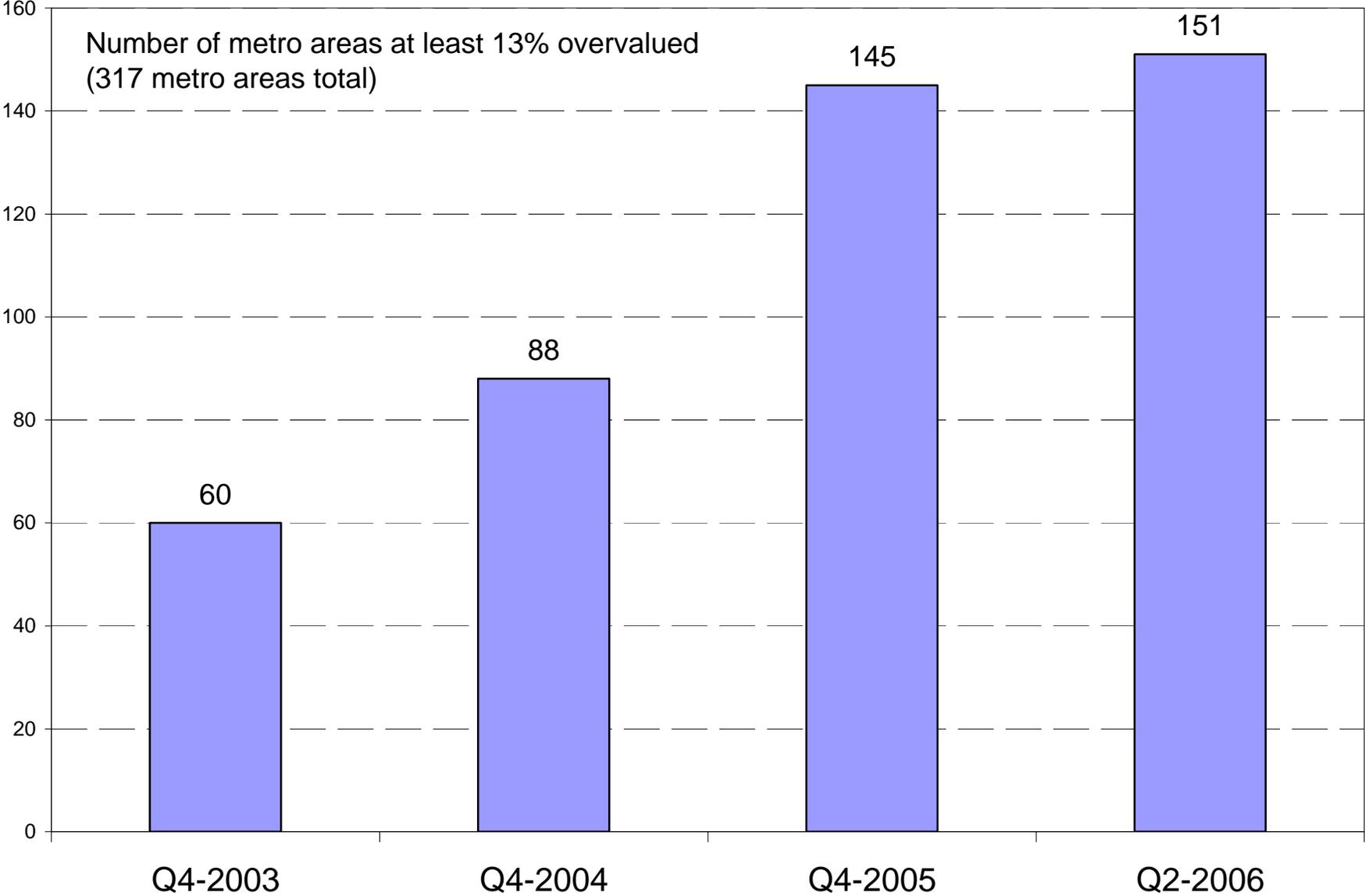
# #1 The housing bubble story

- Assumes that economic fundamentals explain house-price-to-income ratios over long stretches of time.
- Fundamentals include mortgage rates, incomes and employment, building costs & constraints, amenities.
- Average house-price-to-income ratios can differ across cities.
- For any given city, big gap between actual house prices and fundamentals-based prices indicates overvaluation.
- Sustained overvaluation  housing bubble.

# #1 The housing bubble story (continued)

- Timing of the bubble bursting is unpredictable.
- Decrease in housing sales volume is a leading indicator.
- Eventually, sellers adjust their price expectations downward to match what buyers are willing to pay.
- House prices stagnate or fall.

# About one-half of all metro areas are overvalued, according to National City.



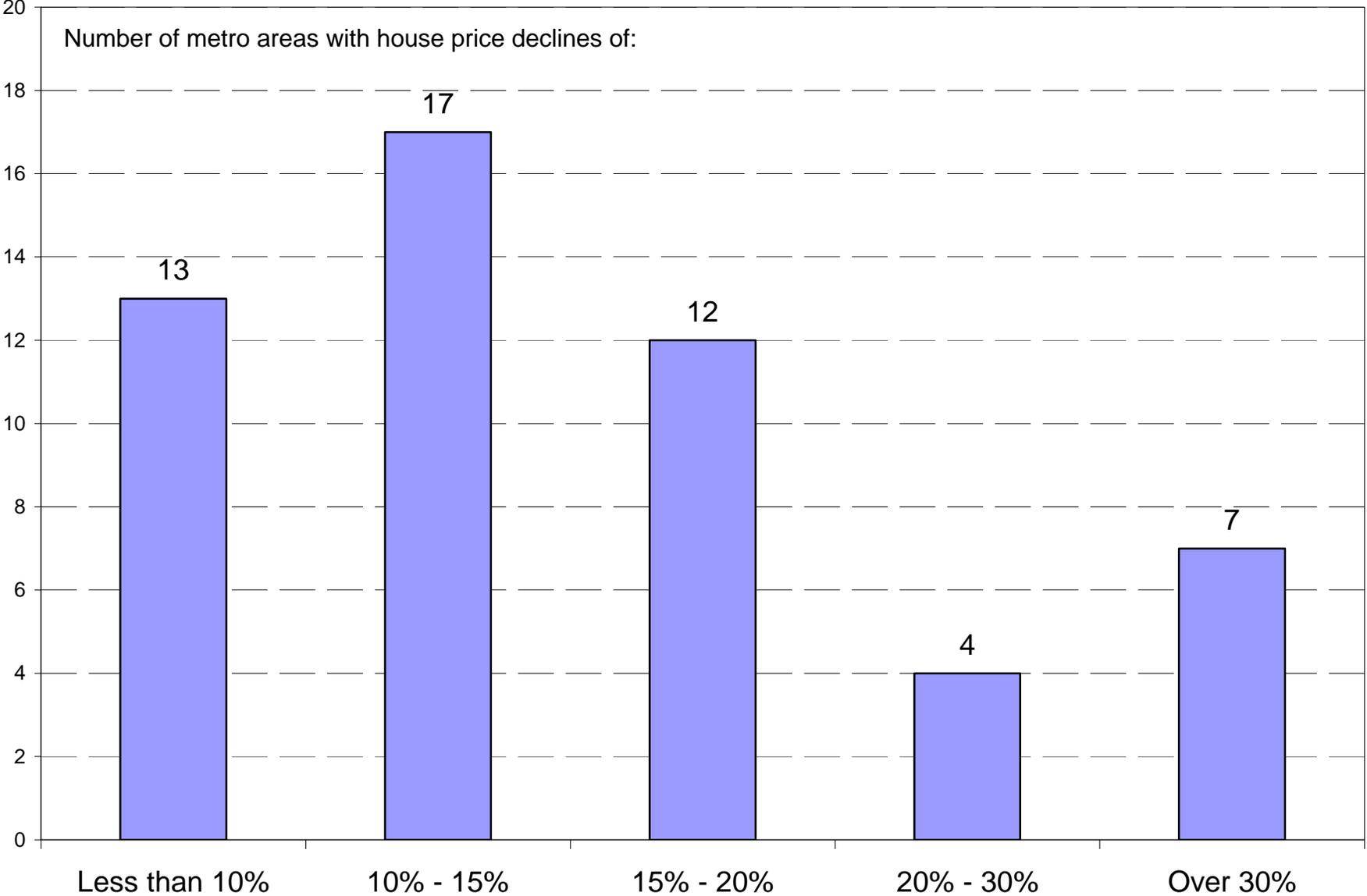
Source: National City Corporation.

## California and Florida have many severely overvalued markets, according to National City.

- Of the 60 metropolitan areas with overvaluation  $\geq$  40 percent:
  - 26 are in California
  - 14 are in Florida
  - 20 are in other parts of the U.S. (including 5 in the Northeast)
  - 0 are in New England
- Overvaluation among New England metropolitan areas is mixed:

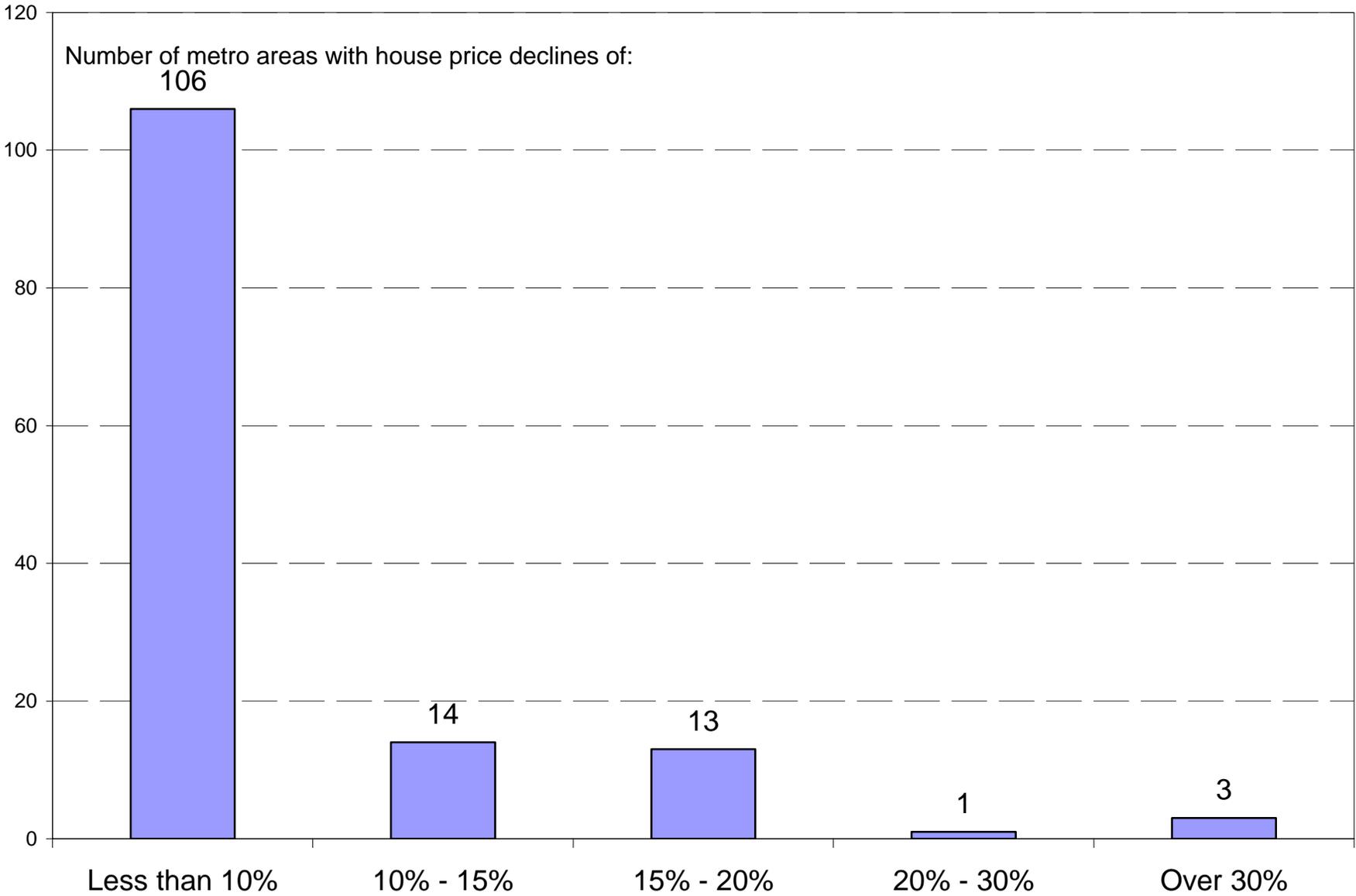
Barnstable, MA	34.7%	Springfield, MA	18.2%
Providence, RI	29.5%	New Haven, CT	14.6%
Worcester, MA	27.0%	Boston, MA	5.7%
Manchester, NH	21.5%	Hartford, CT	5.5%

51 metro areas were overvalued by more than 30% at some time during 1985 – 1995.  
Almost ALL experienced a significant price decline.



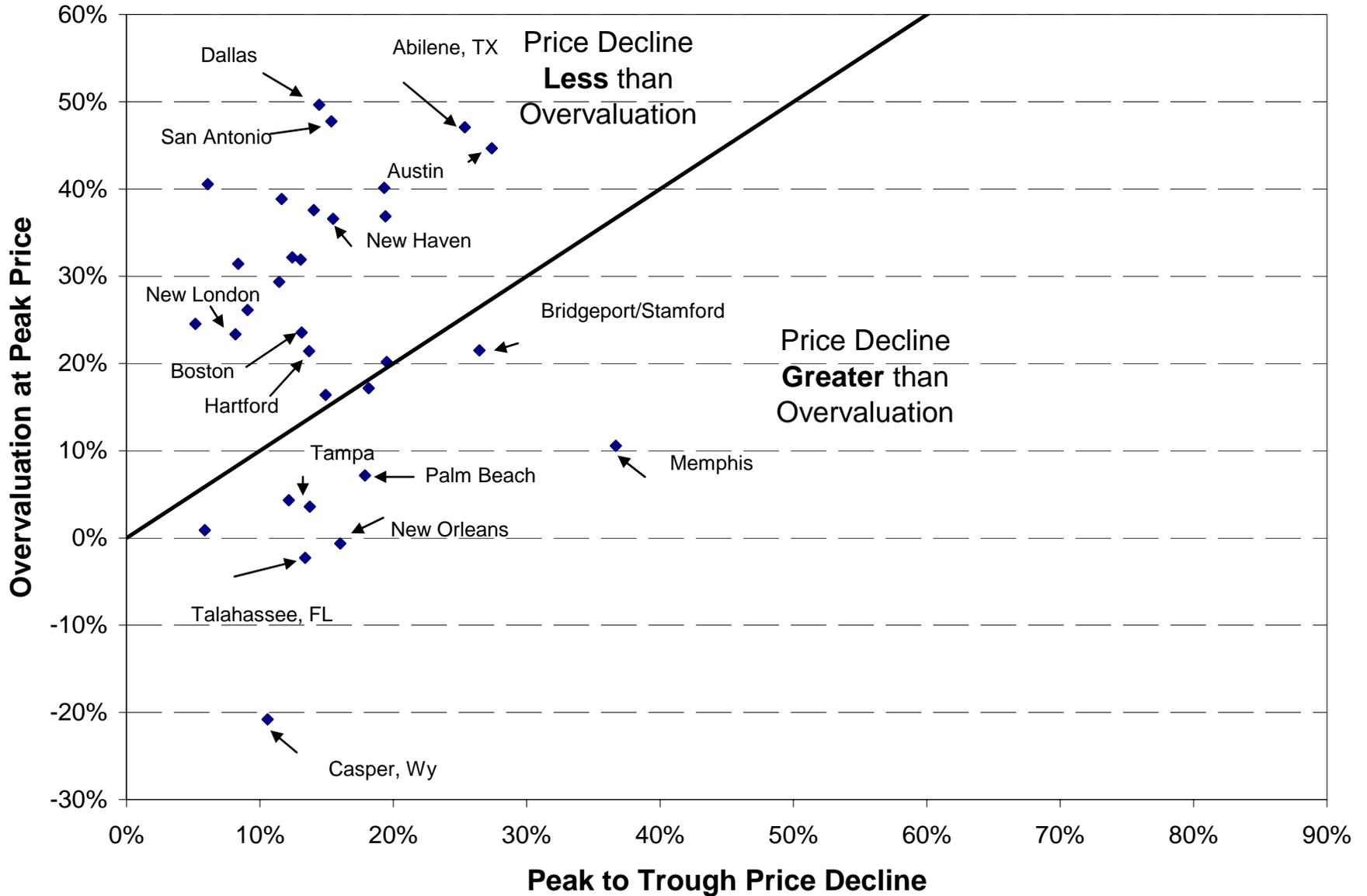
Source: National City Corporation.

134 metro areas were overvalued by between 13% and 30% at some time during 1985–1995.  
106 experienced NO significant price decline.



Source: National City Corporation.

House prices usually fell by LESS than estimated overvaluation in the 1980s.



## #2 The interest rate story

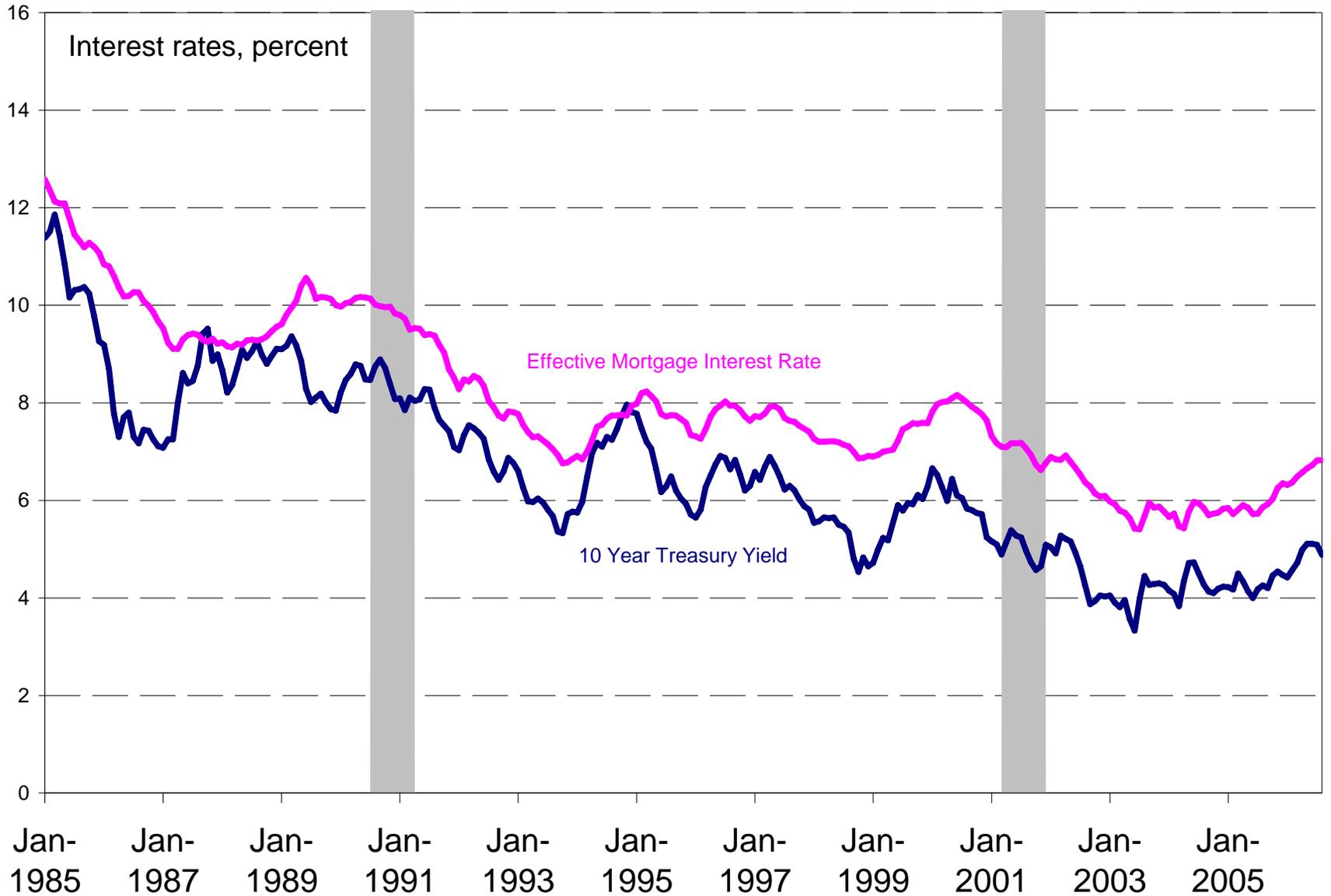
- Backs out equilibrium price of owner-occupied housing, based on likely returns.
- Key determinants include interest rates, rents for comparable units, tax laws, reasonable estimates of capital gains.
- House prices can differ across cities.

(continued)

## #2 The interest rate story (continued)

- For any given city, big gap between actual and equilibrium prices indicates one of two things:
    - People using flawed information
- OR
- People's decisions based on factors that economic models don't include
- Eventually, house prices return to equilibrium.

# Interest rates got very low in the early 2000s and lenders offered new mortgage products



Careful study by Himmelberg-Mayer-Sinai concluded that house prices in most markets are not much higher than equilibrium levels.

- In Q4 2003, only 4 metro areas (out of 47 total) had an “imputed rent” on owner-occupied housing greater than prevailing market rents.
- By Q4 2005, 26 metro areas were overvalued by this measure.
- However, very few markets were severely overvalued.

Overvaluation in Q4	
2005	Number of metros
Less than 10%	11
10% - 15%	4
15% - 20%	5
Over 20%	6

Increase in interest rates puts downward pressure on prices.

- But, as in the housing bubble story:

Timing is unpredictable

Decrease in home sales is a leading indicator

Eventually, sellers adjust their prices to match what buyers are willing to pay

House prices stagnate or fall

- So our housing market data don't tell us which model is correct!

House price declines are correlated with recessions.

1980s case study of 41 state house price booms:

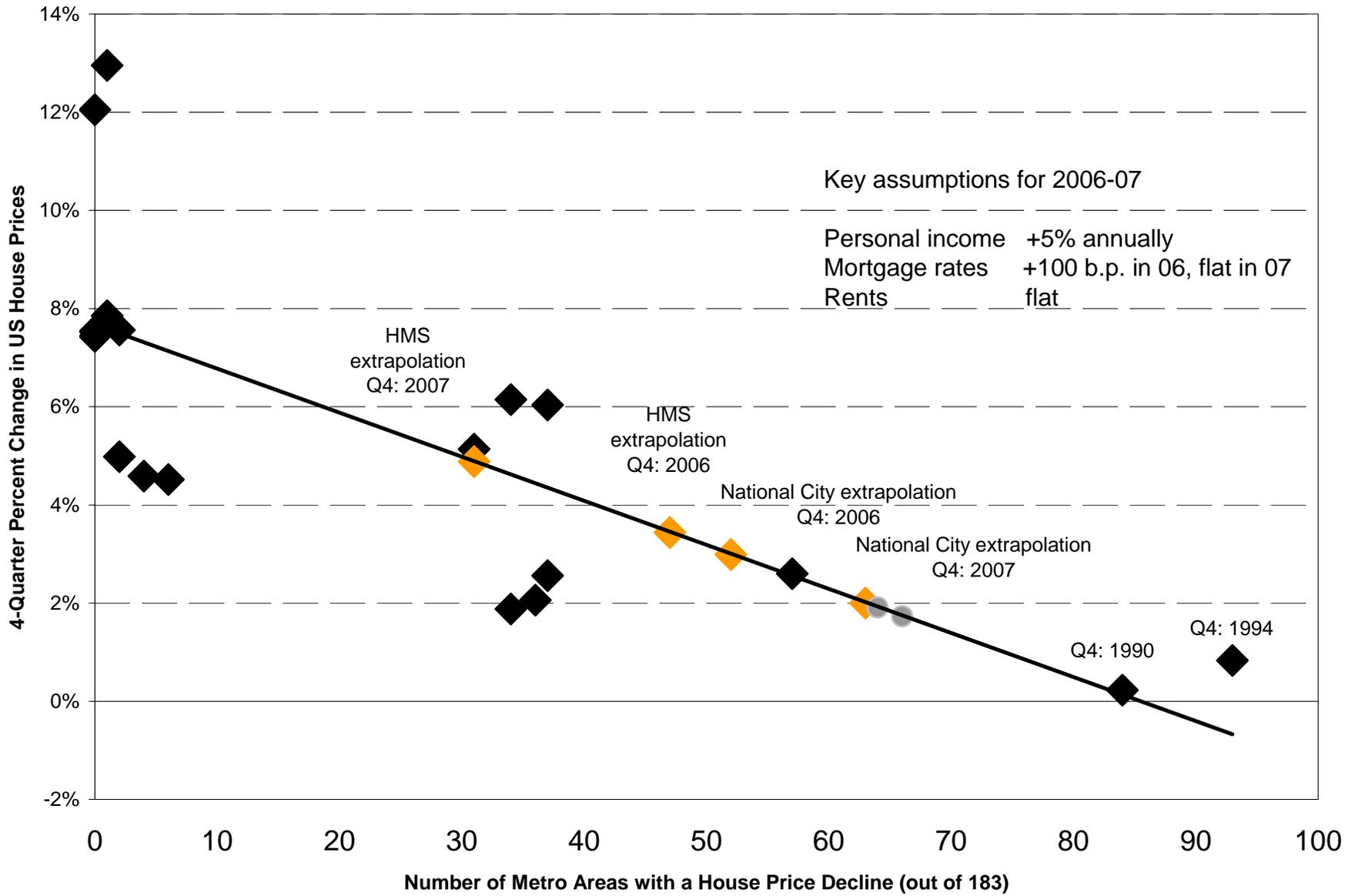
15 states had a recession

In 13, house prices fell.

26 states had no recession

House prices fell in only 7.

# Combining and extrapolating: National home prices likely to be flat in 2006, rise modestly in 2007

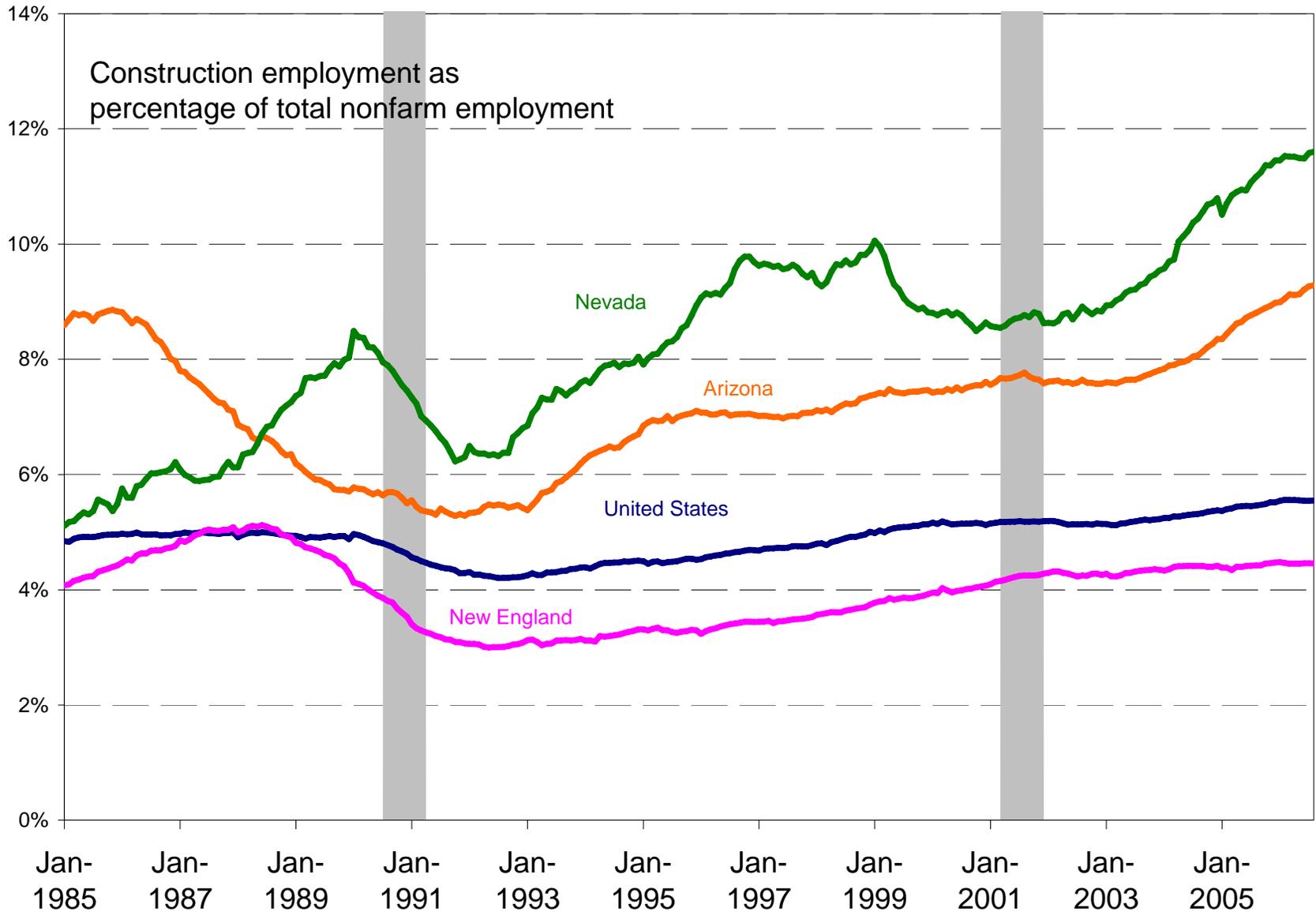


Source: Kodrzycki and Gerew "Using State and Metropolitan Area House Price Cycles To Interpret the U.S. Housing Market ," forthcoming.

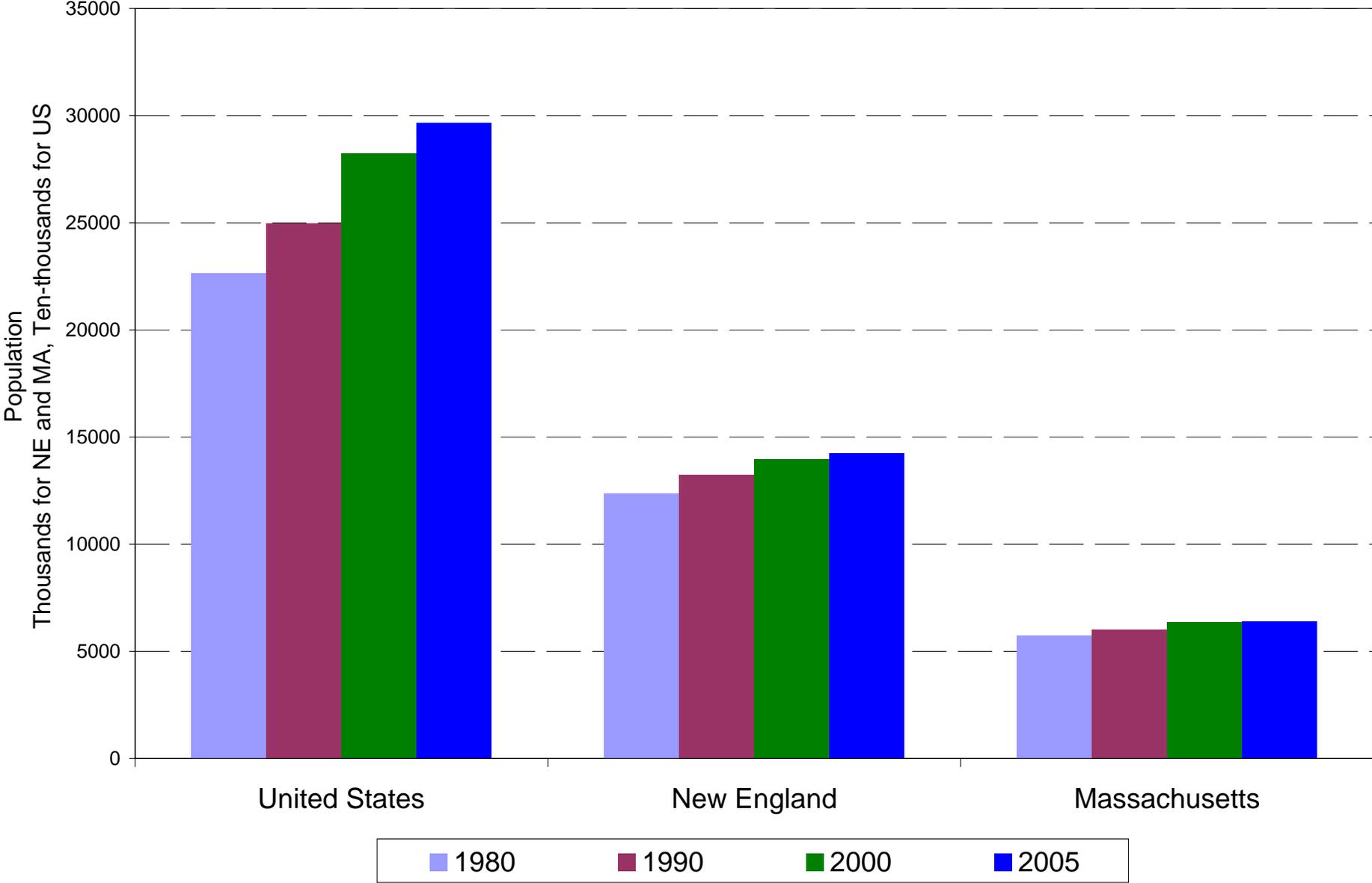
# How about New England housing markets?

- Overvaluation measures not out of line here, as they were in the 1980s.
- Interest rate movements same as national.
- Economy and demographics different from national— both plusses and minuses.

# Fortunately, construction is not a major driver of the New England economy



# Slow regional population growth limits demand for housing.



Source: Bureau of the Census.

High presence of baby-boomers poses risks over the coming decade.

Share of population ages 45 to 64 years old:

United States: 25.0%

New England: 27.0%

- Move to smaller living quarters and retirement locations— spread out over time?
- More patient sellers— less panic selling?
- Risk: Will young adults want to locate here?

# Conclusions

- A housing correction is happening nationwide, damping economic growth.
- House prices are inherently hard to predict.
- A best guess is flattening prices, although some markets will likely see a drop. New England is not especially “out of line.”
- New England’s differences from the nation:
  - Construction is not a big driver of the regional economy.
  - Slow population growth limits demand and poses some risks ahead.
- Keep your eyes on the rest of the economy!