



# Home Prices in 2007: How Much Will They Fall – and Where Will They Fall the Most!

**Thomas A. Lawler**  
**Lawler Economic & Housing Consulting LLC**  
**April 26, 2007**

# Let's Look At What the Homebuilders Heard at the 5/5/2005 Spring Construction Forecast Conference

“The investor share of the purchase market has increased dramatically, to levels not seen since at least the late 1980's. The investor share increase has been concentrated in MSAs with exceptionally rapid home price growth”

“(C)onditions in many parts of the country mirror past conditions that preceded regional housing ‘busts’.”

Response by homebuilders?: surge in SF and for-sale MF building permits and starts over the next 8 months!

Did Homebuilder know that “excess” demand above demographic demand was coming from investors? Yes. Did they think it would end soon? NO! Did the building pace exceed fundamental demographic demand? Yes! But total demand was there so

“Damn the demographics, full build ahead!”

## And at the 4/27/2006 Spring Construction Conference?



**“You Had To Be On Something Not To See Bubbles in Some Areas”!!!!**

*Now Speculative Demand Has Abated....Many Previous Speculators/Investors Are Selling (the “silent inventory”) ... Inventories of Unsold Homes Have Ballooned; Credit Conditions are beginning to tighten; Housing affordability by traditional measures is at 15-25 year lows in parts of the country; and...*

*Net: speculative demand and excess building in anticipation of such demand continuing fueled a boom, and “back to normal” conditions are creating a bust in a number of areas of the country.*

# General Themes

- **National Home Prices Fell in the Second Half of Last Year**
- **Mortgage Credit Performance Deteriorated Despite Declining Unemployment – Especially for Low/No Down Payment Limited Documentation Loans**
- **Mortgage Lenders Have Tightened Credit Considerably, Dampening Effective Housing Demand**
- **Home Prices Will Decline Further This Year**

# Themes Around the “Boom/Bust” in Housing

## **THE BOOM**

- **Low interest rates, volatile stocks, and stable home price gains led to a surge in investment in SF real estate beginning in the latter part of 2003 and accelerating in 2004 and 2005**
- **This surge in “speculative demand” drove home prices up sharply in many areas of the country, leading to a decline in mortgage credit losses that in turn led to more aggressive underwriting/looser credit standards, and to a surge in the use of “nontraditional” mortgage products**
- **The “subprime” share of mortgage-financed home purchases soared, mainly via low/no down payment loans, and low-doc low/no down payment lending surged in all mortgage sectors**
- **Builders responded by accelerating the pace of SF building well beyond “normal” demographic demand**

# Themes Around the “Boom/Bust” in Housing

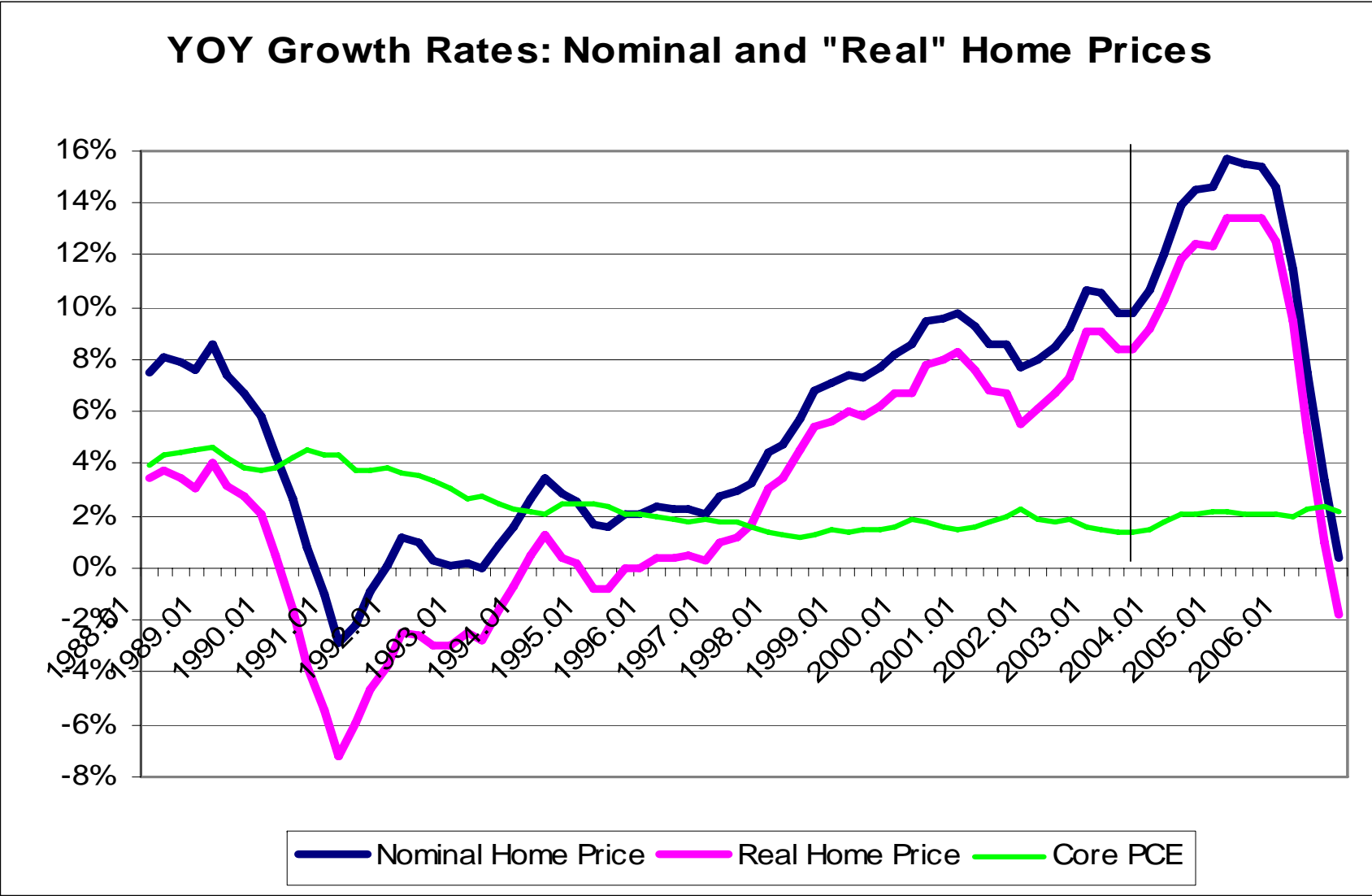
## THE BUST

- **Inventories of homes for sale surged in 2006, both from past excess building and from previous investors putting homes up for sale**
- **Rising interest rates and the previous surge in home prices pushed home affordability down sharply**
- **Home prices began to soften, pushing investor demand lower even as inventories continued rising**
- **Recently originated “risky” mortgages showed a surge in delinquencies and foreclosures, especially for low/no down payment purchase loans with limited documentation**
- **Mortgage lenders began to tighten credit**

## **What Were the Signs?**

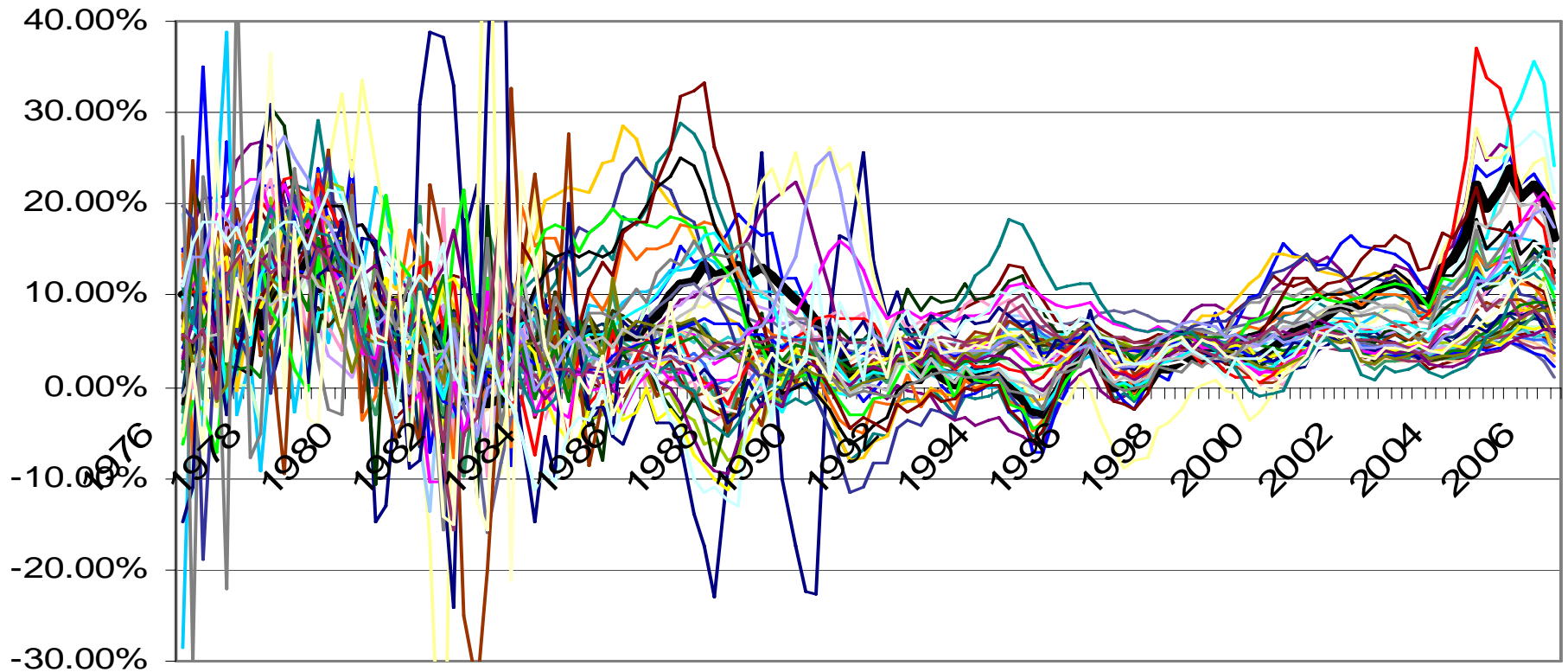
- **Real Home Price Growth Unprecedented, with Out-sized Gains in Many Regions, and Behavior in Many Areas Consistent with “Bubbles”**
  - **Investor/2<sup>nd</sup> Home Purchases Jumped**
  - **Low/No Doc Lending Spiked**
  - **Subprime Lending Surged**
  - **Private-Label MBS/ABS Issuance Exploded**
  - **The Share of “Exotic”, Nontraditional “Affordability” Loan Products Skyrocketed**
  - **Credit Underwriting Standards Eased**

# Real Home Price Growth Was Unprecedented



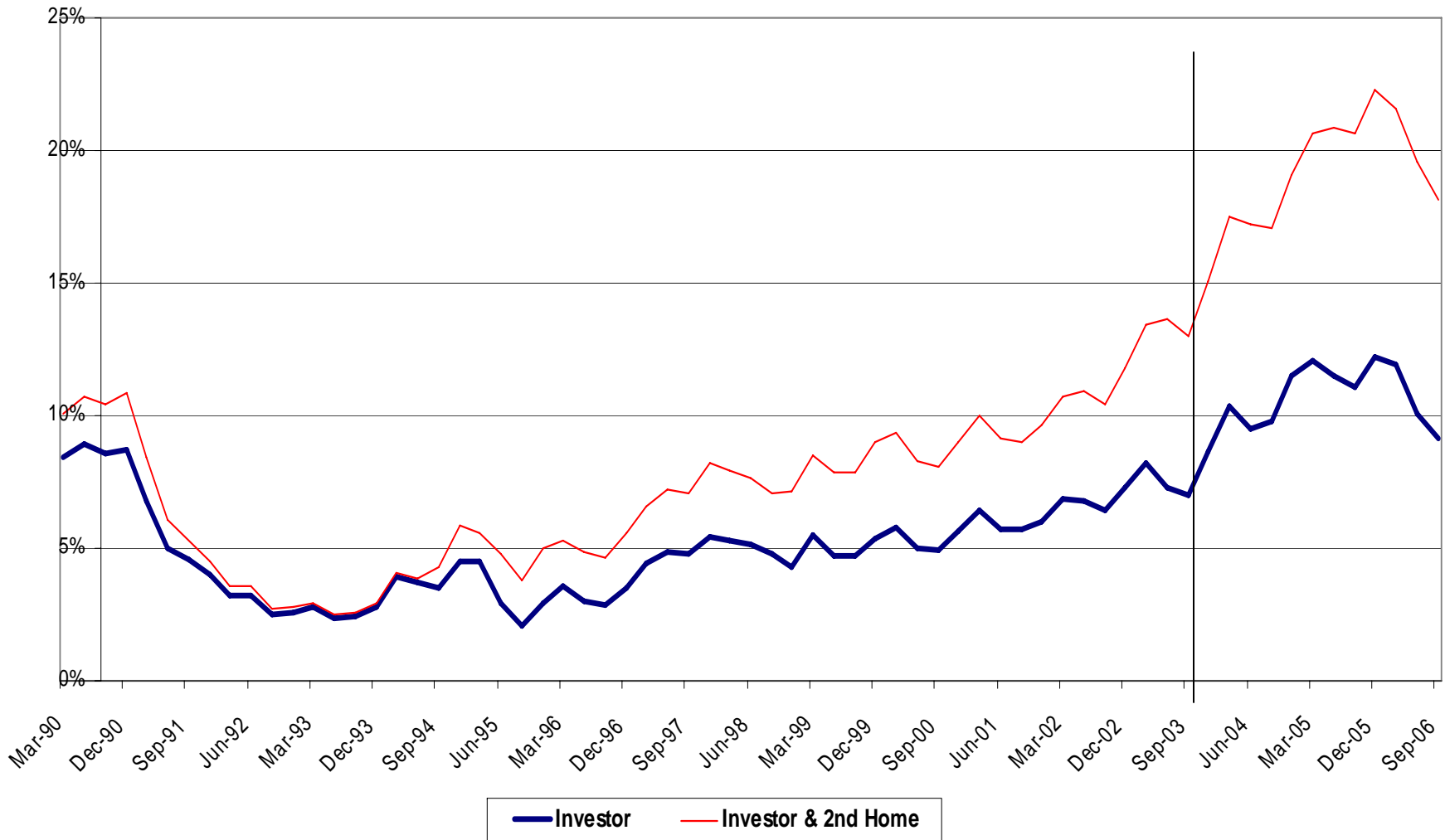
Source: S&P/Case-Shiller, BEA

# Year-over-Year Home Price Appreciation (OFHEO Home Price Index)



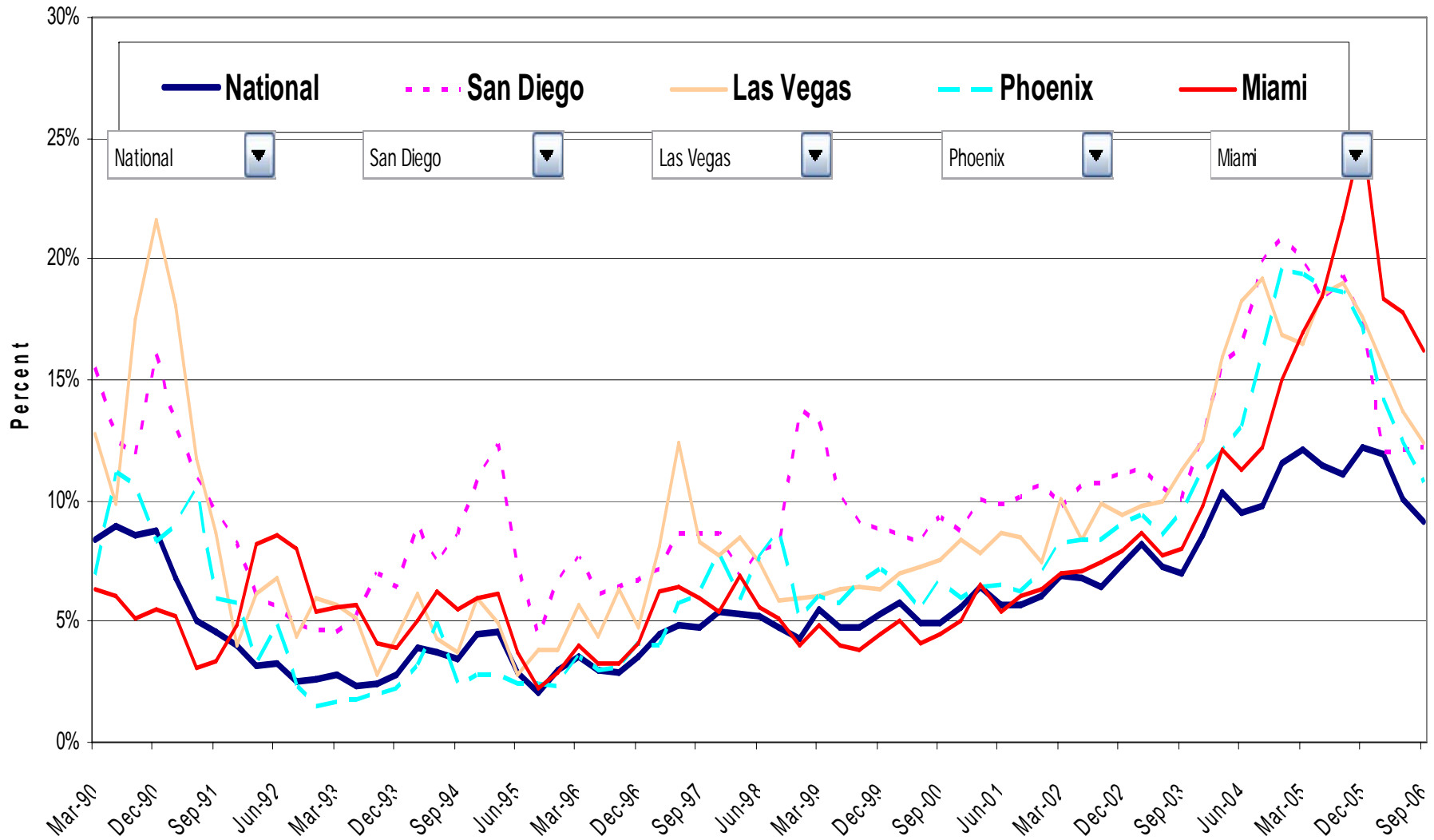
AK	AL	AR	AZ	CA	CO	CT	DC	DE
FL	GA	HI	IA	ID	IL	IN	KS	KY
LA	MA	MD	ME	MI	MN	MO	MS	MT
NC	ND	NE	NH	NJ	NM	NV	NY	OH
OK	OR	PA	RI	SC	SD	TN	TX	UT
VA	VT	WA	WI	WV	WY			

# The Investor And 2nd Home Shares Of the Prime Conventional Conforming Purchase Market



Note: Shares are based upon numbers of loans  
 Source: LoanPerformance

## Investor Shares For Prime Conventional Conforming Purchase Loans In Selected MSAs



Source: LoanPerformance, shares are based on # of loans as of Sept 2006.

## Characteristics of Purchase Loans Backing Subprime ABS

	<b>ARM Share</b>	<b>I-O ARM Share</b>	<b>40-Yr ARM Share</b>	<b>Neg Am ARM Share</b>	<b>Non- Owner Share</b>	<b>Full Doc Share</b>	<b>Piggy back Share</b>	<b>Avg. CLTV</b>	<b>Avg FICO</b>
<b>2001</b>	<b>73.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>7.9%</b>	<b>70.4%</b>	<b>7.1%</b>	<b>85%</b>	<b>605</b>
<b>2002</b>	<b>79.5%</b>	<b>1.8%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>8.1%</b>	<b>60.9%</b>	<b>6.1%</b>	<b>86%</b>	<b>631</b>
<b>2003</b>	<b>80.1%</b>	<b>8.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>8.5%</b>	<b>57.0%</b>	<b>18.2%</b>	<b>90%</b>	<b>650</b>
<b>2004</b>	<b>89.3%</b>	<b>26.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>10.0%</b>	<b>54.0%</b>	<b>33.2%</b>	<b>92%</b>	<b>649</b>
<b>2005</b>	<b>92.7%</b>	<b>37.6%</b>	<b>3.1%</b>	<b>0.0%</b>	<b>9.4%</b>	<b>49.6%</b>	<b>47.5%</b>	<b>93%</b>	<b>650</b>
<b>2006 YTD</b>	<b>91.5%</b>	<b>23.2%</b>	<b>5.3%</b>	<b>0.0%</b>	<b>8.6%</b>	<b>50.0%</b>	<b>51.7%</b>	<b>94%</b>	<b>646</b>

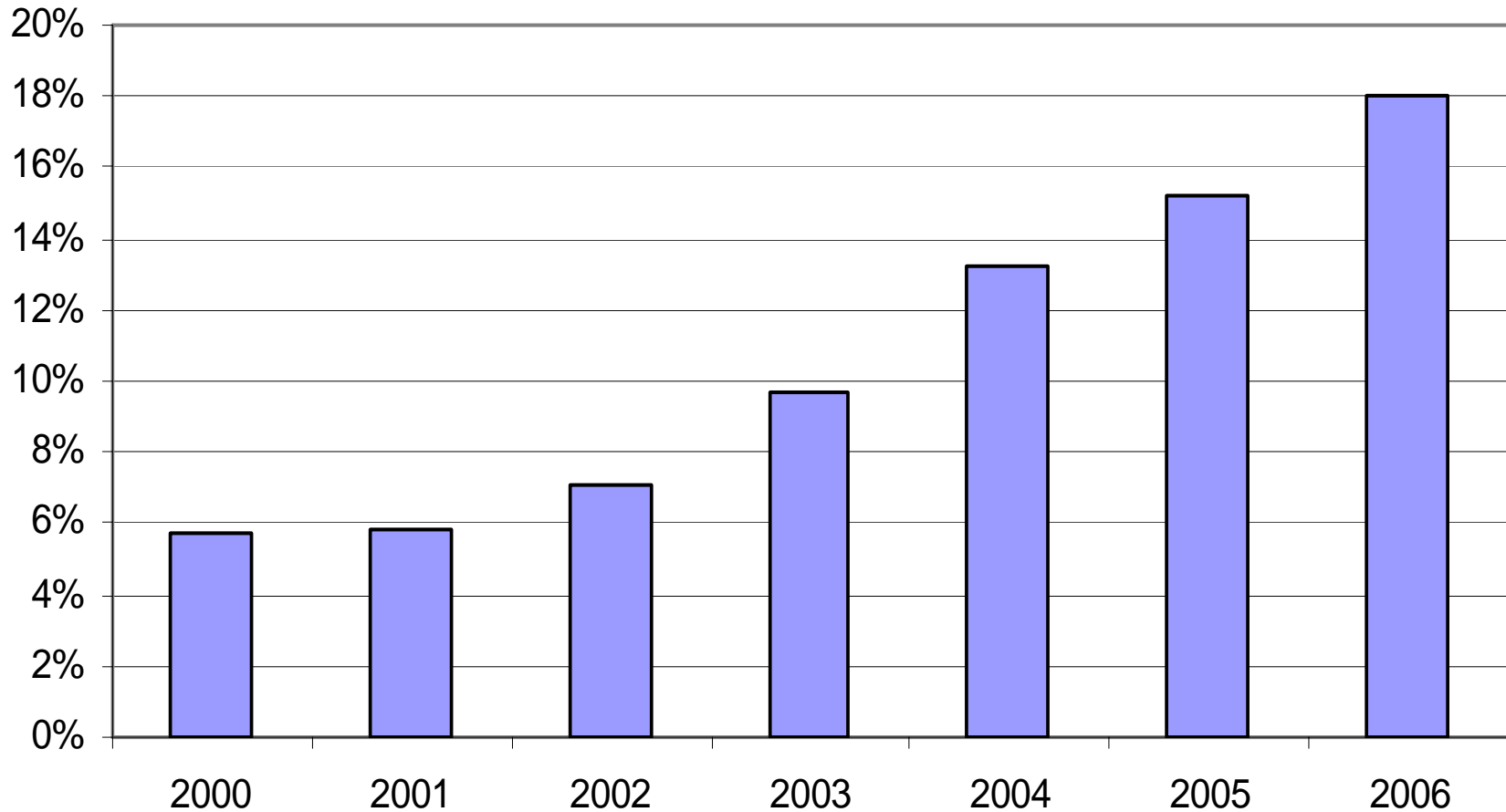
Purchase Loans Only, Based on Origination Year. Source: LoanPerformance

## Characteristics of Purchase Loans Backing “Alt-A” ABS

	<b>ARM Share</b>	<b>I-O ARM Share</b>	<b>40-Yr ARM Share</b>	<b>Neg Am ARM Share</b>	<b>Non-Owner Share</b>	<b>Full Doc Share</b>	<b>Piggy back Share</b>	<b>Avg. CLTV</b>	<b>Avg FICO</b>
<b>2001</b>	<b>18.0%</b>	<b>3.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>12.6%</b>	<b>34.4%</b>	<b>1.7%</b>	<b>84%</b>	<b>699</b>
<b>2002</b>	<b>26.7%</b>	<b>6.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>16.8%</b>	<b>36.2%</b>	<b>2.6%</b>	<b>84%</b>	<b>708</b>
<b>2003</b>	<b>44.1%</b>	<b>24.4%</b>	<b>0.0%</b>	<b>1.3%</b>	<b>21.8%</b>	<b>34.3%</b>	<b>20.1%</b>	<b>85%</b>	<b>715</b>
<b>2004</b>	<b>72.6%</b>	<b>50.7%</b>	<b>0.3%</b>	<b>7.1%</b>	<b>22.7%</b>	<b>34.1%</b>	<b>39.1%</b>	<b>86%</b>	<b>716</b>
<b>2005</b>	<b>72.0%</b>	<b>37.5%</b>	<b>2.2%</b>	<b>27.0%</b>	<b>24.9%</b>	<b>26.0%</b>	<b>46.1%</b>	<b>86%</b>	<b>721</b>
<b>2006 YTD</b>	<b>67.6%</b>	<b>35.2%</b>	<b>6.2%</b>	<b>26.4%</b>	<b>21.9%</b>	<b>18.8%</b>	<b>55.3%</b>	<b>88%</b>	<b>717</b>

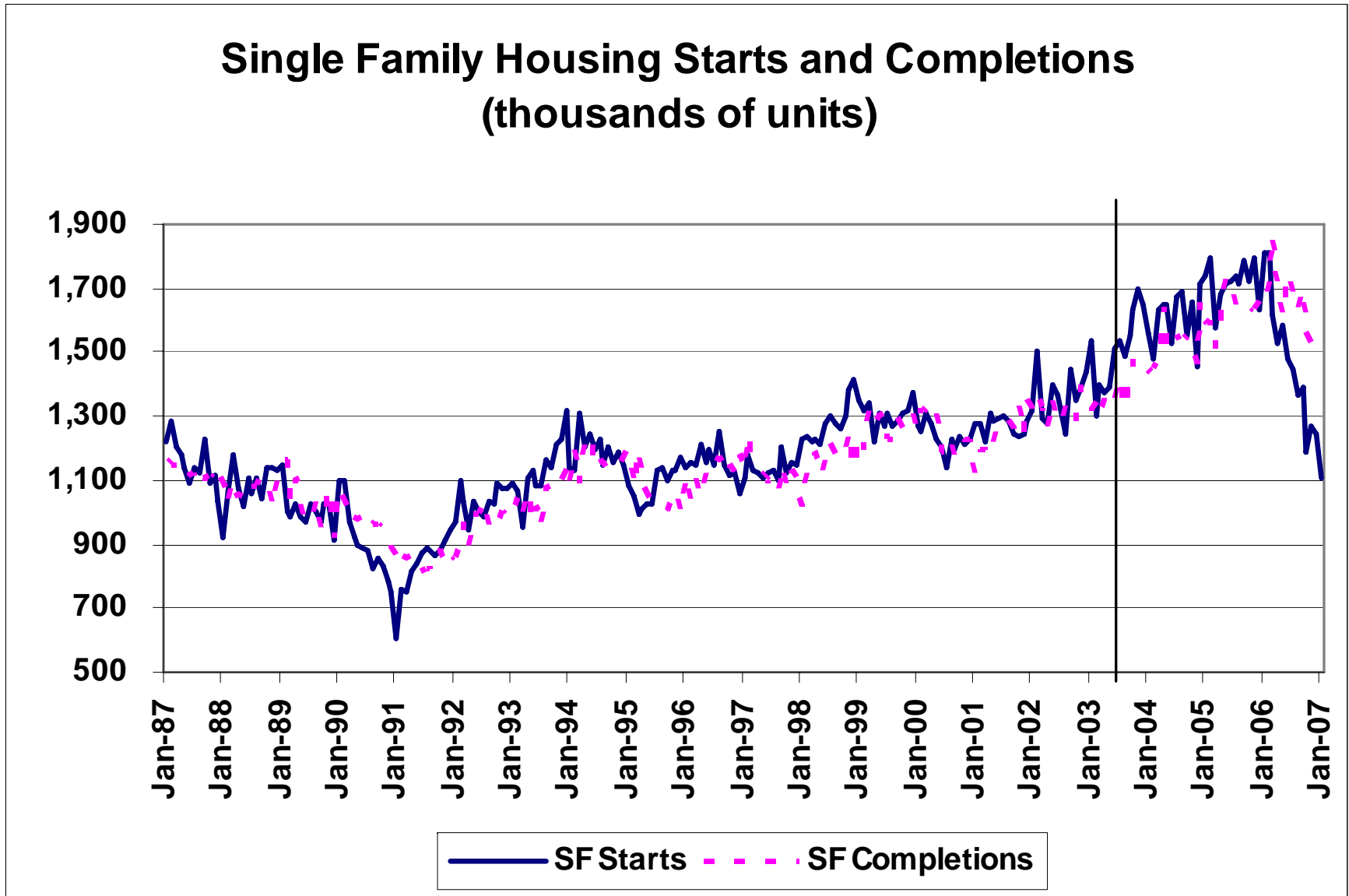
Purchase Loans Only, Based on Origination Year. Source: LoanPerformance

## Subprime Share of Mortgage-Financed Home Purchases



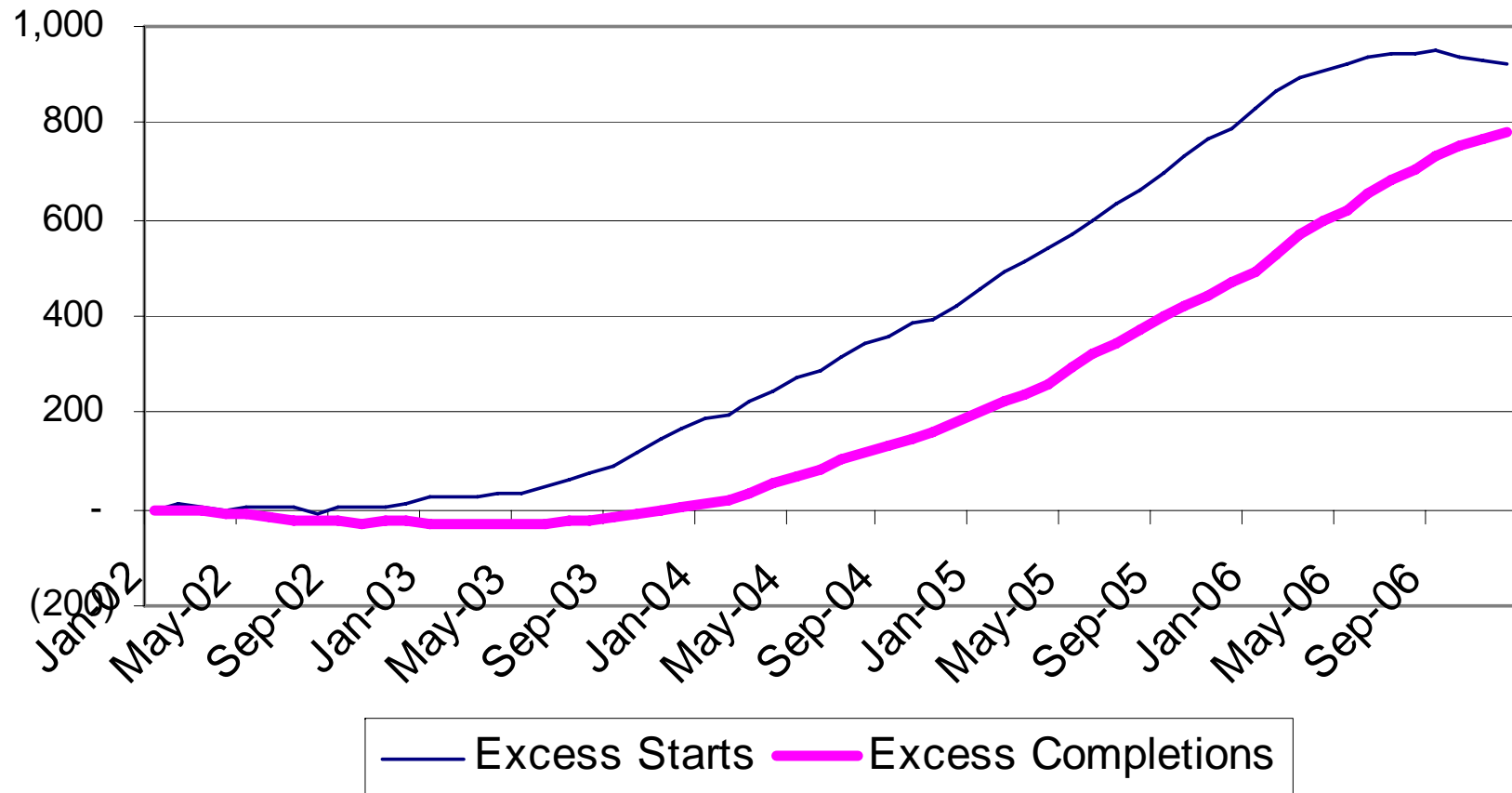
Source: HMDA, LEHC estimate (2006)

# Pace of SF Homebuilding Surged

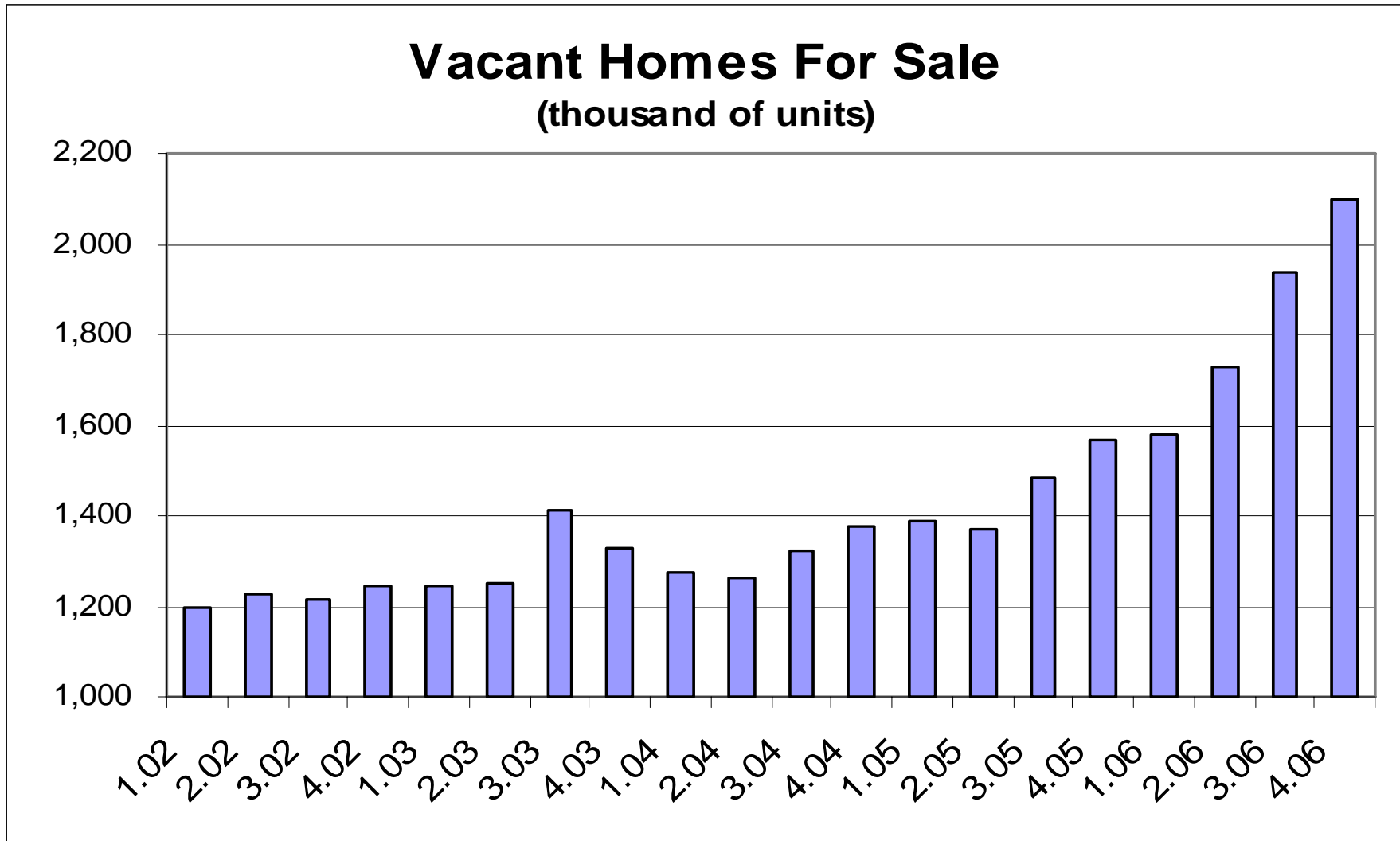


# As Builders Built to Sate Investor Demand...

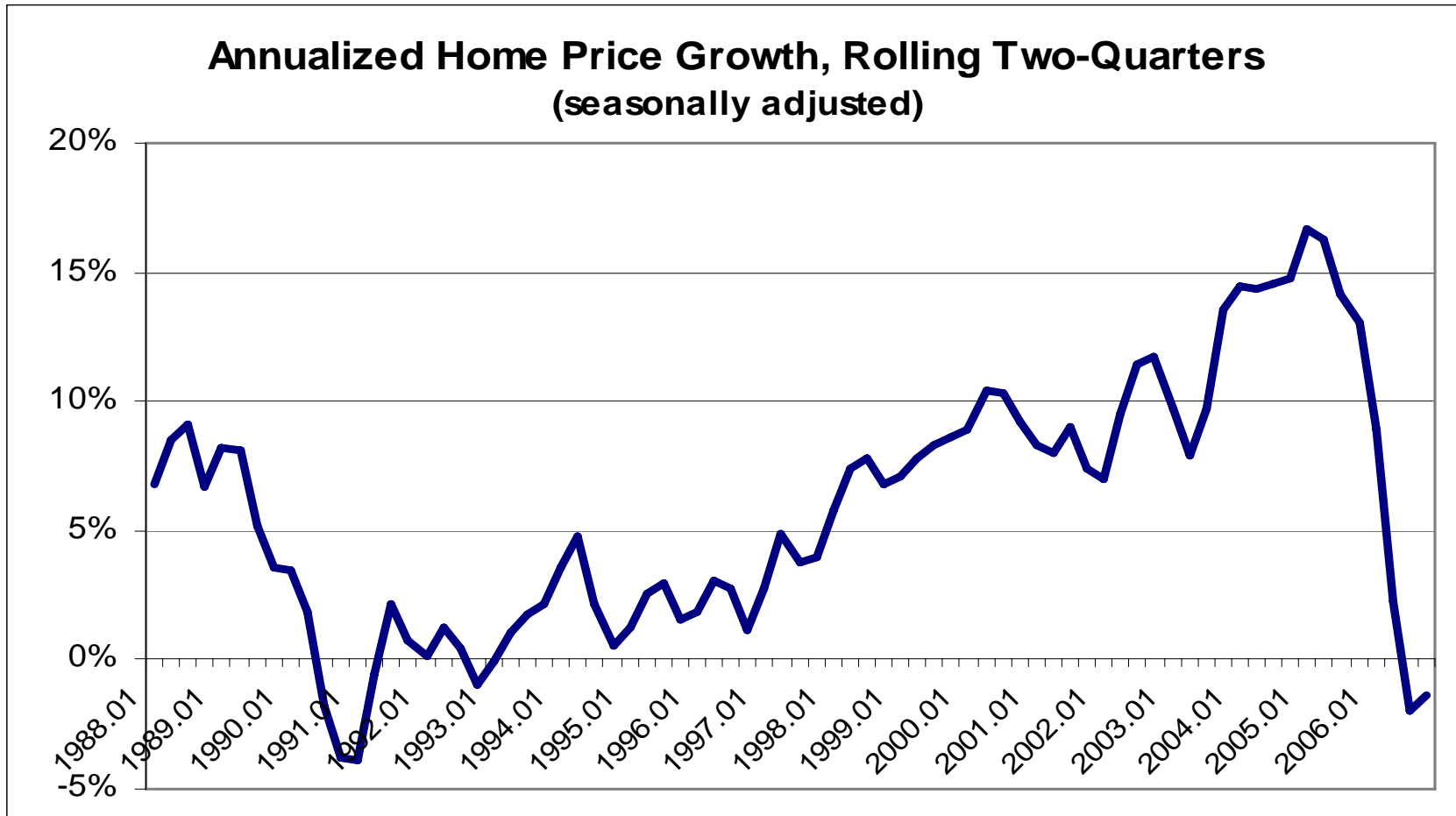
**SF Starts & Completions: "Excess" over "Core"  
Demographic Demand (thousands of units)**



# Vacant Homes for Sale Soared to Record Levels...

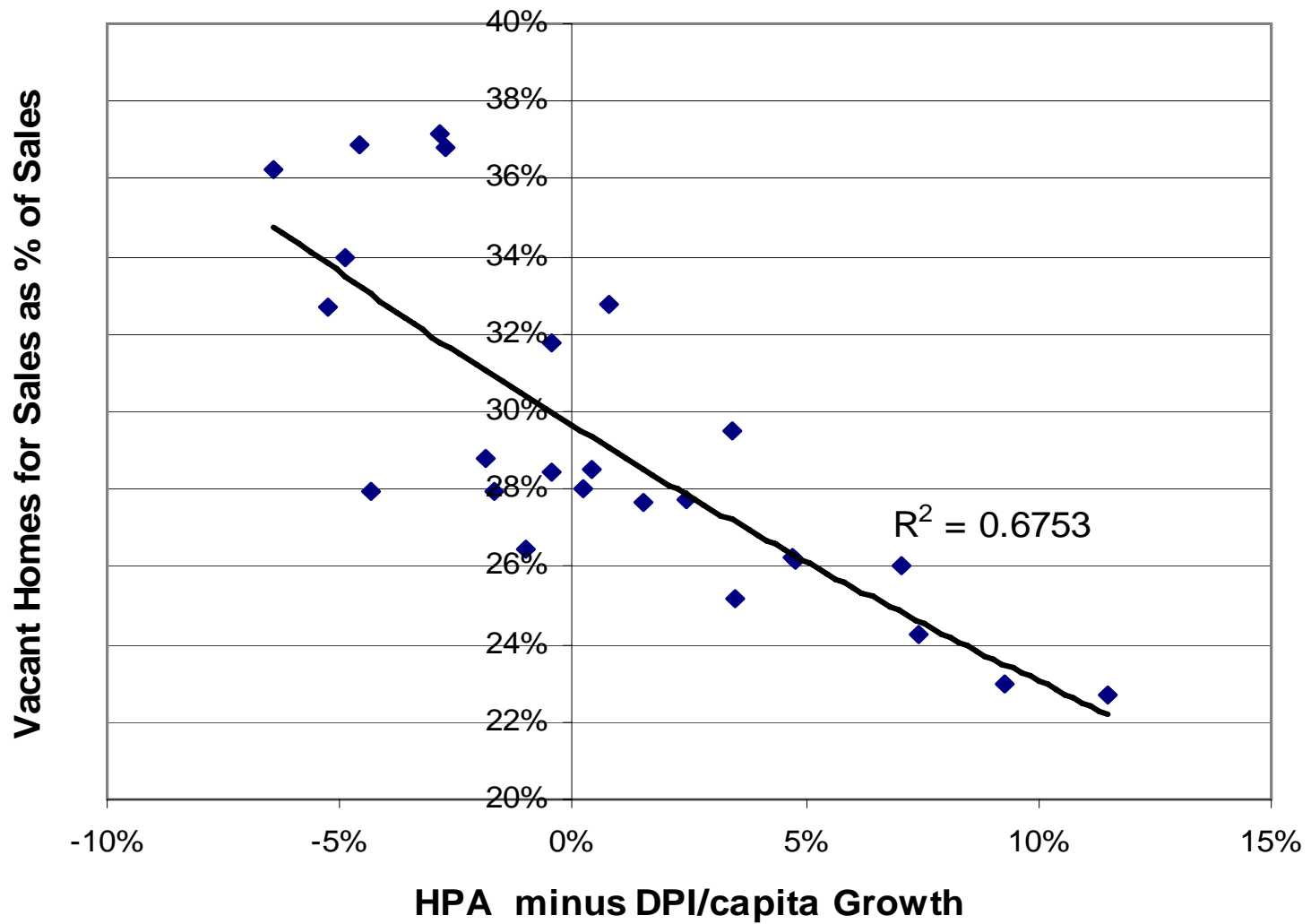


# And Home Prices Began to Move Lower



**S&P/Case-Shiller National Home Price Index (LEHC seasonal adjustment)**

## Vacant Homes for Sales/Home Sales vs. HPA minus Income/Capita Growth



# Home Price Measurement Has Been a Big Issue

## % Change, Home Price Index, Q4/05 - Q4/06

	SPCS	OFHEO	OFHEO "Bias"
Phoenix - AZ	0.3%	9.0%	8.7%
Los Angeles	2.0%	9.2%	7.2%
San Diego	-4.2%	-0.2%	4.0%
San Francisco	-1.4%	2.1%	3.4%
Denver	-0.3%	1.3%	1.6%
Washington	-2.9%	6.3%	9.2%
Miami	6.1%	15.3%	9.2%
Tampa - FL	1.8%	11.4%	9.6%
Atlanta - GA	2.9%	4.3%	1.4%
Chicago	2.7%	6.3%	3.6%
Boston	-5.1%	0.1%	5.2%

## % Change, Home Price Index, Q4/05 - Q4/06

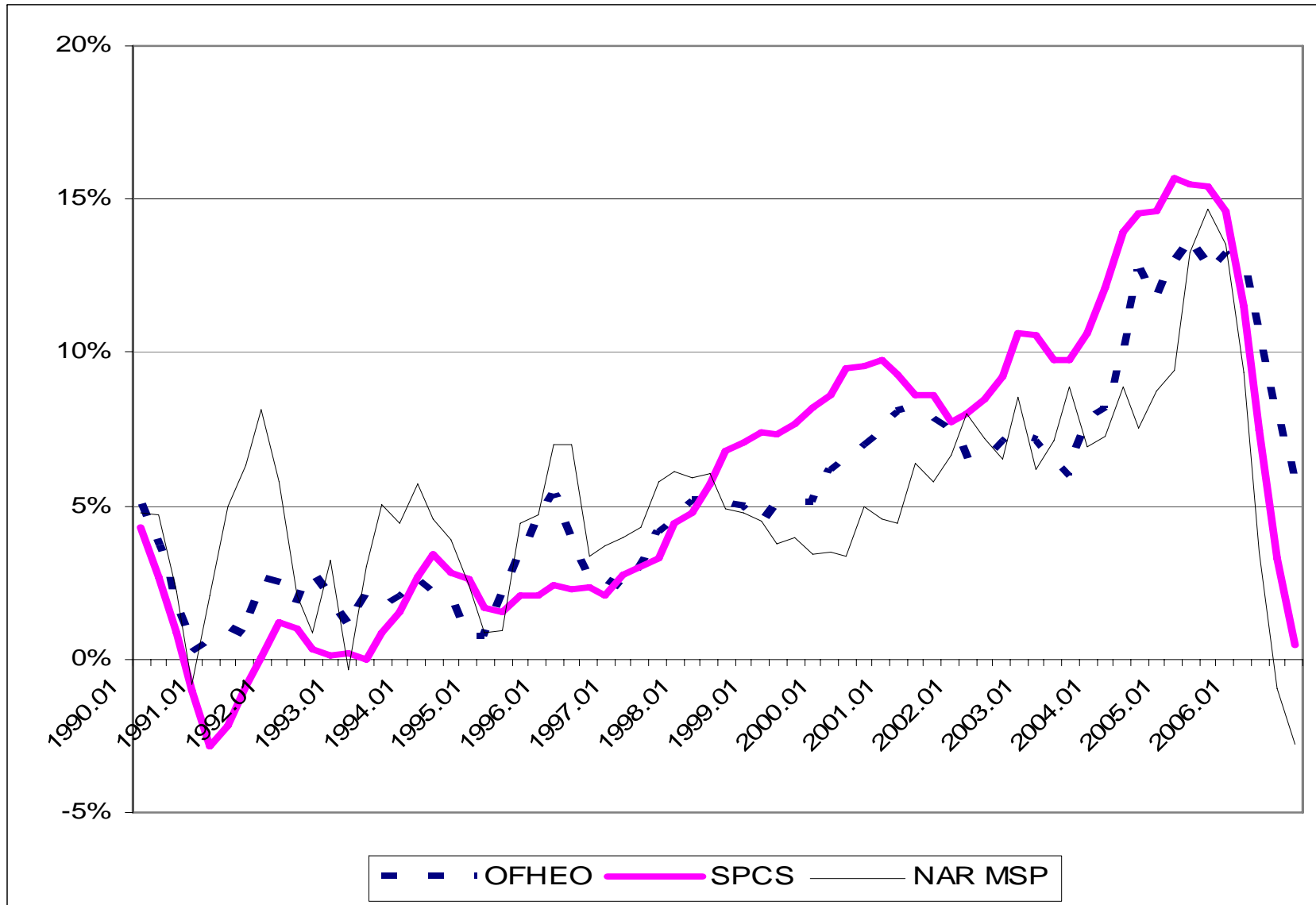
	SPCS	OFHEO	OFHEO "Bias"
Detroit - MI	-5.9%	-1.5%	4.4%
Minneapolis - MN	-0.8%	2.0%	2.8%
Charlotte - NC	6.7%	9.1%	2.4%
Las Vegas	0.9%	5.4%	4.4%
New York	-0.1%	6.1%	6.2%
Cleveland - OH	-2.4%	-0.3%	2.1%
Portland - OR	9.9%	13.5%	3.5%
Dallas - TX	1.1%	4.7%	3.6%
Seattle - WA	12.1%	14.5%	2.4%
Composite-20	0.5%	5.8%	5.3%
National	0.4%	5.9%	5.5%

# Problems with the OFHEO Index

- **Only Includes Properties with Loans Purchased/Securitized by Fannie/Freddie**
  - Declining market share; only includes conforming loans; under-represents properties financed with ARMs, alternative mortgages, subprime, alt-A, etc.
- **Includes Property Appraisals on Refinance Transactions – Biases Home Price Index**
  - Understates home price appreciation in strong market/declining rates/high rate-term refi share
  - Overstates home price appreciation in weak market/flat-to-rising interest rates/high cash-out refi share

# OFHEO, S&P/Case-Shiller, & NAR

(YOY National SF Home Price Growth, Various Measures)



# Home Prices Have Been Declining in Many Areas

## Annualized Growth, S&P/Case-Shiller Home Price Index

	Last 6 months	last 12 months	2003-2005
Phoenix - AZ	-6.2%	-0.7%	32.2%
Los Angeles	-3.7%	1.0%	23.4%
San Diego	-9.3%	-4.2%	16.2%
San Francisco	-5.3%	-1.4%	17.9%
Denver	-6.2%	-1.1%	4.1%
Washington	-9.3%	-3.9%	22.2%
Miami	0.8%	4.2%	27.5%
Tampa - FL	-7.6%	-0.1%	24.8%
Atlanta - GA	-1.9%	2.3%	4.9%
Chicago	0.0%	2.2%	9.1%
Boston	-10.4%	-5.6%	6.4%
Detroit - MI	-8.4%	-6.9%	3.0%

Last 6 and 12 months thru January 2007

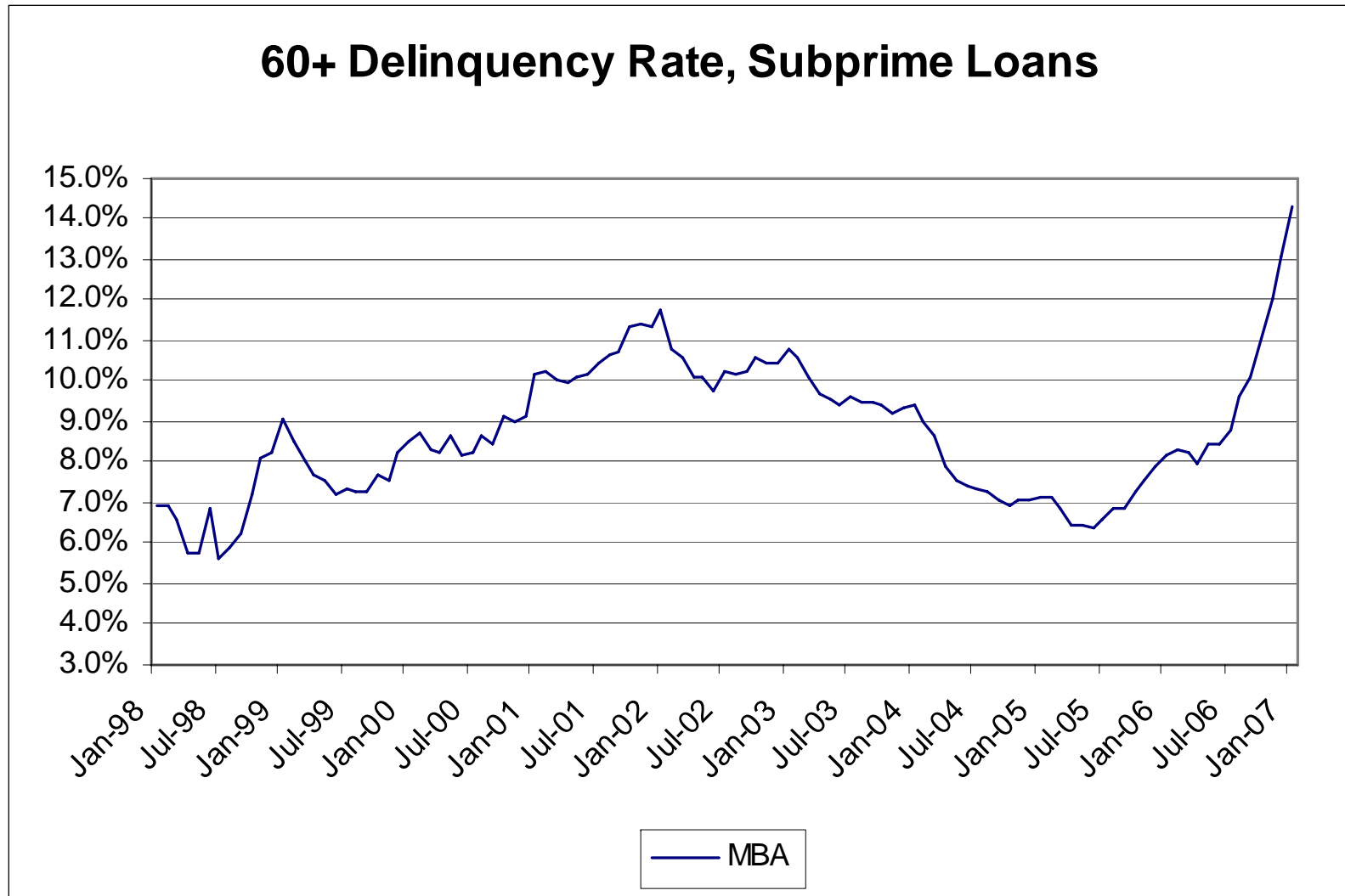
# Home Prices Have Been Declining in Many Areas

Annualized Growth, S&P/Case-Shiller Home Price Index

	last 6 months	last 12 months	2003-2005
Minneapolis - MN	-3.3%	-0.9%	6.8%
Charlotte - NC	2.3%	7.9%	4.5%
Las Vegas	-3.2%	0.0%	26.8%
New York	-3.5%	-0.9%	14.5%
Cleveland - OH	-7.4%	-2.7%	2.8%
Portland - OR	0.1%	8.7%	15.9%
Dallas - TX	-4.2%	0.5%	3.6%
Seattle - WA	4.4%	11.1%	14.9%
Composite-20	-4.3%	-0.2%	15.8%

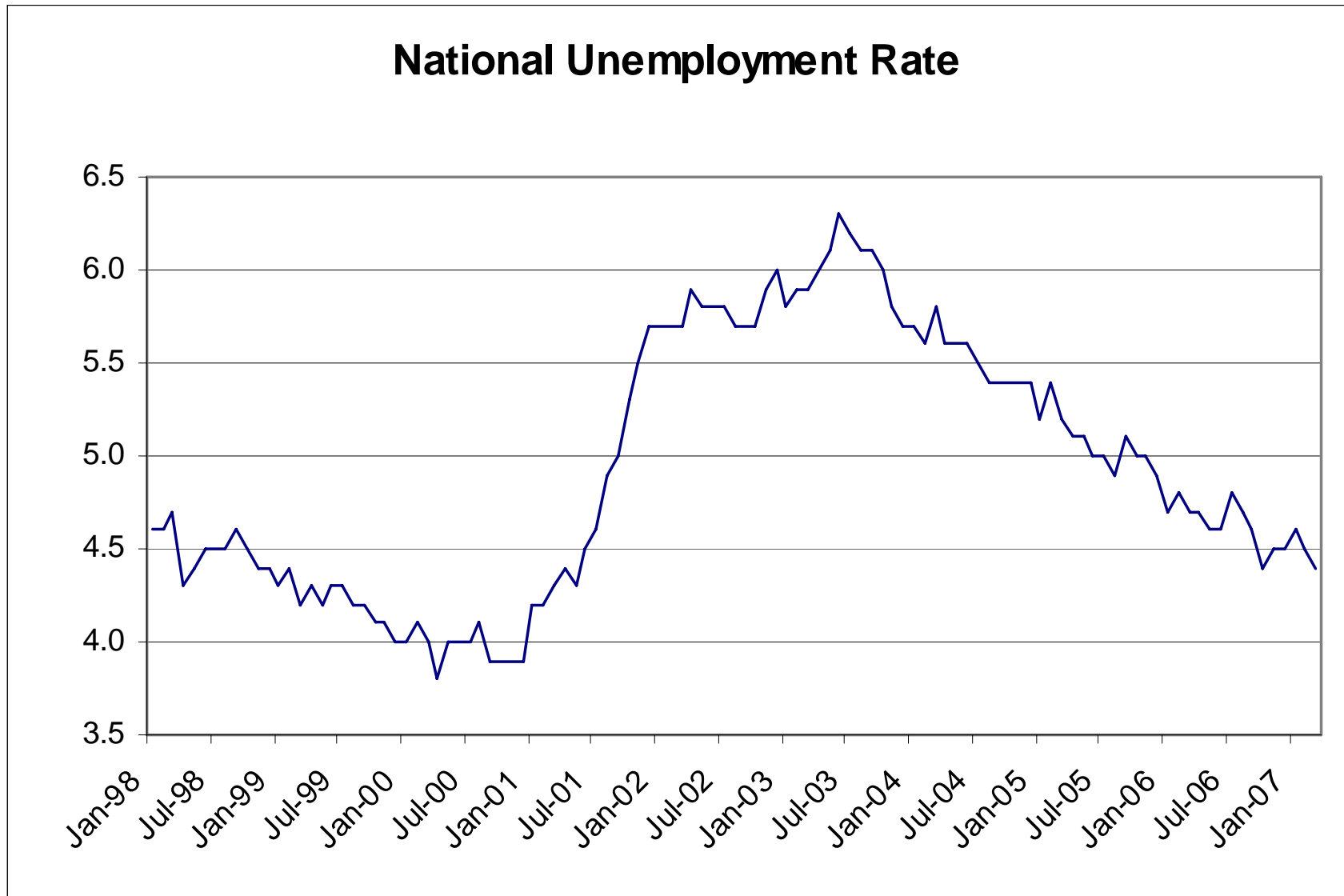
Last 6 and 12 months thru January 2007

# Subprime Delinquency Rates Soared....



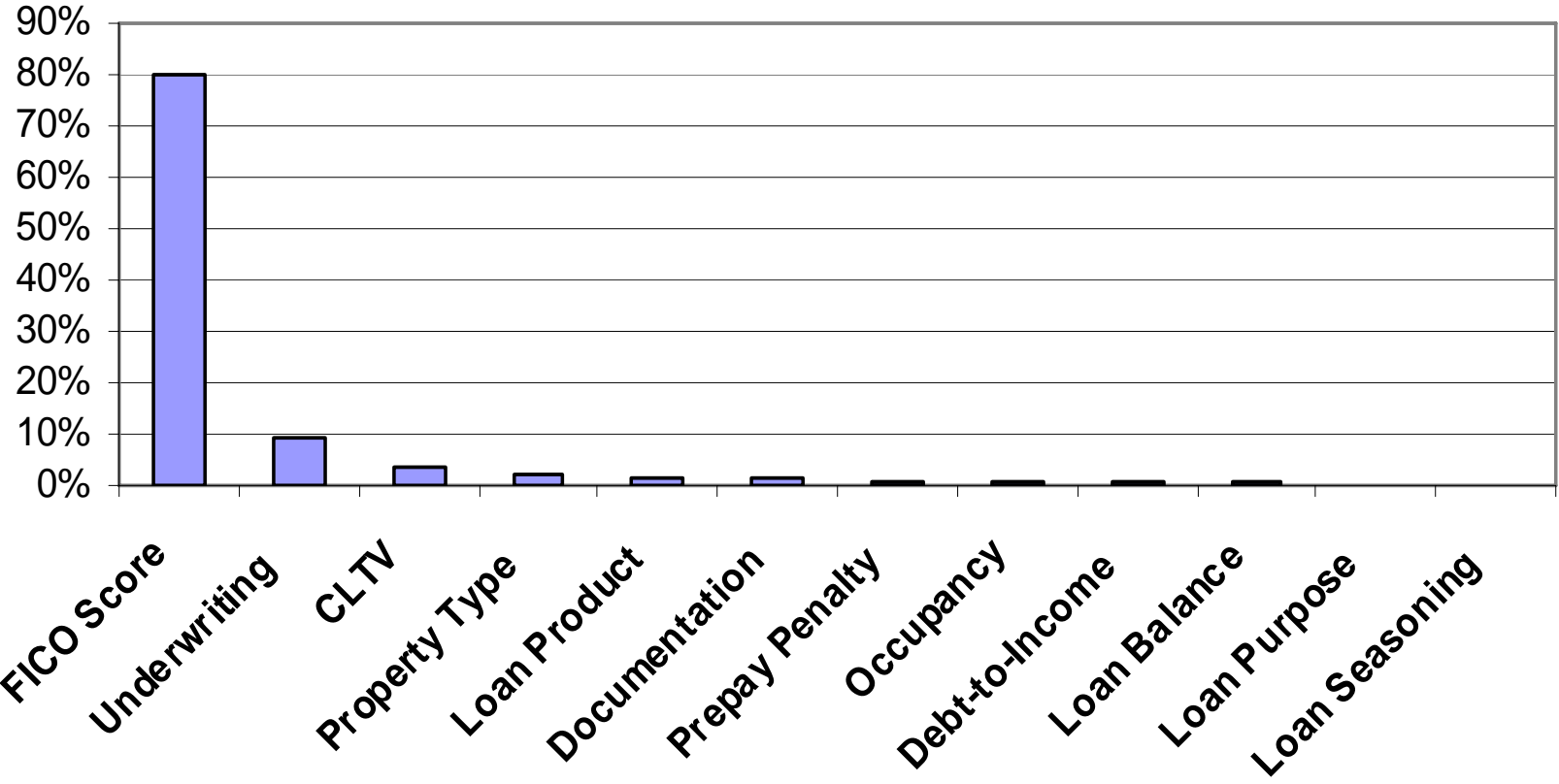
Source: LoanPerformance, Securitized Loans

# Despite Declining Unemployment Rate



# Rating Agency Models: Too Much FICO, Not Enough “Fundamentals”

Explanatory Power of Mortgage Loan Characteristics, "Typical" Rating Agency Model of Foreclosure Probability



## ...And Rating Agencies Have Lost All Credibility in the Subprime RMBS World

Figure 2. HEL Floating-Rate Cash and CDS Spreads, bp

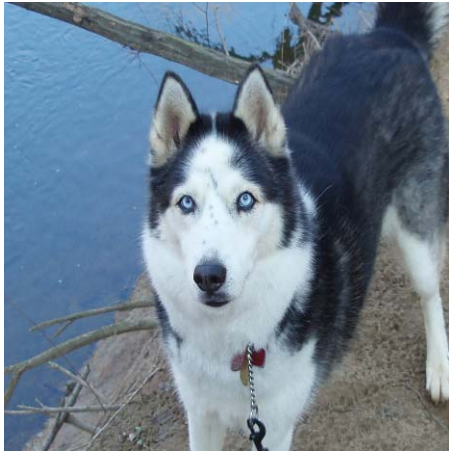
	Current	12Mo*			Since 1998*		
		Min	Max	Avg	Min	Max	Avg
AAA 1Yr Seq	10	3	13	6	3	14	9
AAA 3Yr Seq	23	14	25	16	14	28	20
AAA LCF Seq	34	22	34	25	22	45	31
AAA PT	23	14	25	16	14	70	28
AA 5Yr	55	27	55	33	27	110	57
A 5Yr	150	38	150	52	38	225	102
BBB 5Yr	800	100	800	201	100	800	212
BBB- 5Yr	1000	190	1000	319	170	1000	298
CDS A- 5 Yr	135	35	175	64	35	175	60
CDS BBB 5 Yr	475	80	550	187	80	550	156
CDS BBB- 5 Yr	700	190	875	319	185	875	264

Source: Lehman Brothers

# From Last Spring's Construction Conference

- When performance data are only available for favorable environments, statistical models are less reliable/robust
  - “idiosyncratic” events/fraud can dominate default data in low credit-loss environment
  - Sometimes can lead to very counterintuitive results (**and excessive reliance on credit scores vs. underwriting/collateral value**)
- Questionable quality of data for ABS combined with new product types and lack of history imply high degree of uncertainty on performance, sizing, and reliability of ratings

# How Underwriting Has Tightened



**Borrower Profile: Kita Lawler**  
**Application: No Income, No Asset**  
**FIDO Score: 680**

**2006: APPROVED (Subprime Channel)**

**2007: This Applicant's a Dog! (REJECTED)**

# So Where Are We Going?

- **Investor Demand for SF Real Estate Will Continue to Decline**
- **Recent Credit Tightening, Focused on High CLTV/low-doc lending, will Cut “Effective” Housing Demand by around 10% This Year**
- **Further Cuts in Housing Production Are Almost Certain**
- **Inventories of Vacant Homes Will Edge Higher in Early 2007, and Won’t Begin Falling Significantly Until the Second Half of This Year**
- **Downward Pressure on Home Prices Will Intensify, With Some Regions Likely to Experience Sizable Declines**

# LEHC 2007 Forecast

(Starts/Sales/Completions in Thousands of Units)

	2005	2006	2007 P
Housing Starts	2,068	1,801	1,295
Single Family	1,716	1,465	982
Multifamily	352	336	313
Housing Completions	1,931	1,979	1,515
Single Family	1,636	1,654	1,190
Multifamily	295	325	325
Existing Home Sales	7,076	6,478	5,875
New SF Home Sales	1,283	1,053	890
% Change, National Home Prices, Q4/Q4			
S&P/Case Shiller	14.6%	0.4%	-7.0%

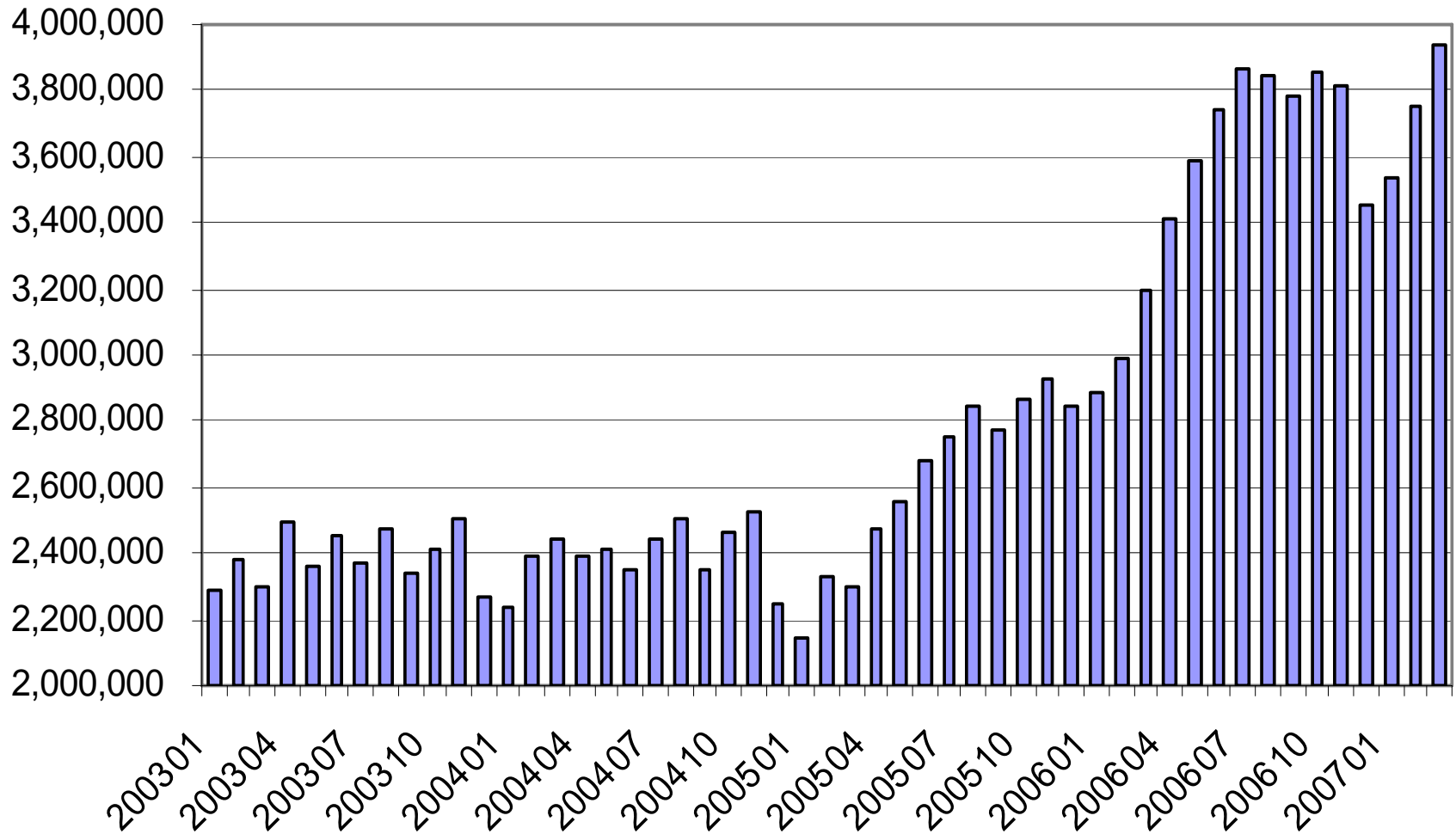
# What Does the Futures Market Say?

(Implied % Change in Home Prices, CME Futures Prices, 2007)

<b>Los Angeles</b>	<b>-5.7%</b>
<b>San Diego</b>	<b>-6.3%</b>
<b>San Francisco</b>	<b>-5.2%</b>
<b>Denver</b>	<b>-5.3%</b>
<b>Washington</b>	<b>-6.7%</b>
<b>Miami</b>	<b>-6.1%</b>
<b>Chicago</b>	<b>-2.2%</b>
<b>Boston</b>	<b>-7.4%</b>
<b>Las Vegas</b>	<b>-6.3%</b>
<b>New York</b>	<b>-5.7%</b>
<b>Composite</b>	<b>-6.1%</b>

**Source: S&P/Case-Shiller, CME**

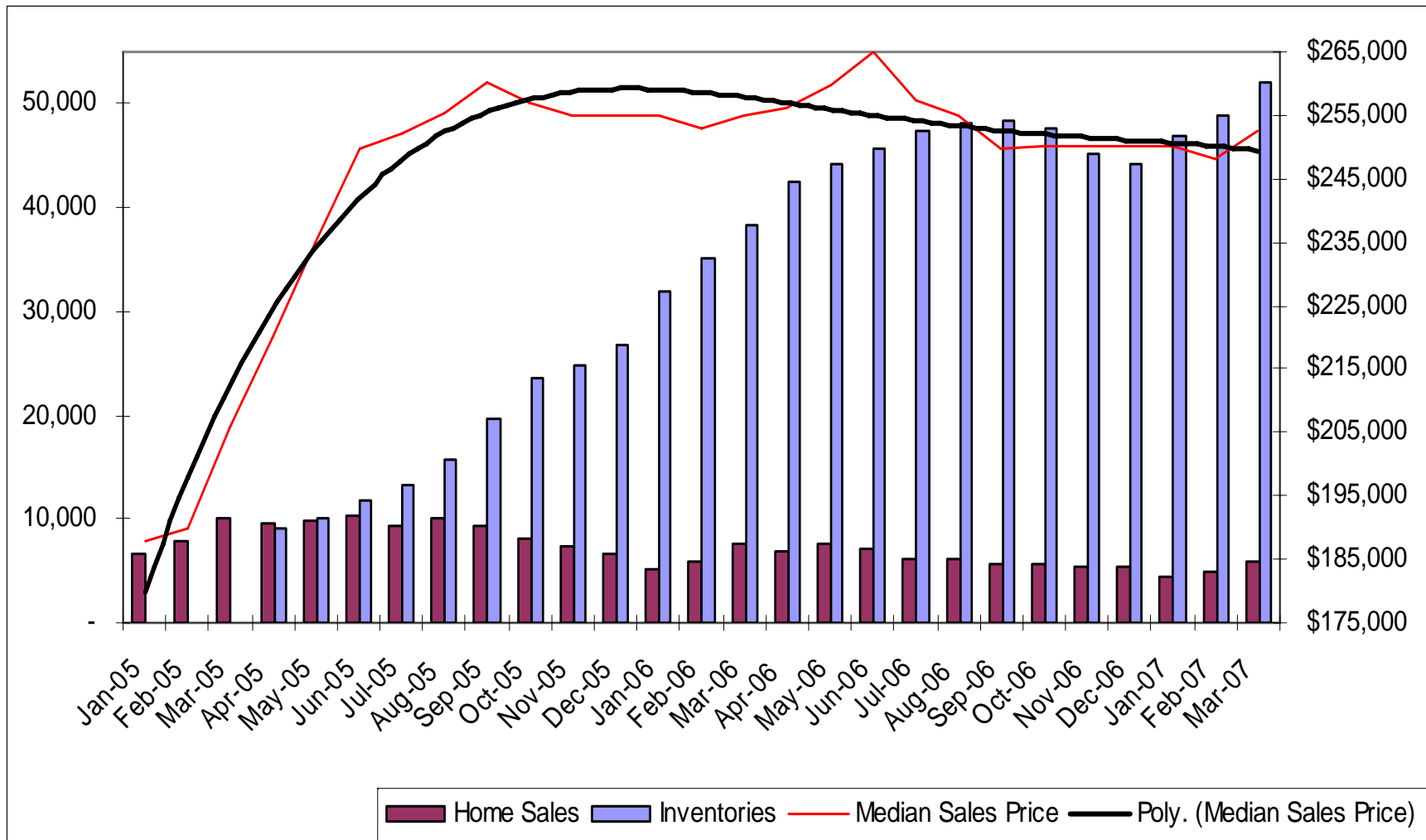
# Nationwide Existing Home Listings



March: Estimate Based on Data from Local MLS

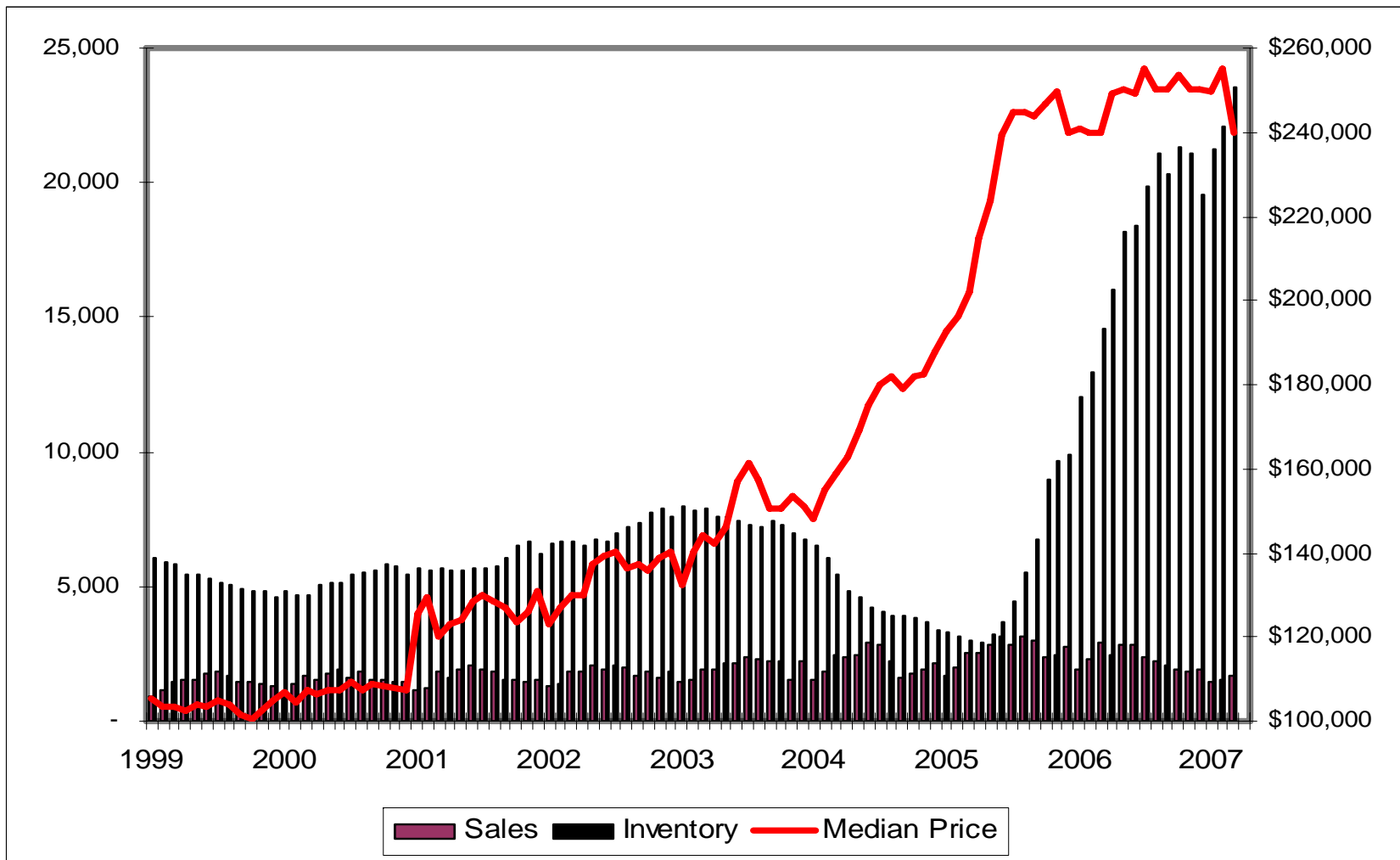
Source: National Association of Realtors

# Home Sales, Listings, Median Prices Greater Phoenix Area



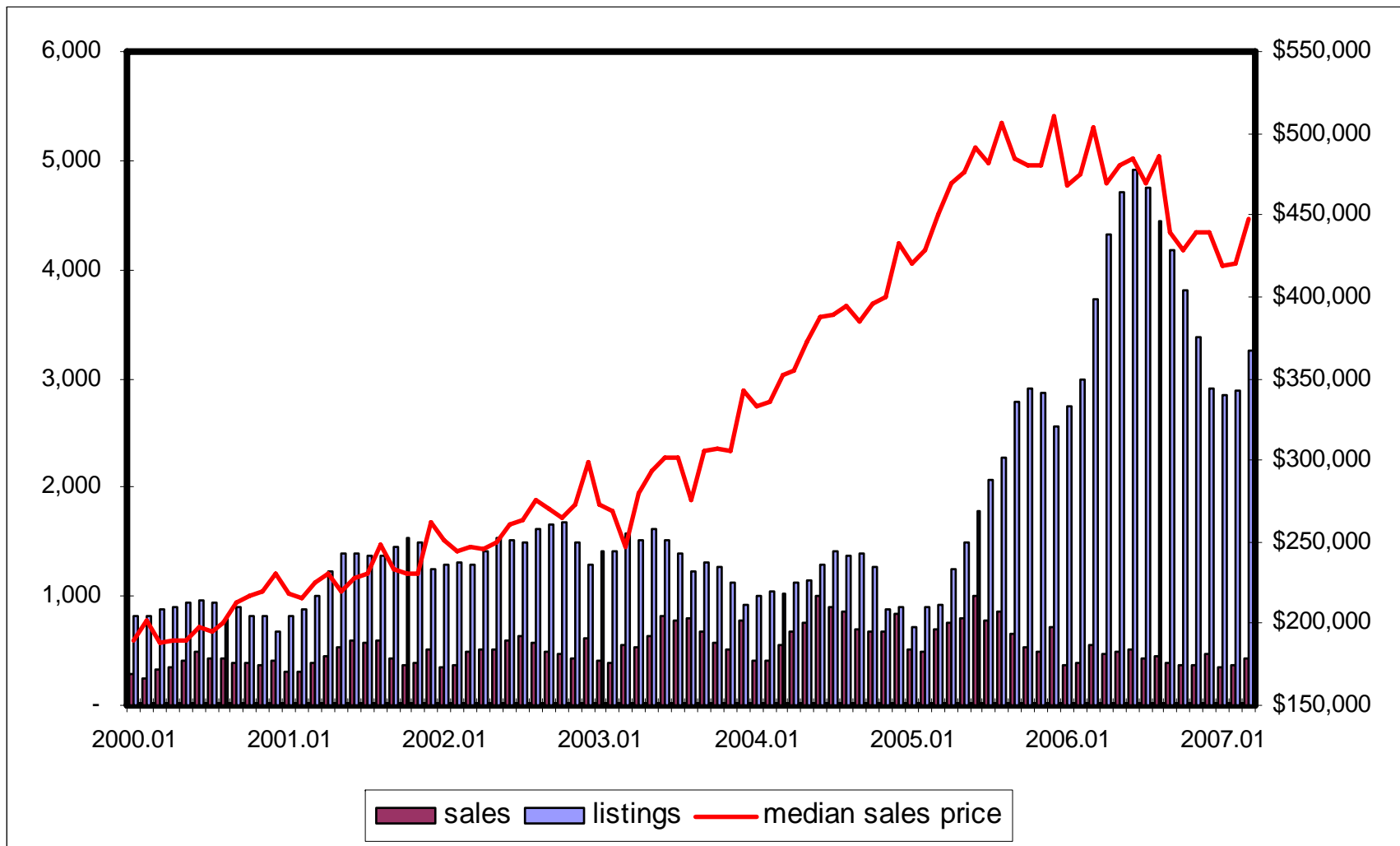
Source: ARMLS

# Home Sales, Listings, Median Prices Orlando



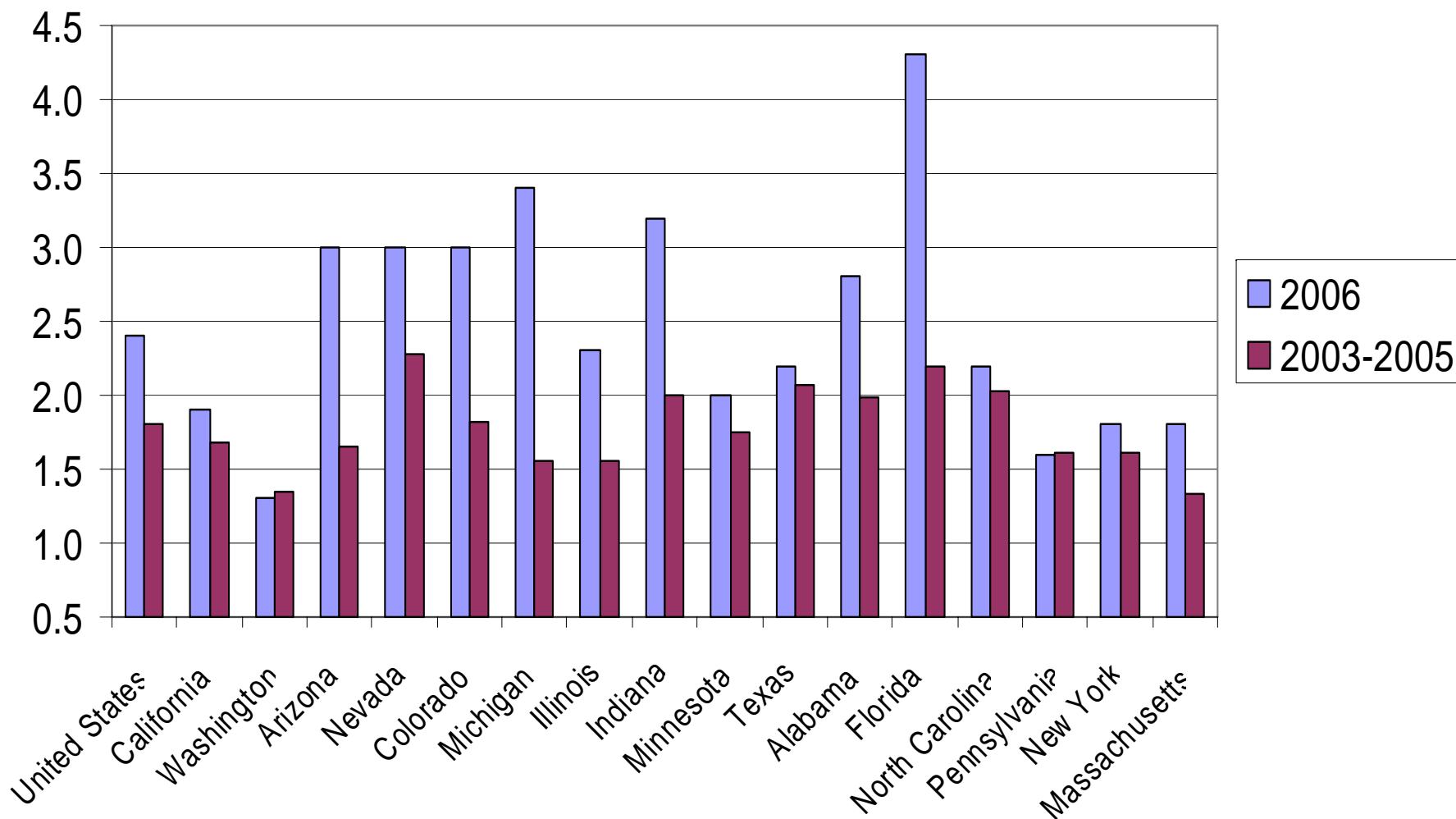
Source: ORRA

# Home Sales, Listings, Median Prices Loudoun County, VA



Source: MRIS

## Homeowner Vacancy Rate, Selected States



**Based on Yearly Average Data From Census Dept.: Q4 data would be scarier!**

# Florida Inventory Situation is Scary

<u>LISTINGS</u>	Feb-07	Feb-06	Feb-05	<u>SALES</u>	Feb-07	Feb-06	Feb-05	2/07 mos. supply
Broward County	37,323	22,225	6,405	Broward County	1,136	1,686	2,062	32.9
Dade County	34,455	20,433	8,568	Dade County	1,136	1,686	2,062	30.3
Tampa	19,234	10,865	4,386	Tampa	1,209	1,718	1,948	15.9
Orlando	22,055	12,966	3,141	Orlando	1,541	2,269	1,988	14.3
Palm Beach County	36,926	26,690	12,802	Palm Beach County	1,022	1,242	1,529	36.1
St. Lucie County	9,366	5,871	2,760	St. Lucie County	220	300	291	42.6
Pensacola	6,351	5,155	1,335	Pensacola	330	460	489	19.2
<b>Total</b>	<b>165,710</b>	<b>104,205</b>	<b>39,397</b>	<b>Total</b>	<b>6,594</b>	<b>9,361</b>	<b>10,369</b>	<b>25.1</b>

Source: Various Local MLS

# So What Have We Learned?

- **Supply matters (home prices have declined in areas where the economy hasn't, but where investor buying/loose credit boosted home prices, but then home building outpaced "core" demographic demand)**
- **Demand matters (home prices have declined in areas where the economy has weakened)**
- **Underwriting matters (FICO score alone a poor predictor of credit performance in a weak housing market)**
- **Low/No Doc + Low/No Down Payment Lending Invites Fraud**
- **Home price measurement matters**
- **Logit/Probit "Models" Using Only Data from "Good Times" May Be Horrible Predictors of Performance During "Bad Times"**

# Poison Said It All in 1990 in a Song Reportedly Inspired by a Mortgage Lender After Housing Crashed that Year, and Low/No Doc (“Liar”) Loan Defaults Skyrocketed

- *Well my vices have turned to habits  
And my habits have turned to stone  
The lies chipped away at my smile now baby  
While the truth ate me down to the bone*

*One more step and I swear  
I'll be over the edge  
I've gotta stop living at a pace that kills  
Before I wake up dead*

*Chorus:  
Good times, bad times  
How life loves a tragedy  
Heartbreaks, heartaches  
How life loves a tragedy*

Excerpted from “Life Loves A Tragedy”, Poison, 1990



**Franklin, the Fair Housing Fox**