

2009 WFE Meeting

May 5, 2009

Lynn Michaelis

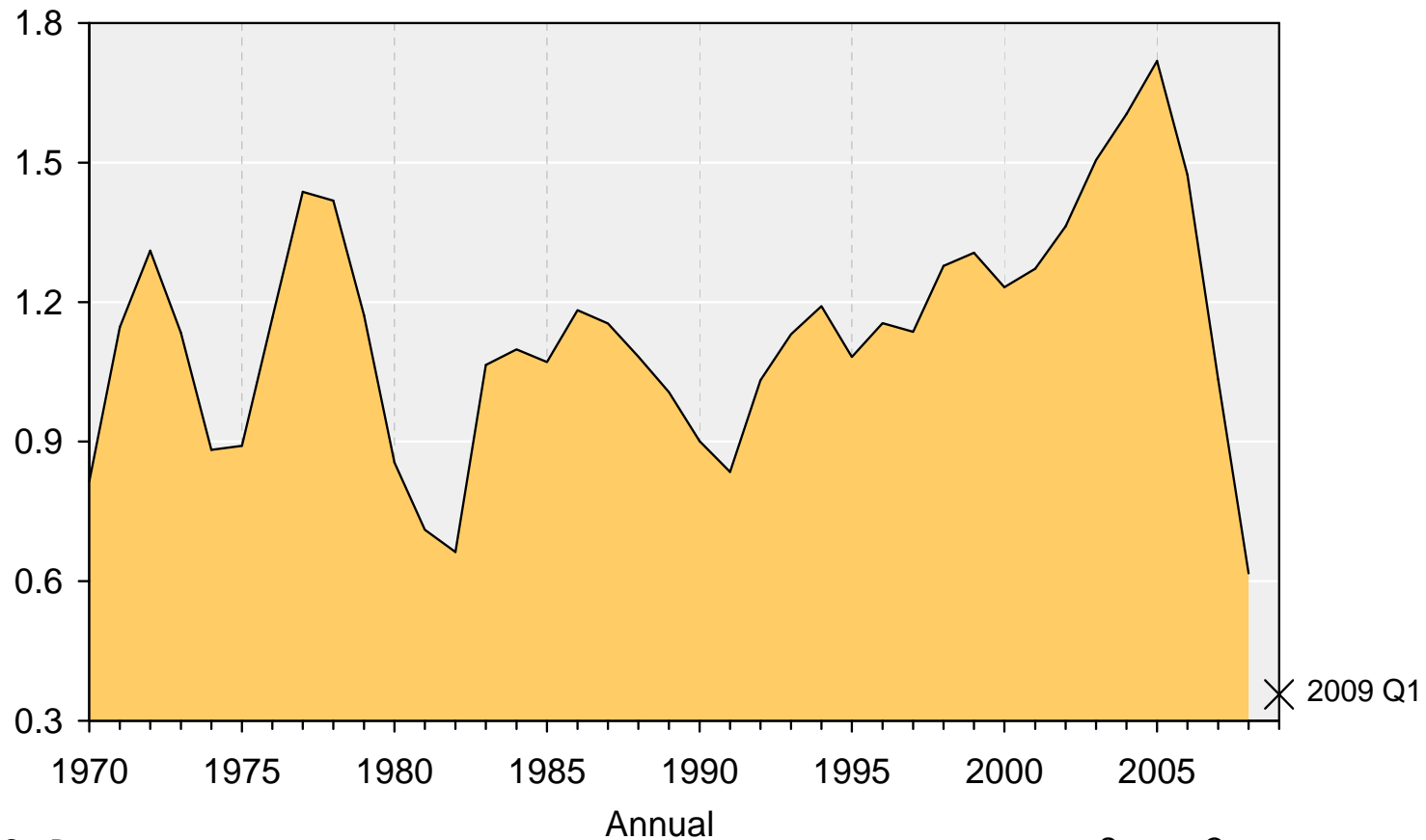


My history: The pathway to forecasting humility!!! May 2009



U.S. Single-family Housing Starts

Million Units



AMDHO55B

Source: Census

Discussion topics for today

May 2009



- Understand what happened: unique situation
- Prospects for national starts: slow rebound
- Long term outlook: very optimistic

Became concerned about hidden inventory

March 2009



- Started to ask management to think about what if scenarios in 2004
- Each year became more concerned about the “hidden inventory” and a housing price bubble
 - Investors
 - Buyers that would not

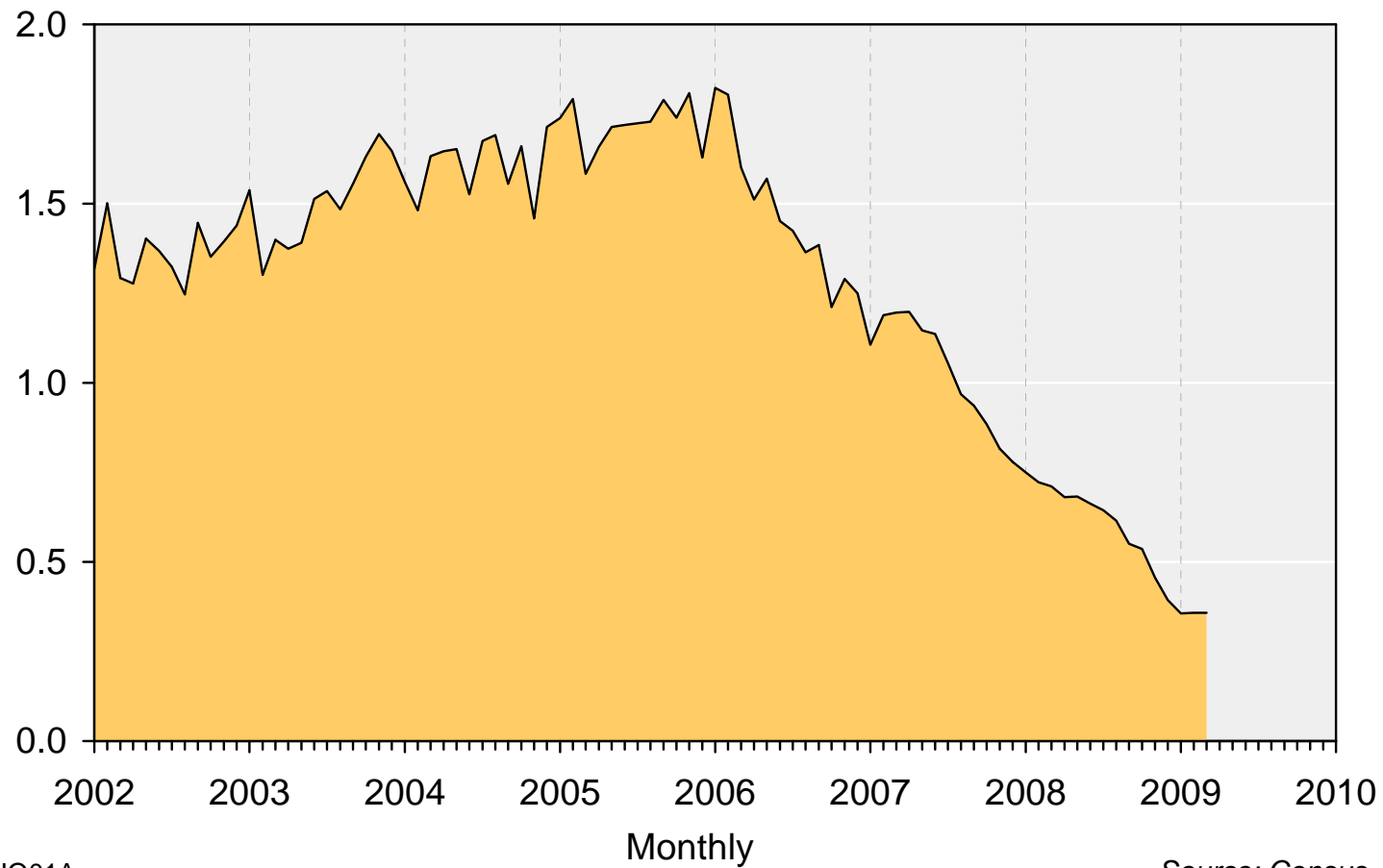
Fell even further than low scenario

May 2009



U.S. Single-family Housing Starts (Seasonally Adjusted Annual Rate)

Million Units



MMDHO01A

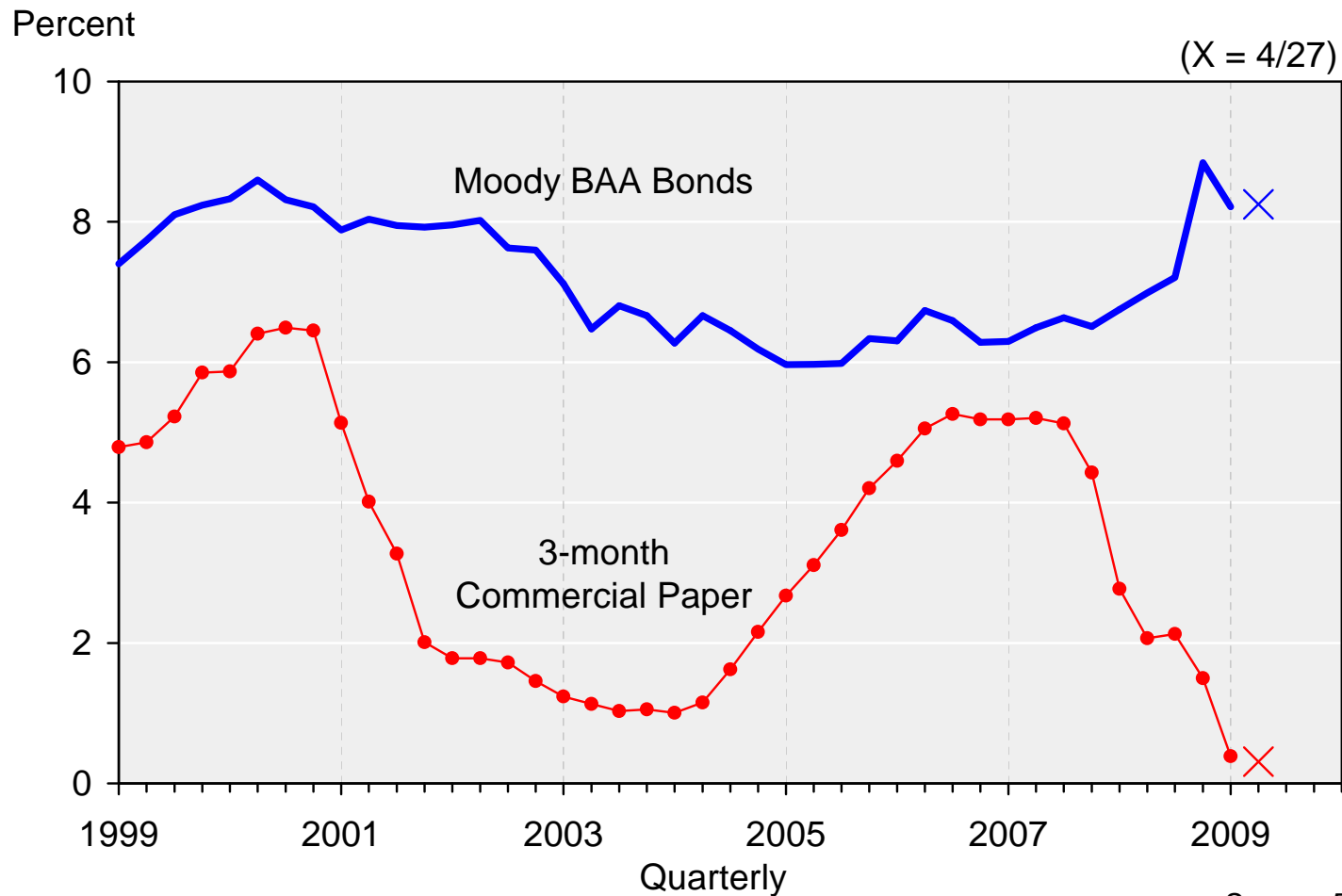
Source: Census

Federal Reserve actions were crucial to the "bubbles"

May 2009



U.S. Interest Rates



QMDIR52A

Source: FRB

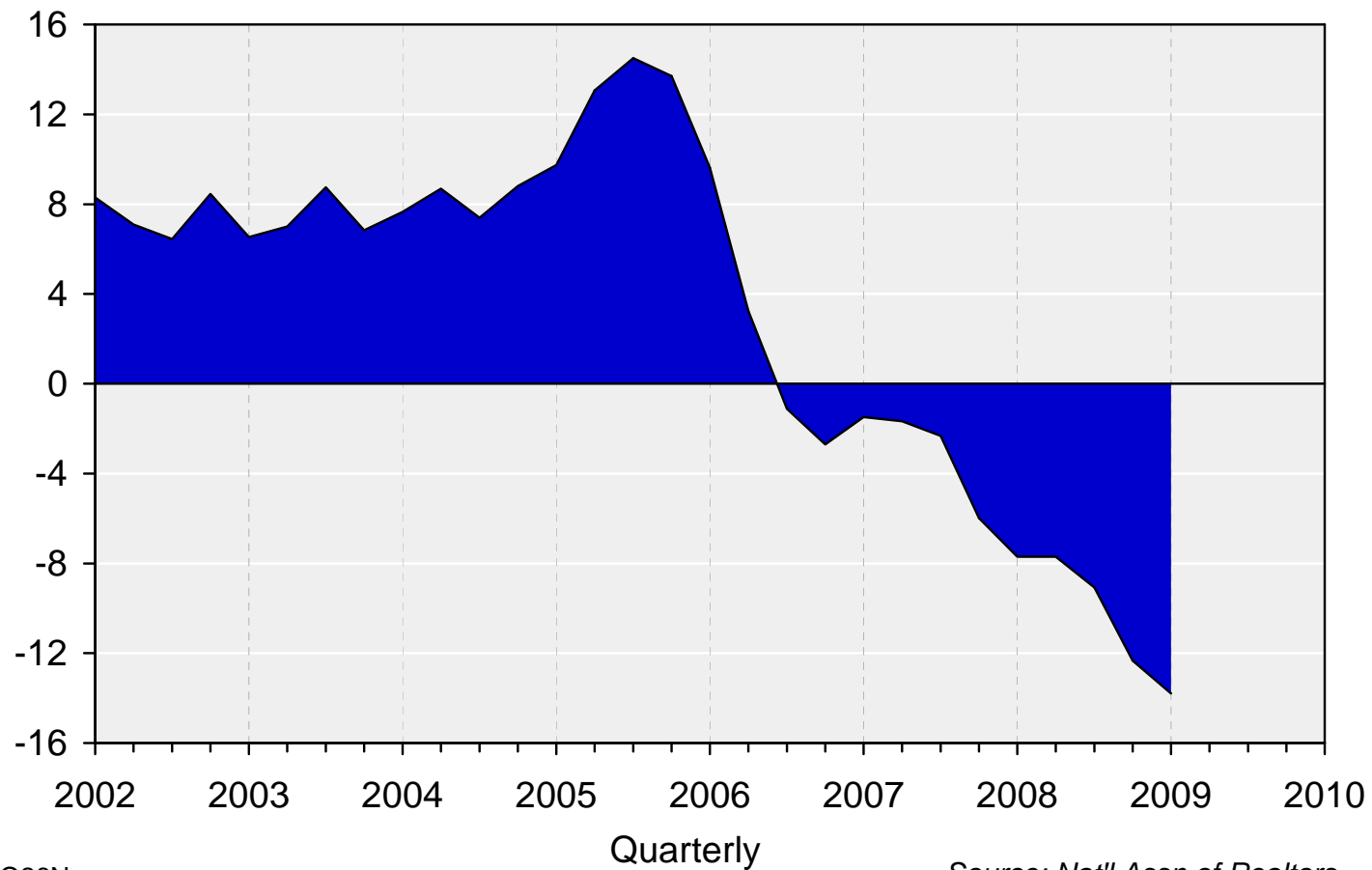
Decline in home prices triggered financial crisis but was just the tip of the iceberg

May 2009



Growth in Median Price for Existing Single-family Homes

% Change Year Ago



QMDHO26N

Source: Nat'l Assn of Realtors

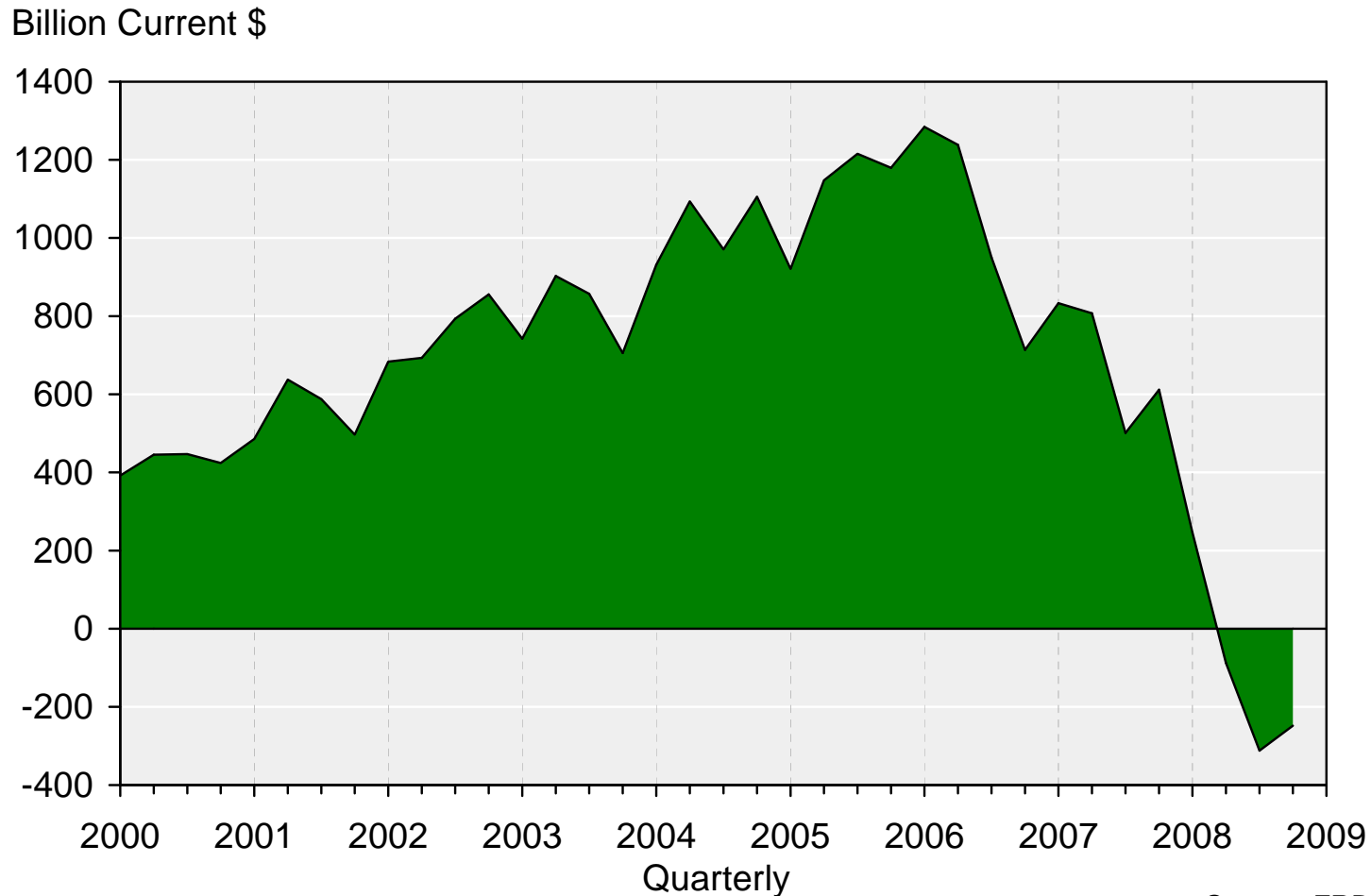
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Boom/bust in mortgage flow

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Net Flow of Home Mortgages (Seasonally Adjusted Annual Rate)



QMDIR07B

Source: FRB

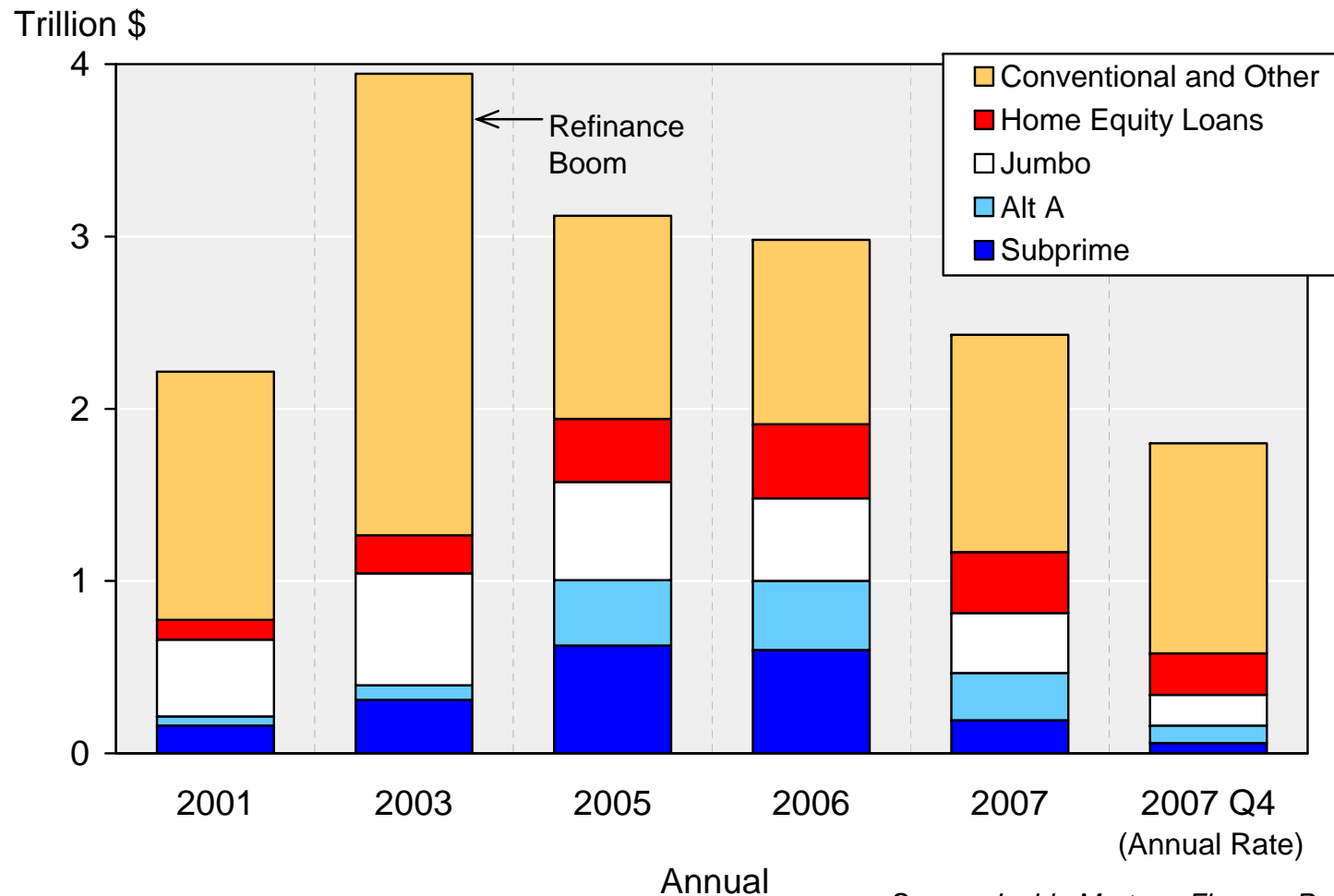
7

Quality fell rapidly to sustain high level of placements

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Mortgage Originations by Product



AMDIR50B

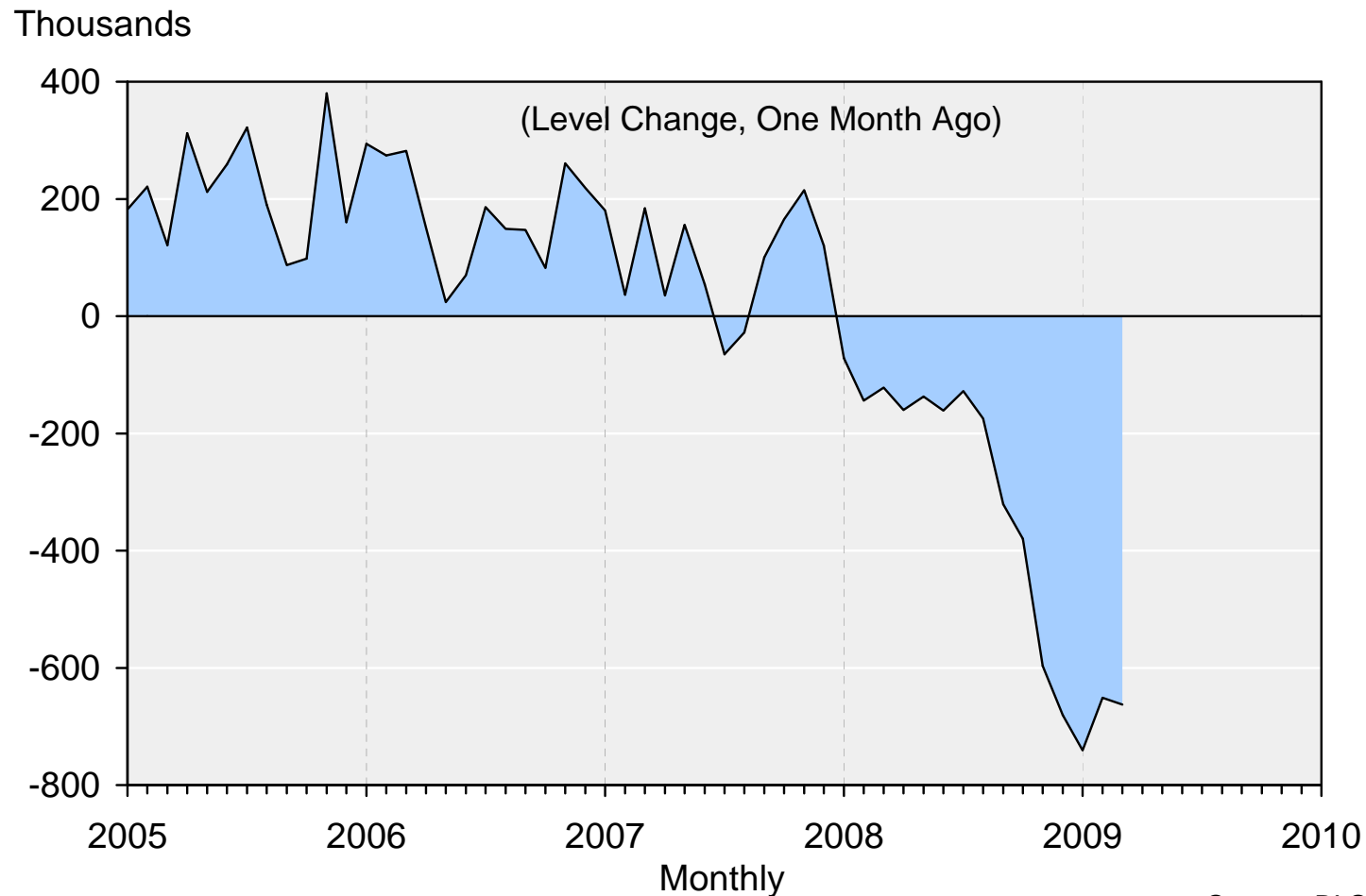
8

Job losses accelerated in second half

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Level Change in U.S. Non-Agricultural Employment



MMDOT02E

Source: BLS

9

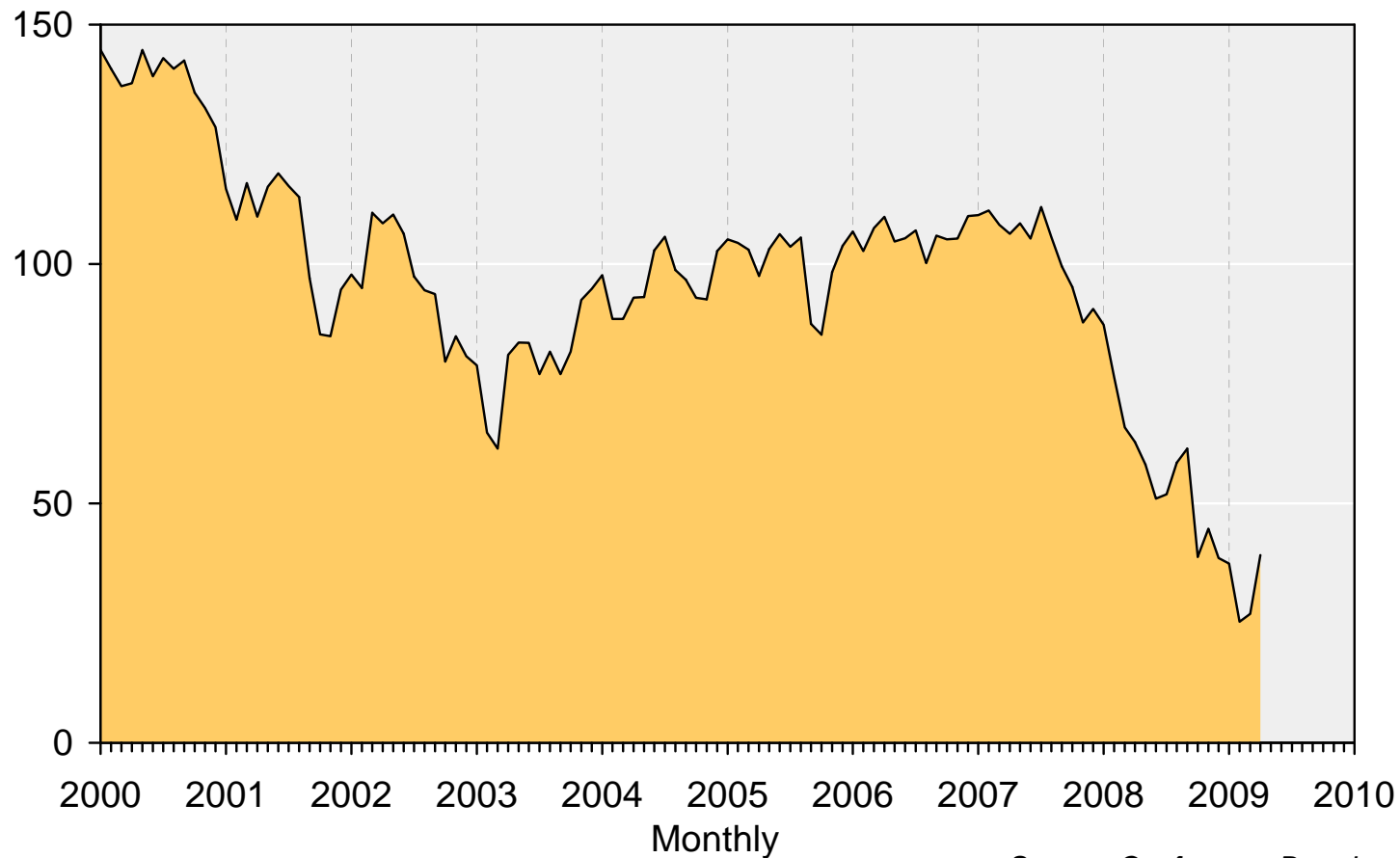
Pushed consumer confidence to record low

May 2009



U.S. Consumer Confidence

Index 1985=100



MMDOT08A

Source: Conference Board

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Problem this time: finding source of turnaround

May 2009



- Usual interest rate-sensitive sectors will not respond as usual
 - Durables: Autos, furniture, etc.
 - Housing starts—single or multi family
 - Non-res construction—lagging more than usual
- Net exports is still a hope, but...
 - Rapid drop in global growth
 - Plus rebound in dollar value—important to lumber, OSB and pulp

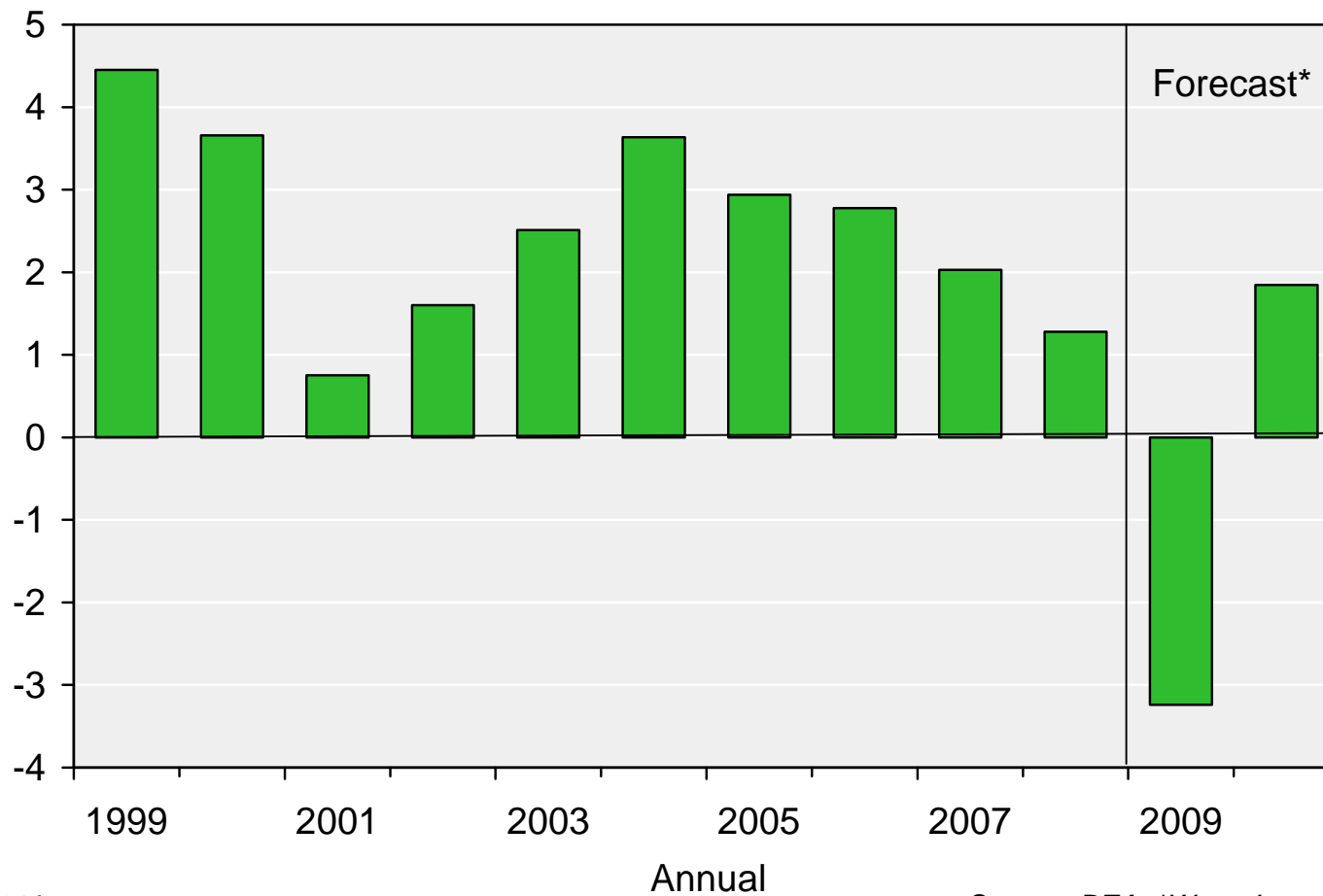
Worst recession since 1982—still downside for this year

May 2009



Growth in U.S. Real GDP

Percent Change



AMDGA01A

Source: BEA, *Weyerhaeuser

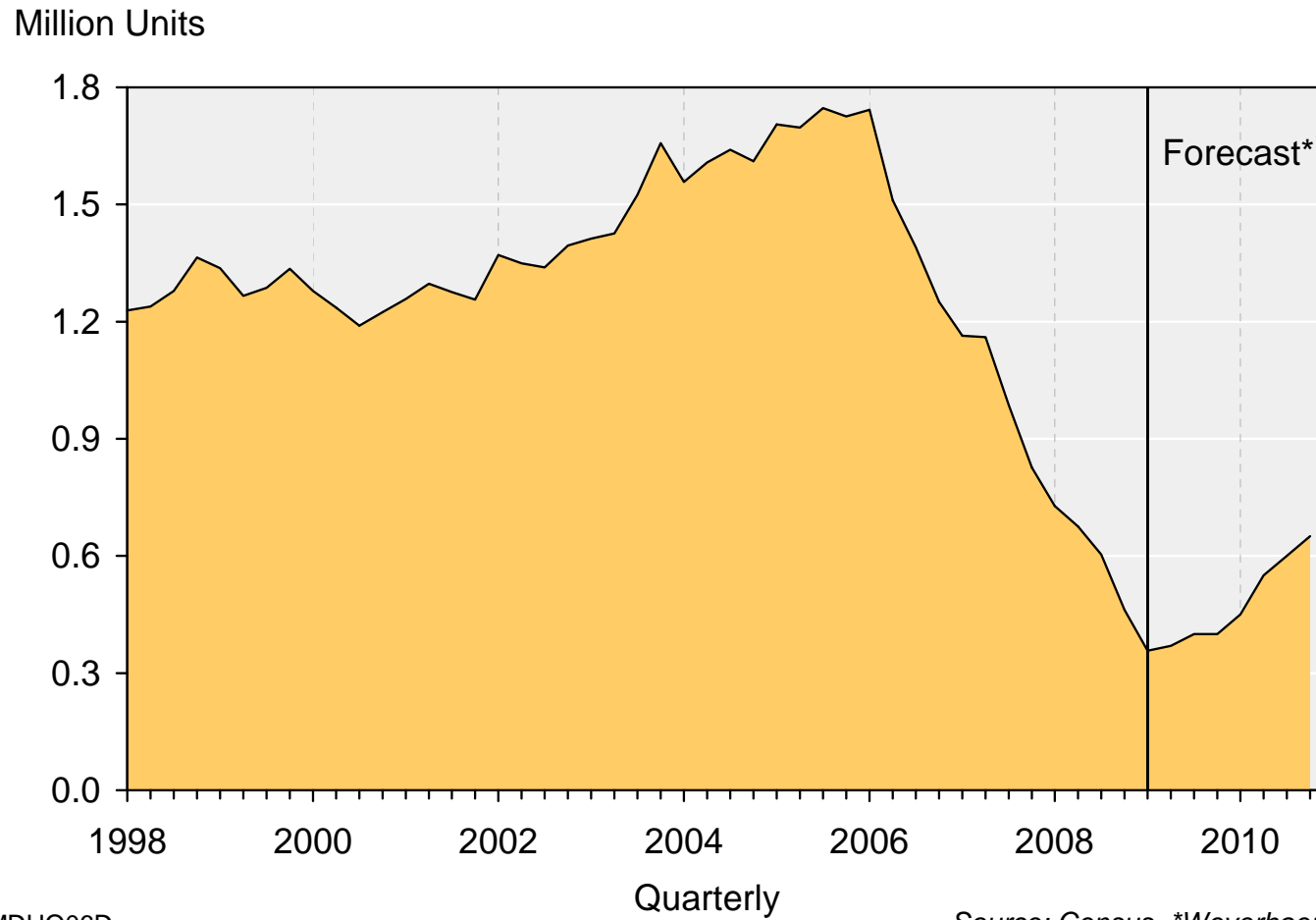
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Turning to key driver for wood products

May 2009



U.S. Single-family Housing Starts (Seasonally Adjusted Annual Rate)



QMDHO06D

Source: Census, *Weyerhaeuser

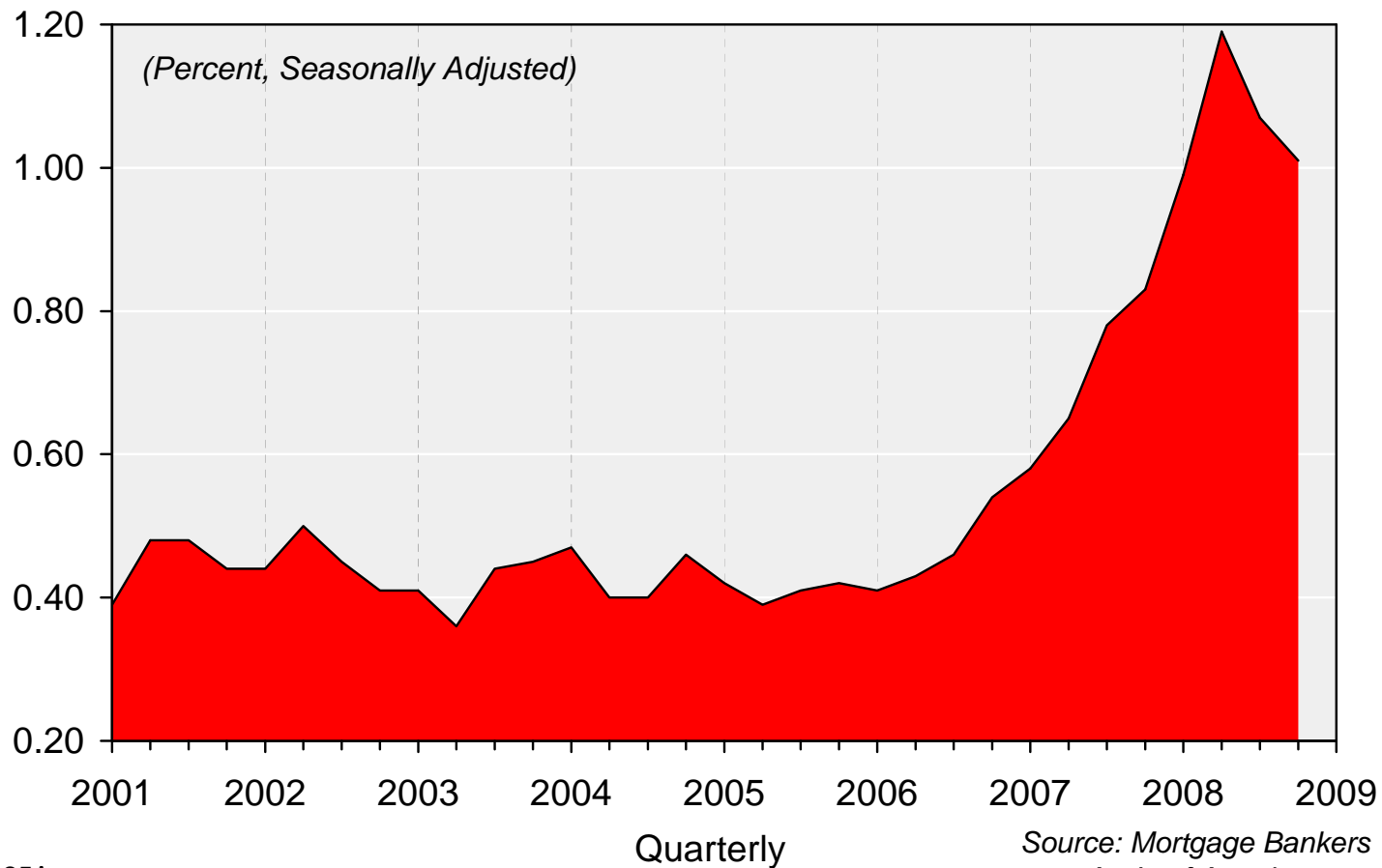
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Reason #1: Foreclosure drive prices lower and add to inventory of unsold units

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Foreclosure Started During Quarter All Loans



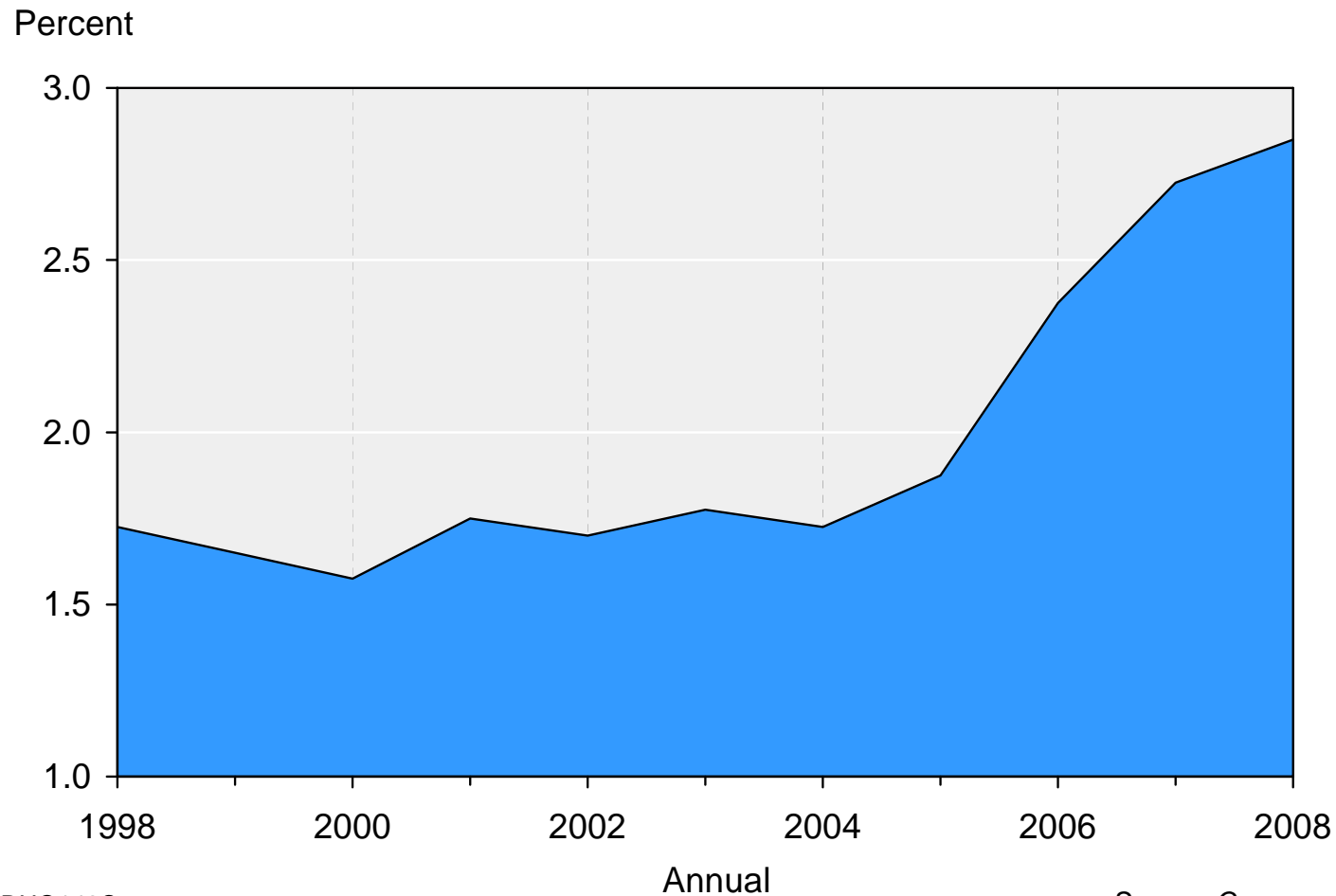
QMDIR25A

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One input to our housing outlook: Vacant units May 2009



Vacancy Rate in Homeowner Units Total U.S.



AMDHO142C

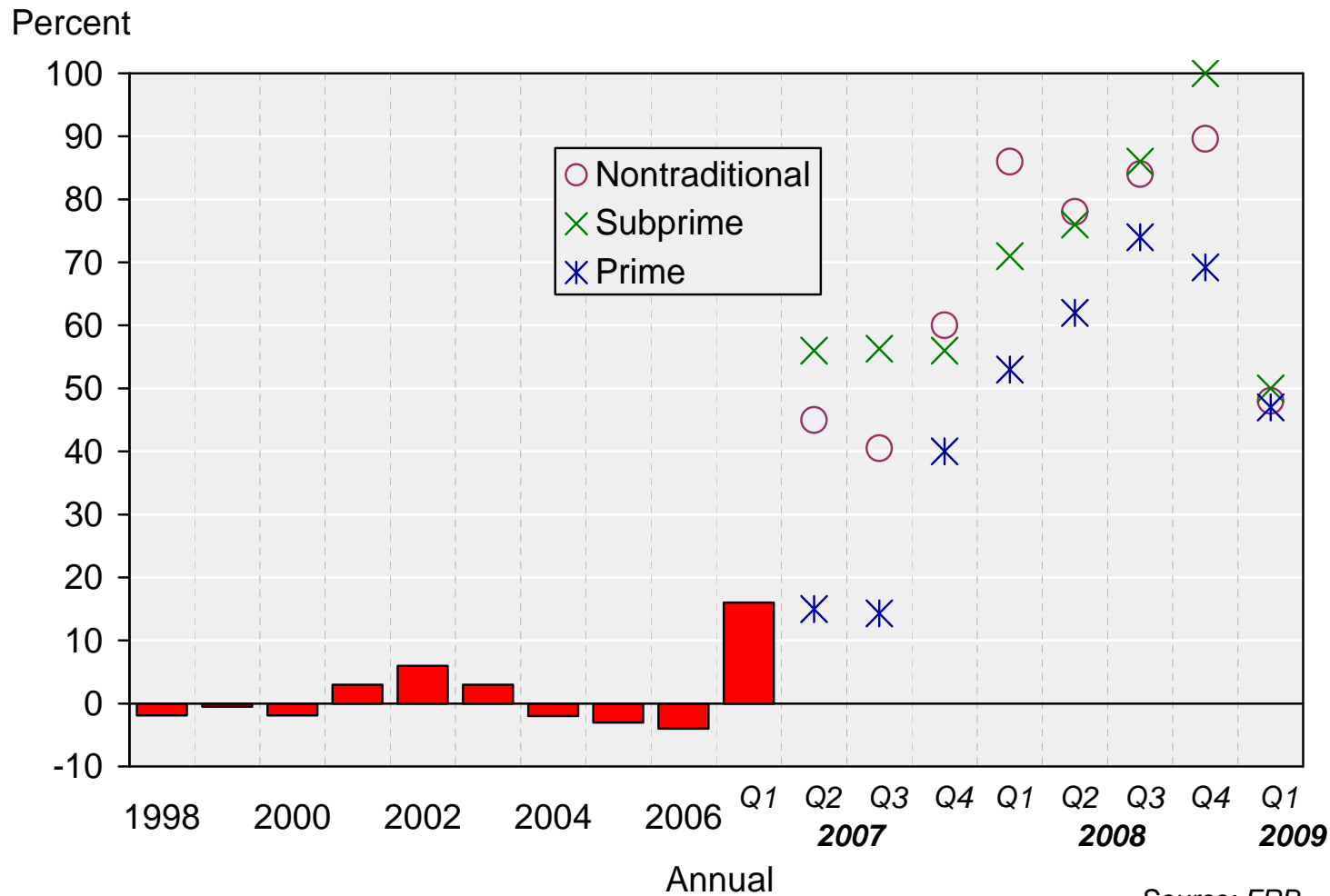
Source: Census

Reason #2: Lending standards limit potential buyers

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Net Percentage of Banks Tightening Standards for Mortgages



AMDIR113C

Source: FRB

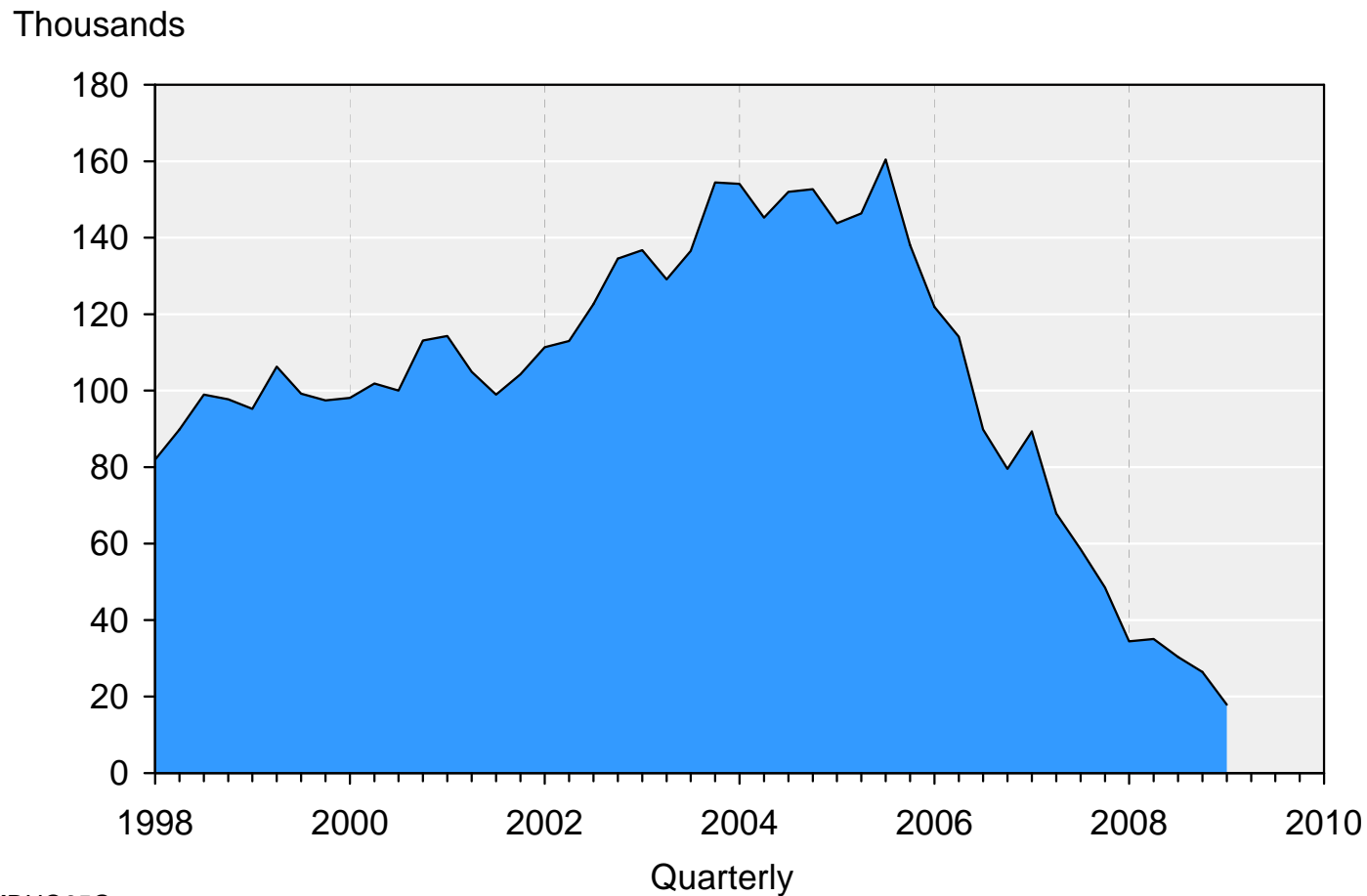
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California housing: primary event for western Lumber

May 2009



Single-family Building Permits for California (Seasonally Adjusted Annual Rate)



QMDHO65G

Source: Bureau of Census

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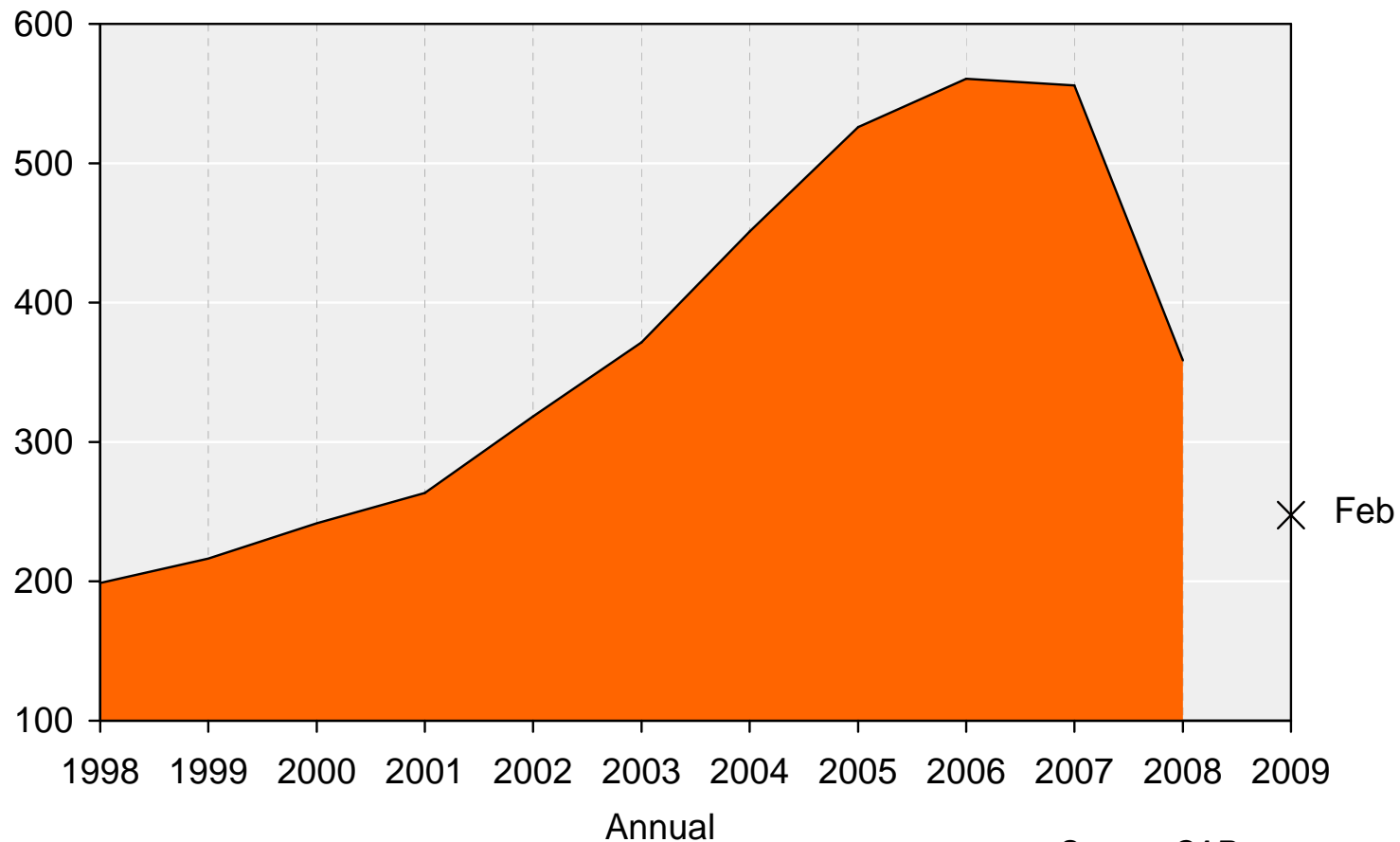
Housing prices are now back to 2001 levels

May 2009



Median Existing Home Price for California

Thousand \$



AMDHO103E

Source: CAR

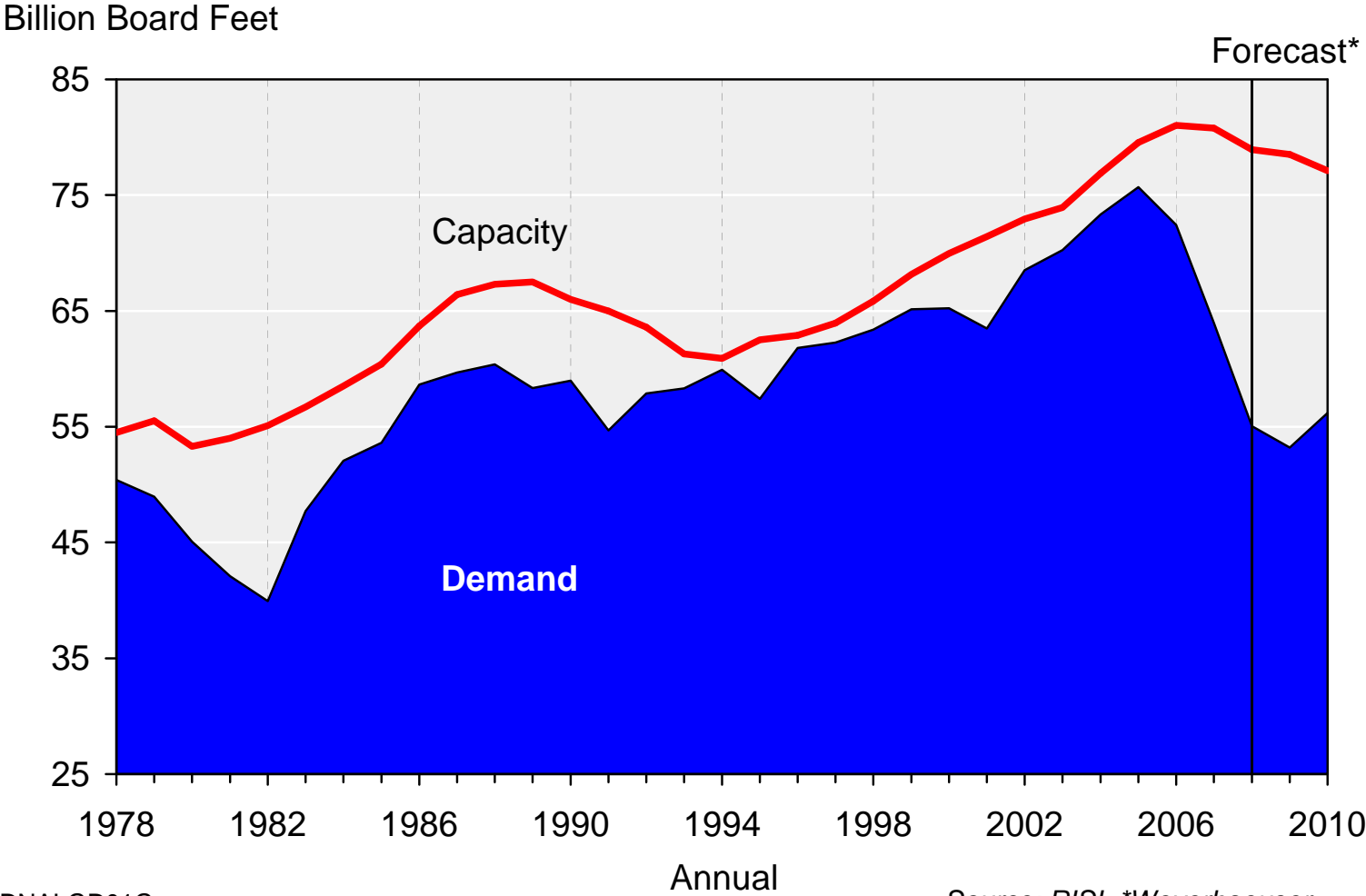
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Bigger and steeper drop than in 1979-82 cycle

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Demand on North American Lumber Mills vs. Capacity



AWDNALGD01G

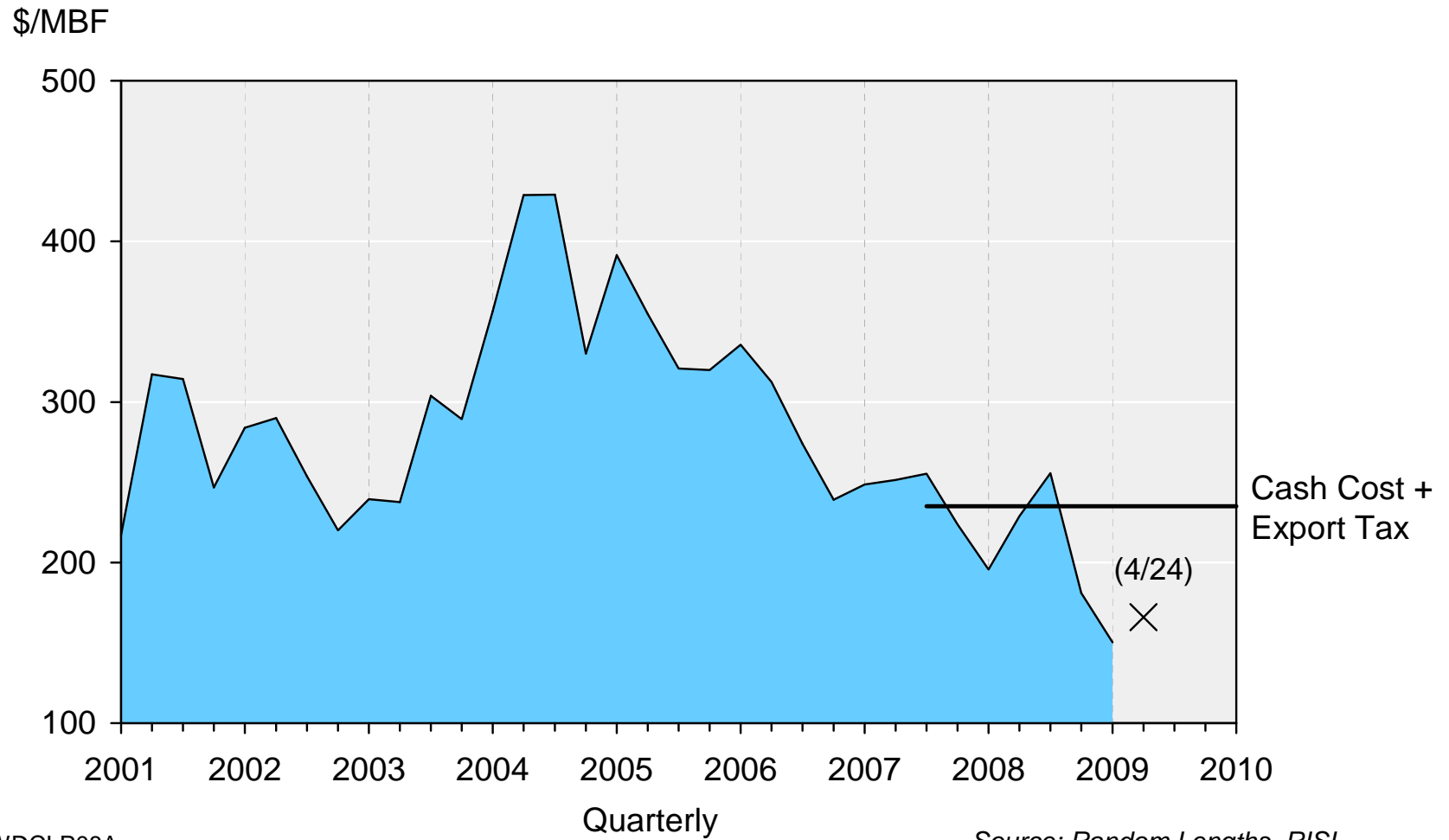
Source: RISI, *Weyerhaeuser

Prices fell below cost support again

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Spruce-Pine-Fir 2x4 Mill Price



QWDCLP08A

Source: Random Lengths, RISI

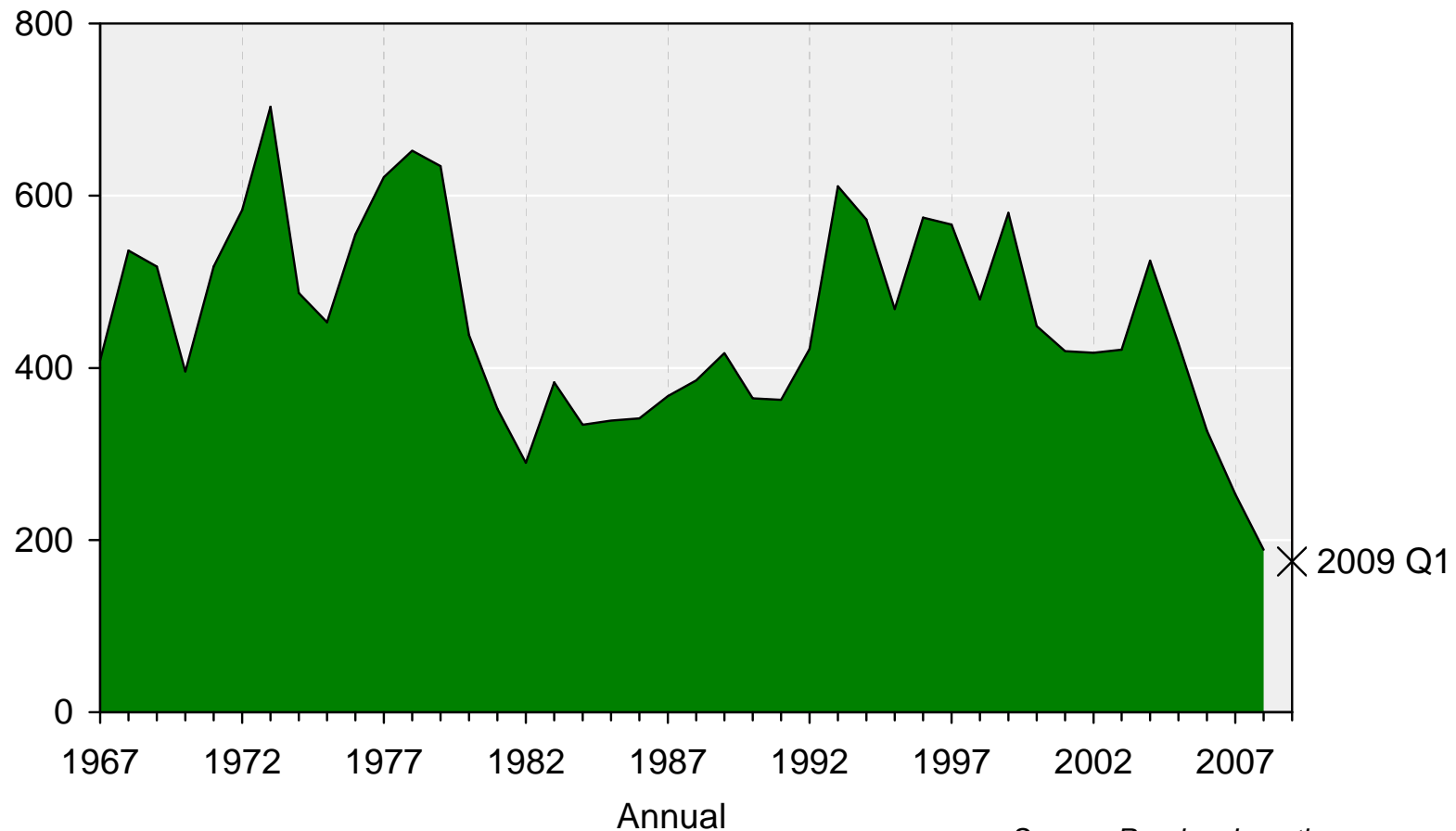
Drove Western lumber prices to lowest prices in 40 years adjusted for inflation

May 2009



Real Douglas Fir 2x4 Green Lumber Price

2008\$/MBF



AWDWLP08I

Source: Random Lengths

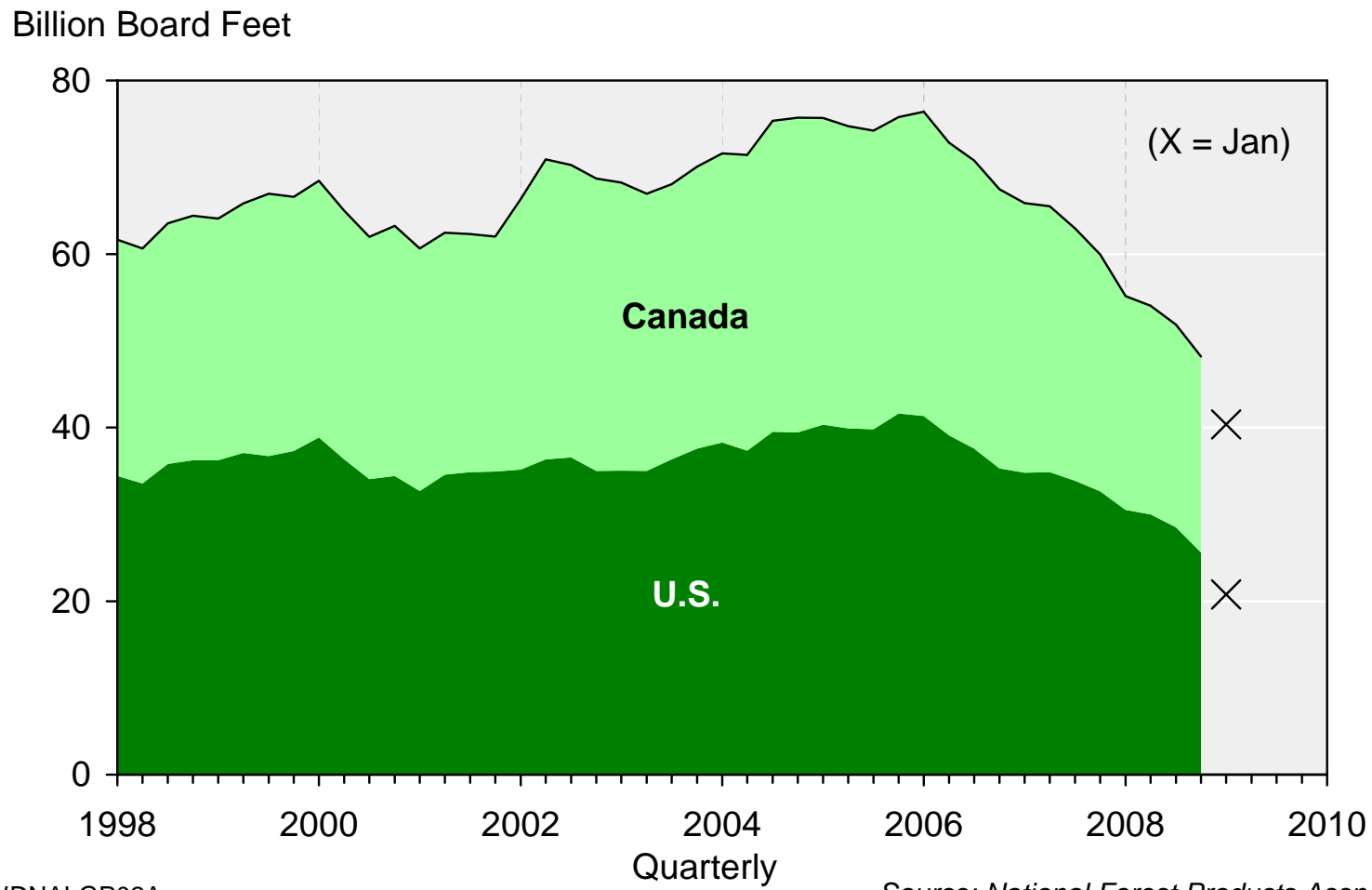
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Canada has taken most of curtailment so far

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N.A. Lumber Production (SAAR)

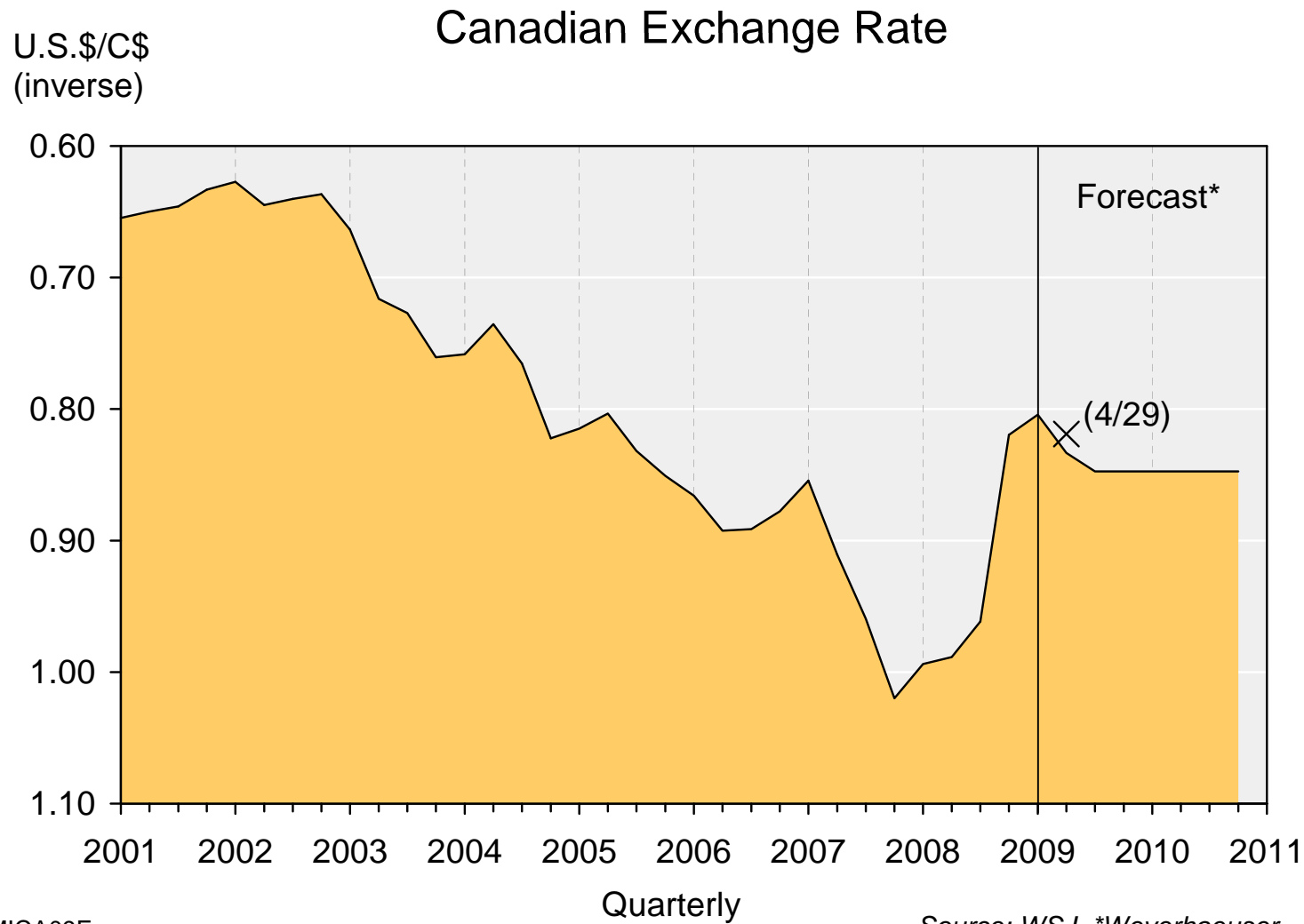


QWDNALGP02A

Source: National Forest Products Assn, COFI

Expect C\$ to hold or strengthen in 2009

May 2009



QMICA09E

For average mill to breakeven, need \$41/mbf price lift

May 2009



Production Costs and Margins for an Average B.C. Interior Mill

	Q1 2008	Q2 2008	Feb 2009
Cash Costs in C\$**	209	223	216
Cash Costs in U.S.\$**	209	214	173
SPF 2x4 Price*	195	256	152
Less Export Tax	25	33	20
Mill Net	170	222	132
Implied Margin for Avg. Mill	(39)	8	(41)

*Random Lengths

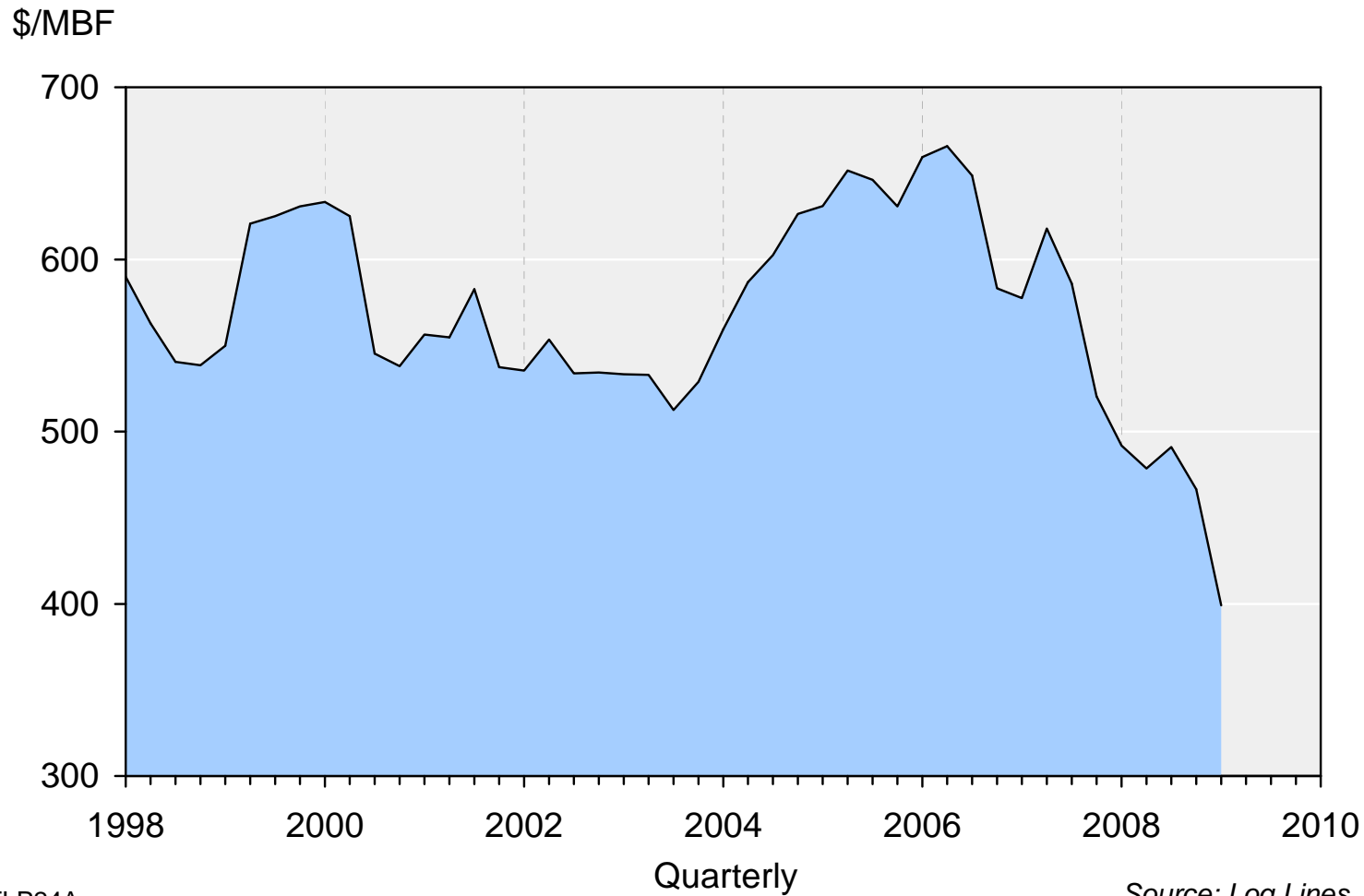
**Based on RISI Survey – Average B.C. Mill

Log prices held-up until recently—now in line with DF green 2x4 at \$160/mbf

May 2009



Douglas Fir Domestic #2 Log Price



QTLP24A

Source: Log Lines

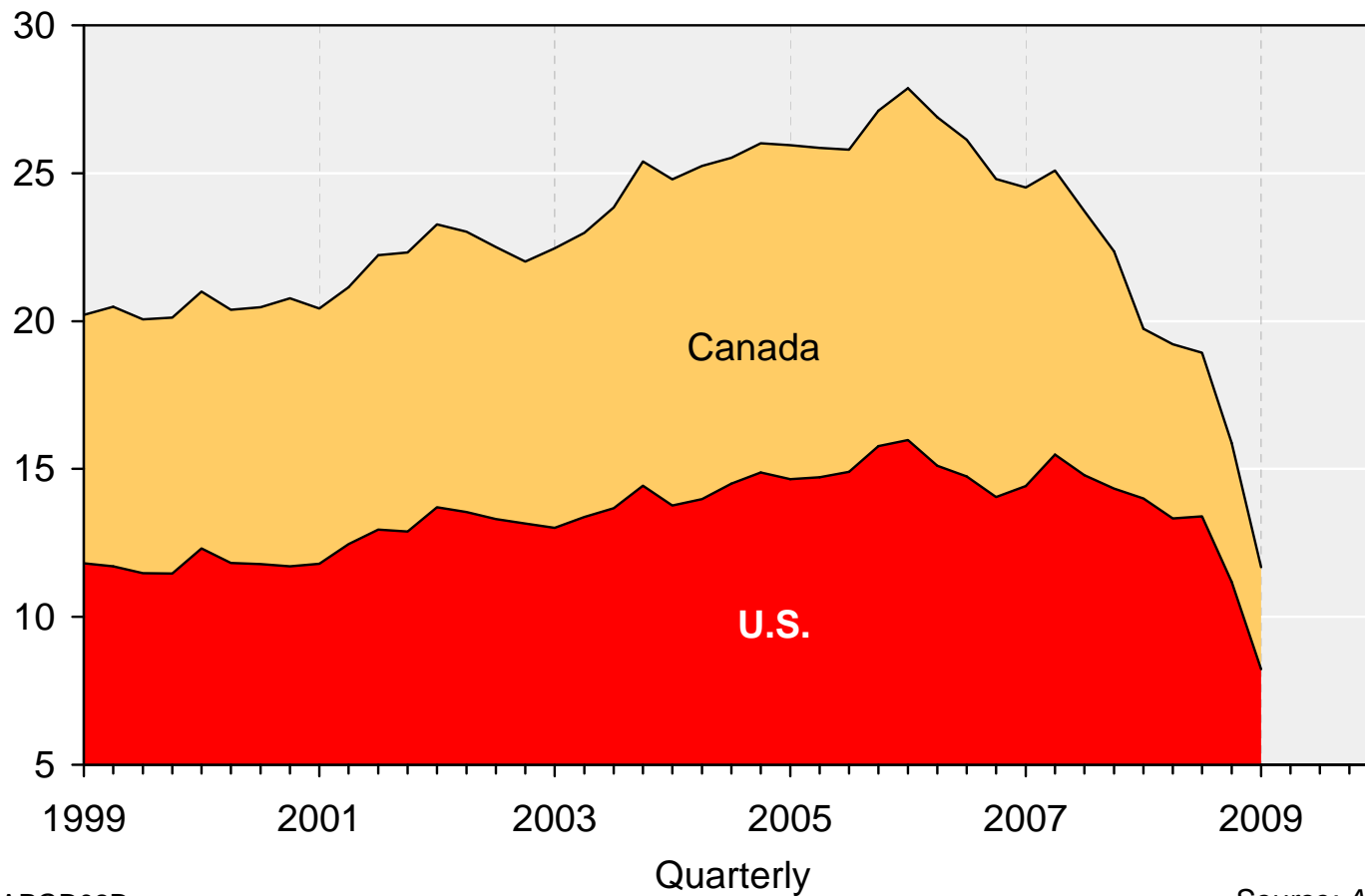
Collapse in demand, but hit Canadian production very hard

May 2009



N.A. OSB Production (Seasonally Adjusted Annual Rate)

Billion Square Feet



QWDNAPGD02D

Source: APA

Discussion topics for today

May 2009



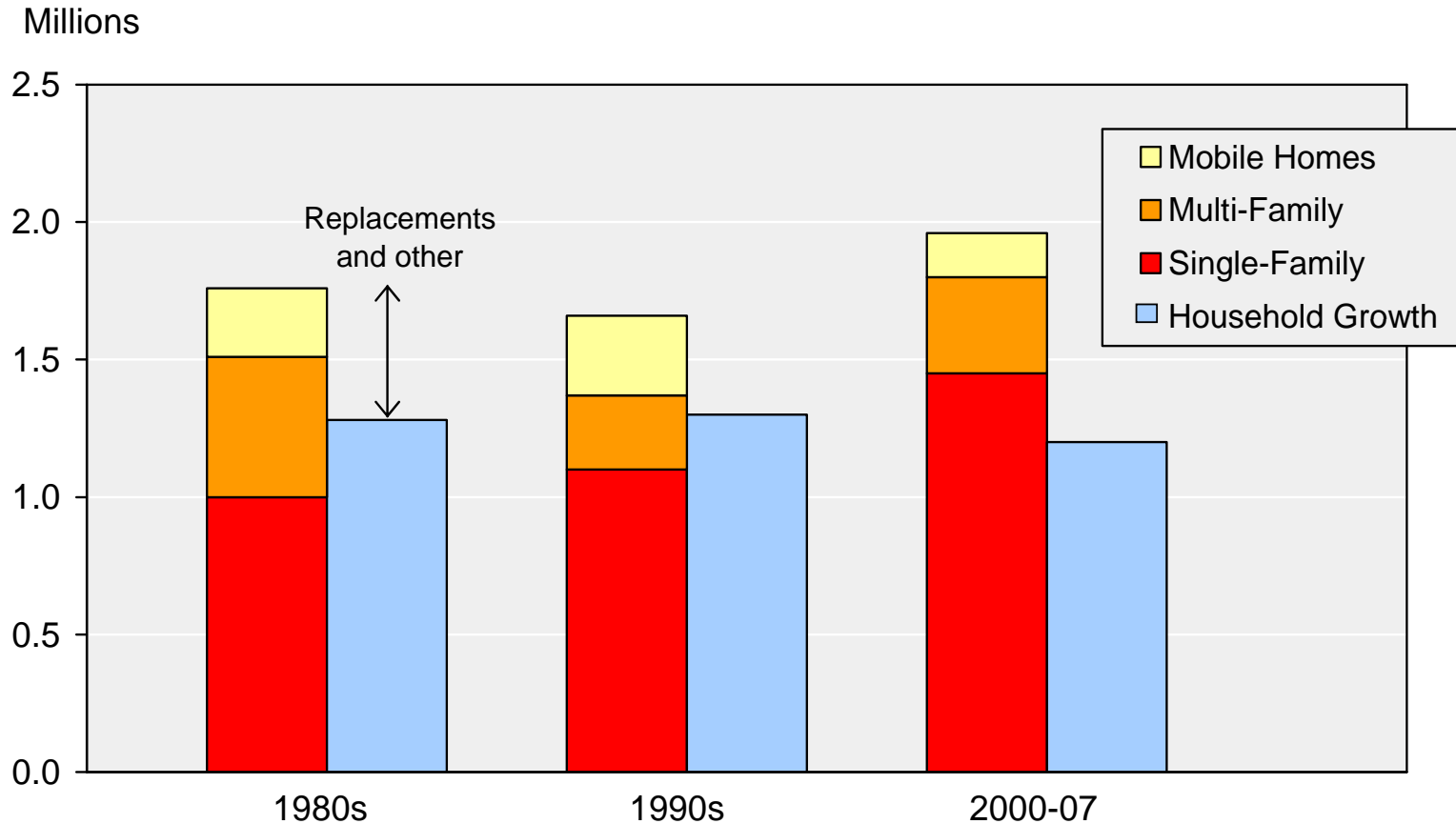
- Understand what happened: unique situation
- Prospects for national starts: slow rebound
- Long term outlook: very optimistic

Household formations drive trend demand

May 2009



Newly Built Units Added to Housing Stock vs. Household Growth (millions/year)



AMDHO68K

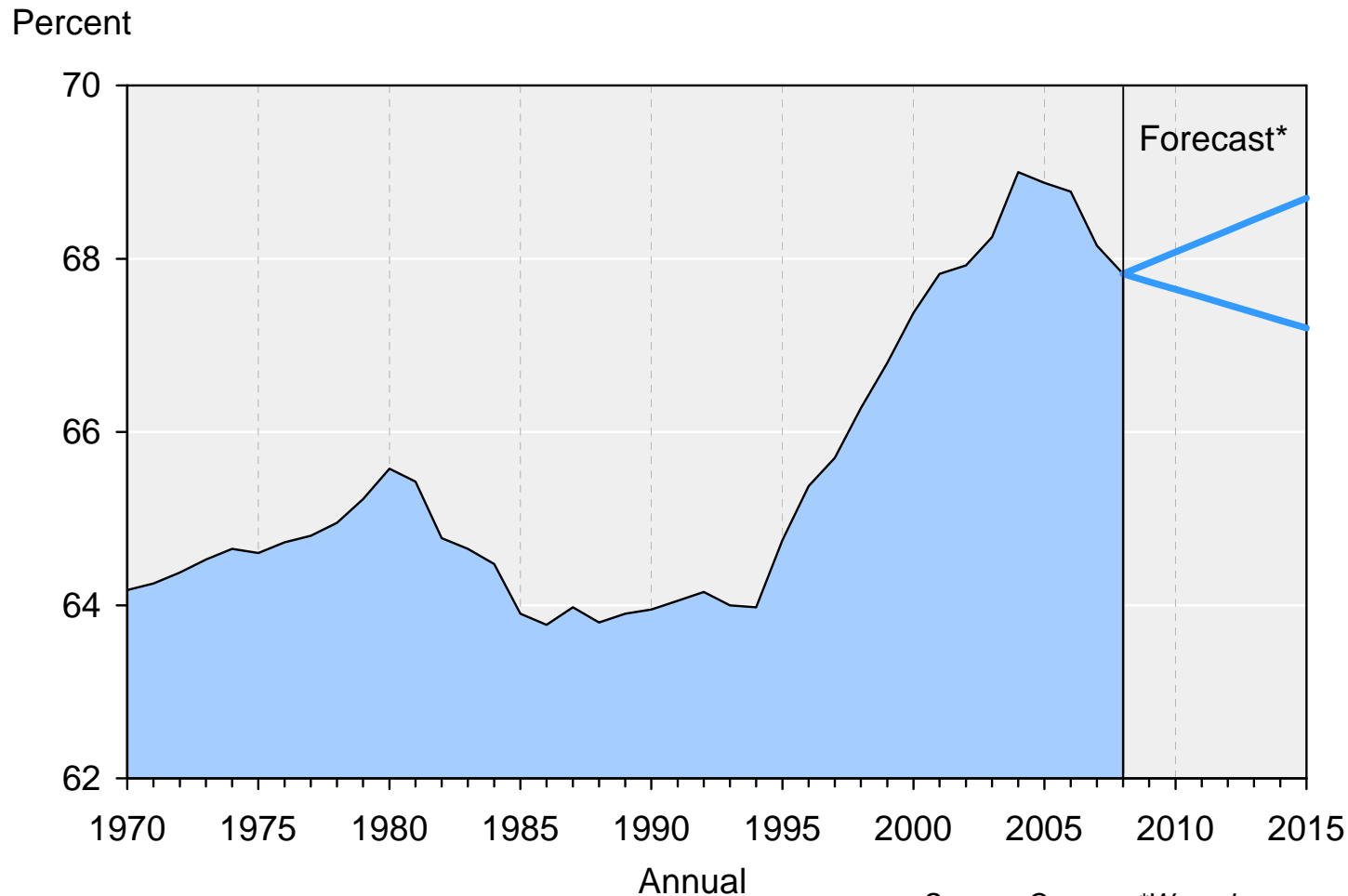
Source: Census

Primary driver of single family range: where will ownership rate be in 5 years?

May 2009



U.S. Homeownership Rate



AMDHO29K

Source: Census, *Weyerhaeuser

Long term: industry still looks good

May 2009



- Demographics, housing and structural lumber demand
- Need for Canadian imports, but lower capacity given beetle kill impact
- Very little economic competition for other producing geographies