

Wealth Management Research

Jonathan Woloshin, CFA – Equity Sector Analyst
Commercial & Residential Real Estate Overview – March 2010

This report has been prepared by UBS Financial Services Inc. (“UBSFS”).

The Ugly, The Bad & The Good

Summary

THE UGLY

- Negative Equity
- Shadow Inventory Overhang
- Foreclosures/Mortgage Delinquency
- Mortgage Modifications
- “Sand” Markets

THE WILD CARDS

- Politics
- Unemployment

THE BAD

- ARM/Option ARM Resets/Recasts
- Homeownership Rates
- Impact of Distressed Sales
- High End Risk
- Single Family Rentals

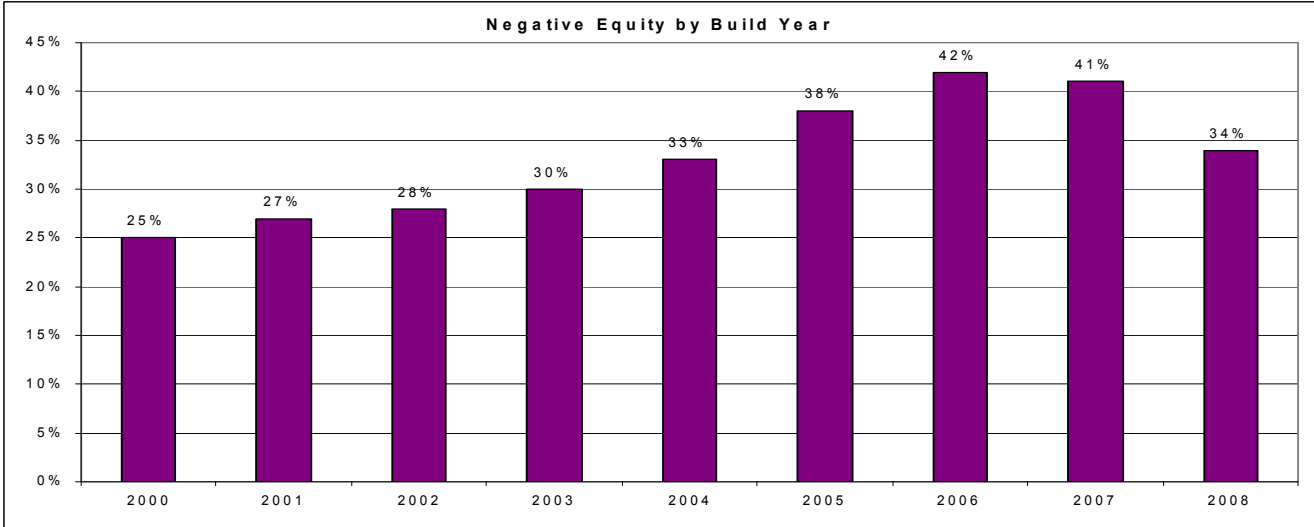
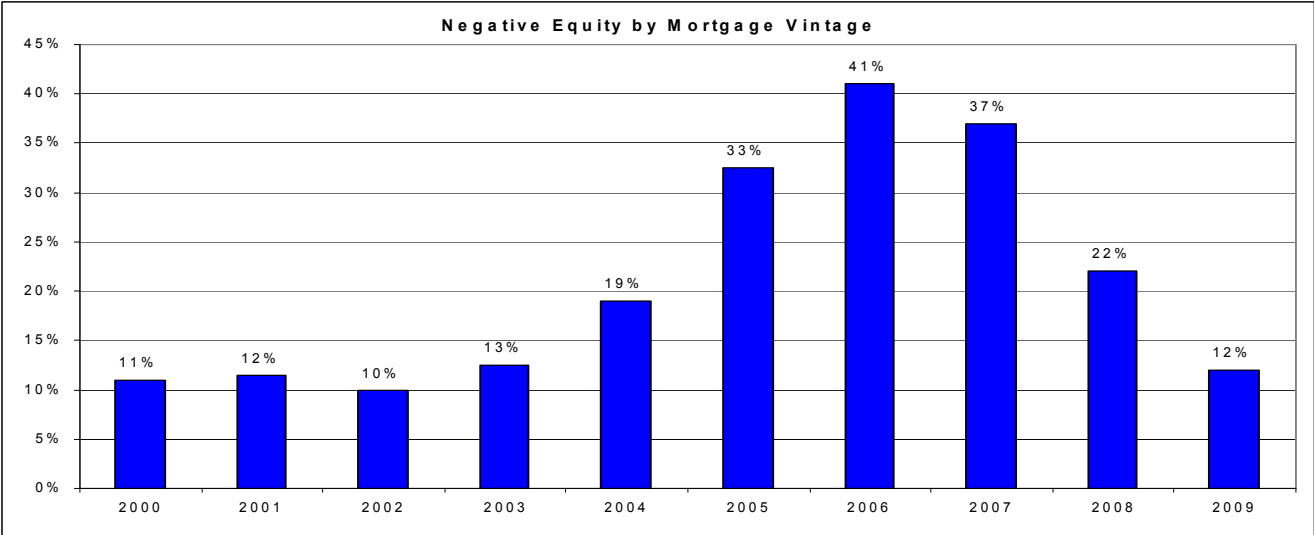
THE GOOD

- Affordability
- Lagging Housing Starts and Household Formations
- Length of Downturn
- Public Builder Market Share Gains

THE UGLY

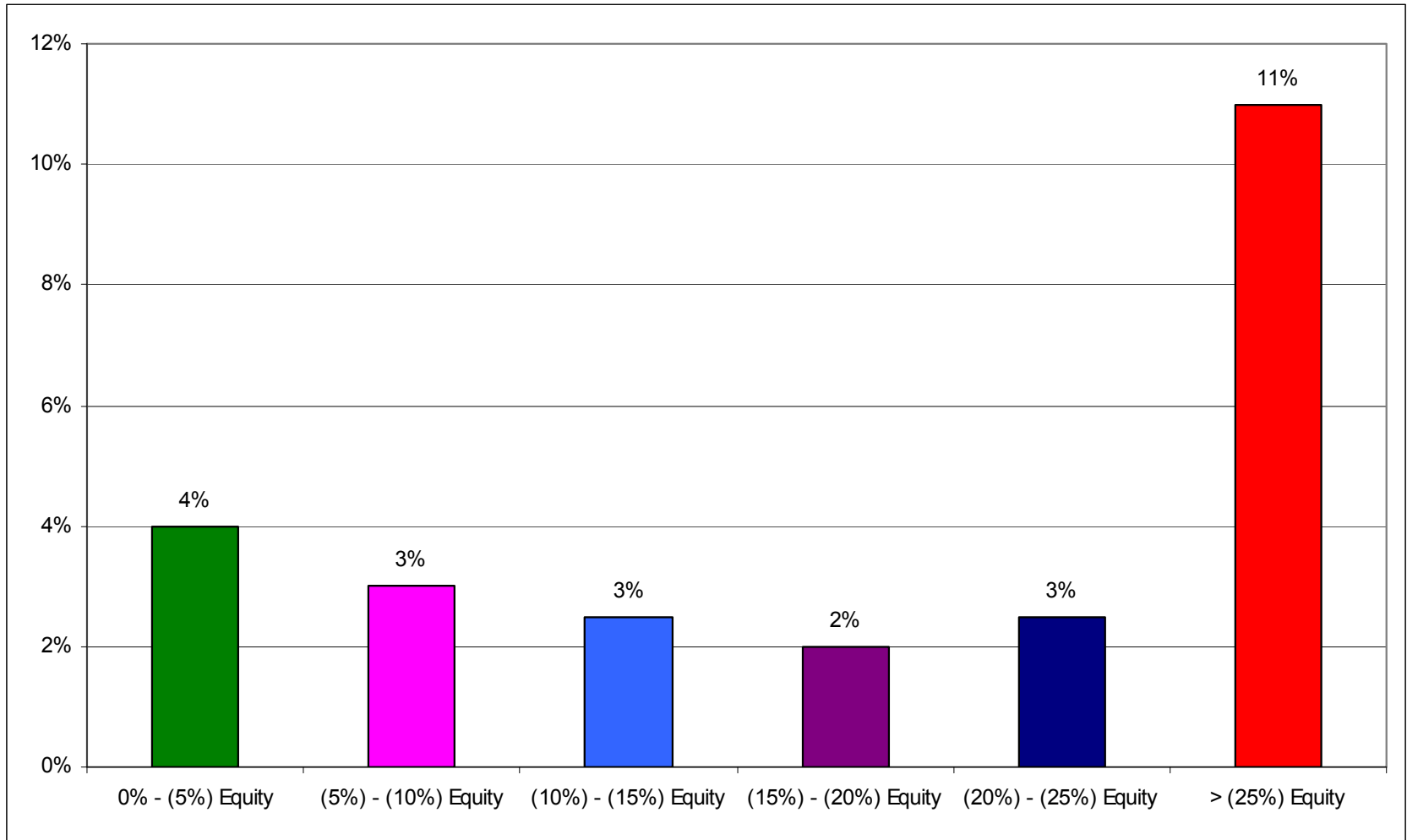
Negative Equity Time Series

Source: First American Core Logic



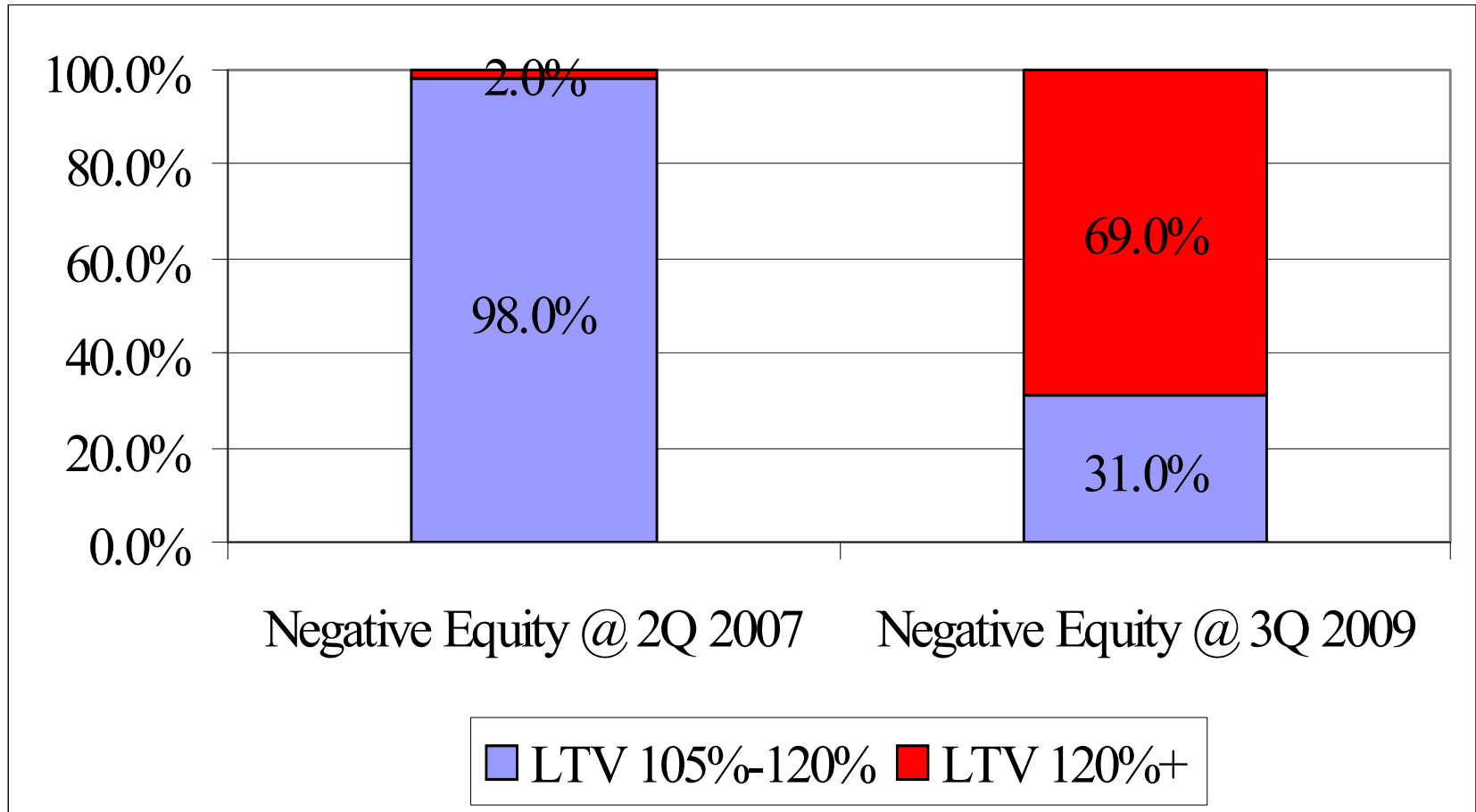
Distribution of Negative Equity 3Q 2009

Source: First American Core Logic



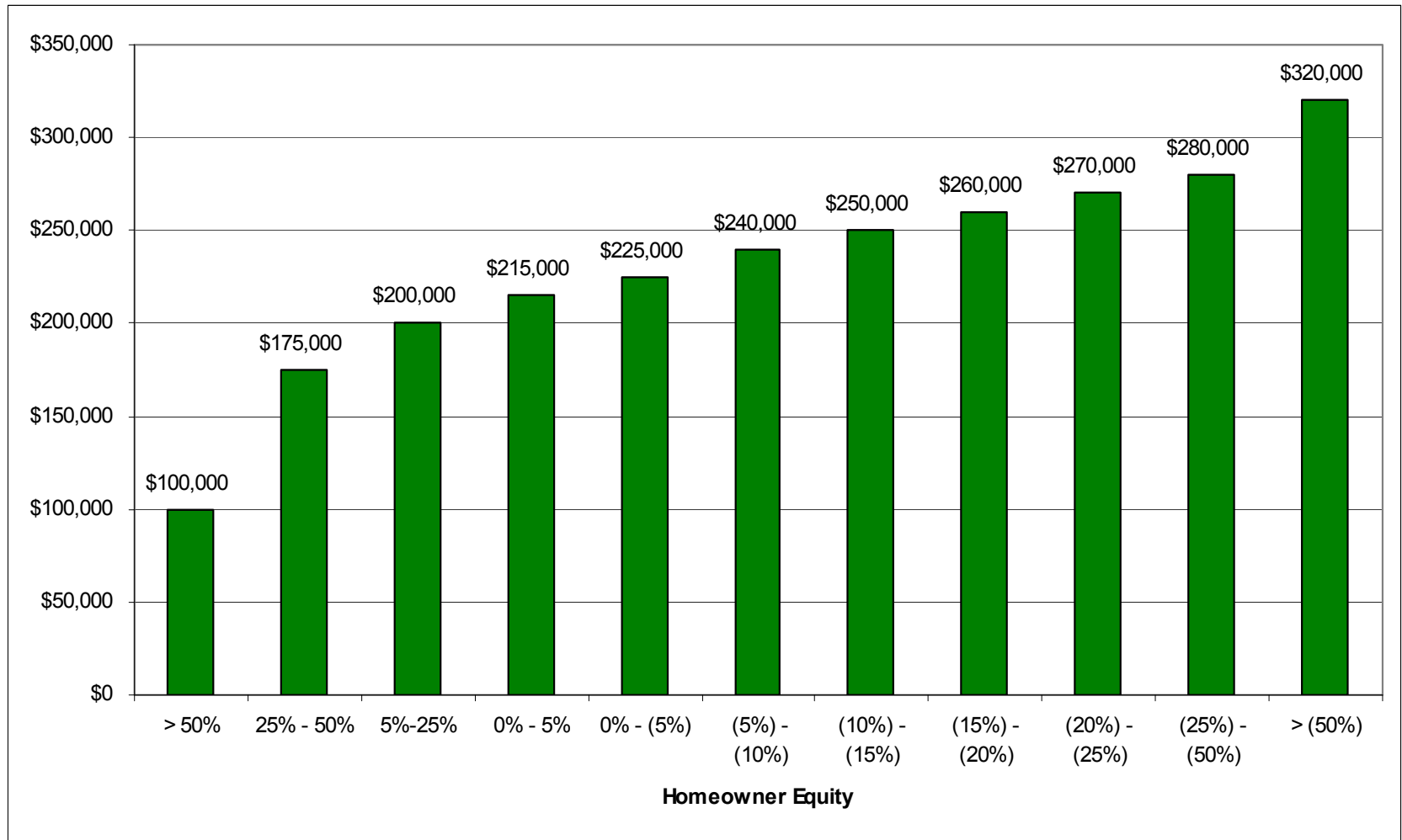
Negative Equity Composition

Source: Loan Performance



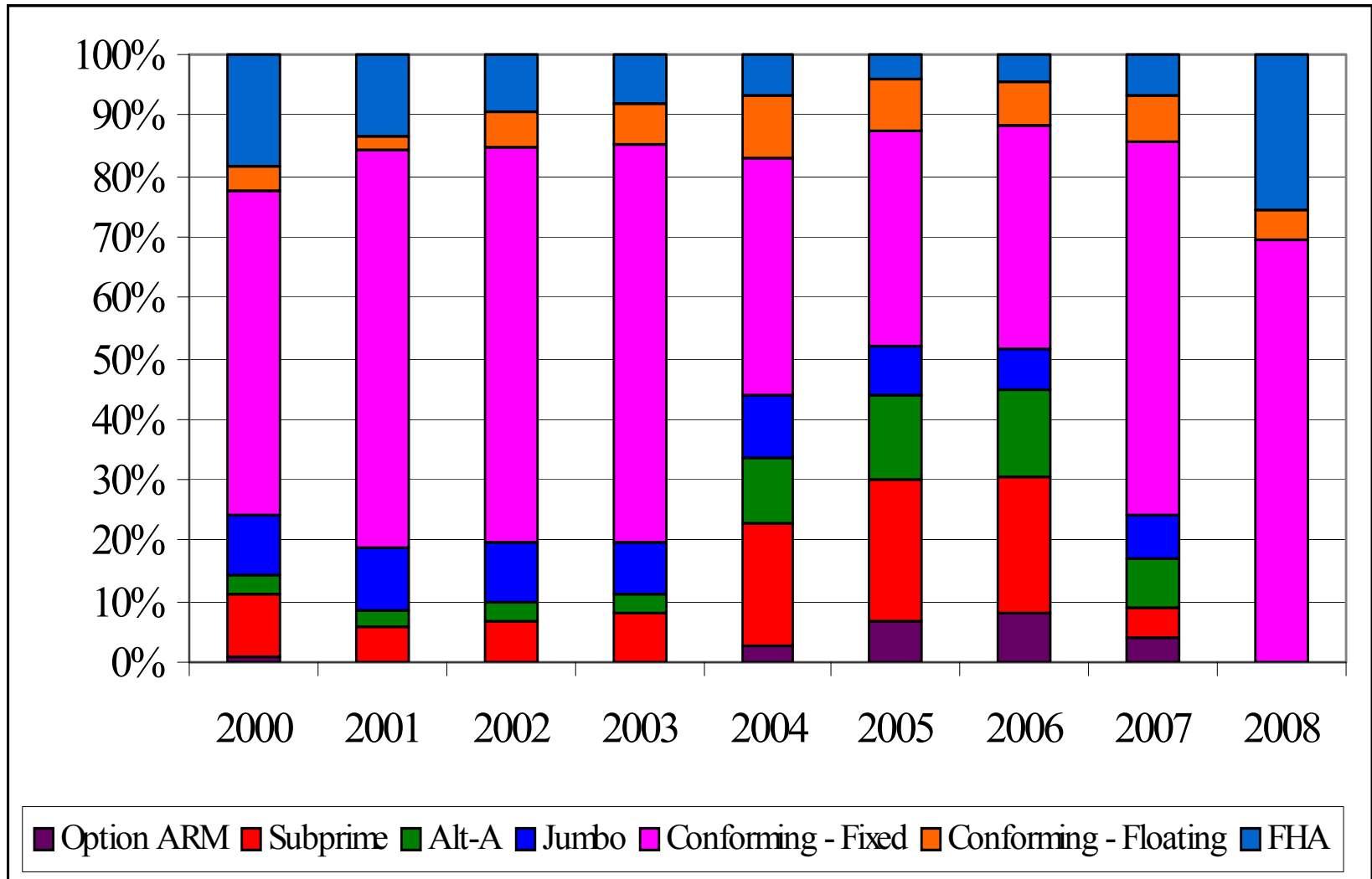
Mortgage Amount by Equity Level

Source: First American Core Logic



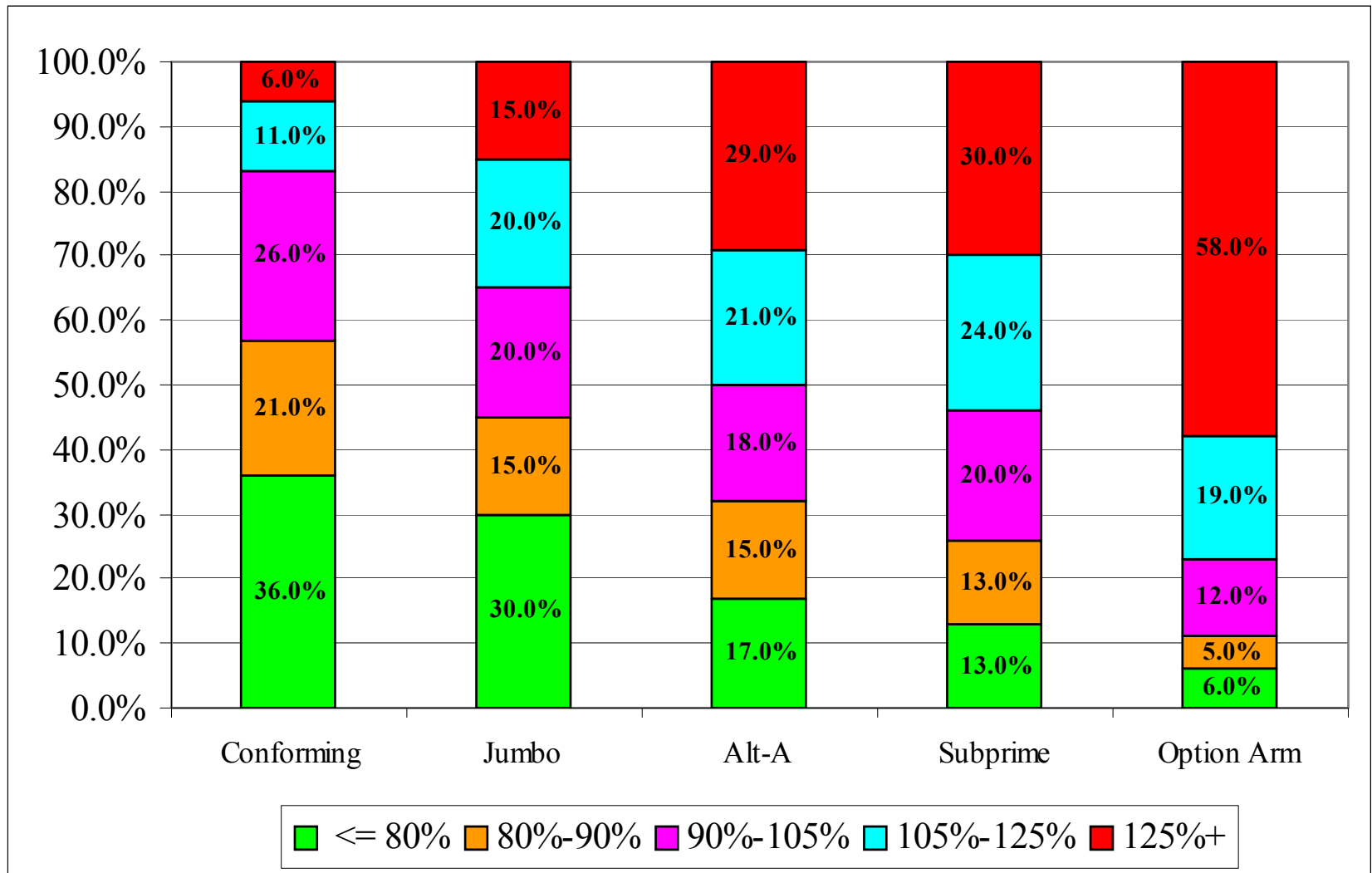
Mortgage Issuance 2000-2008

Source: MBA



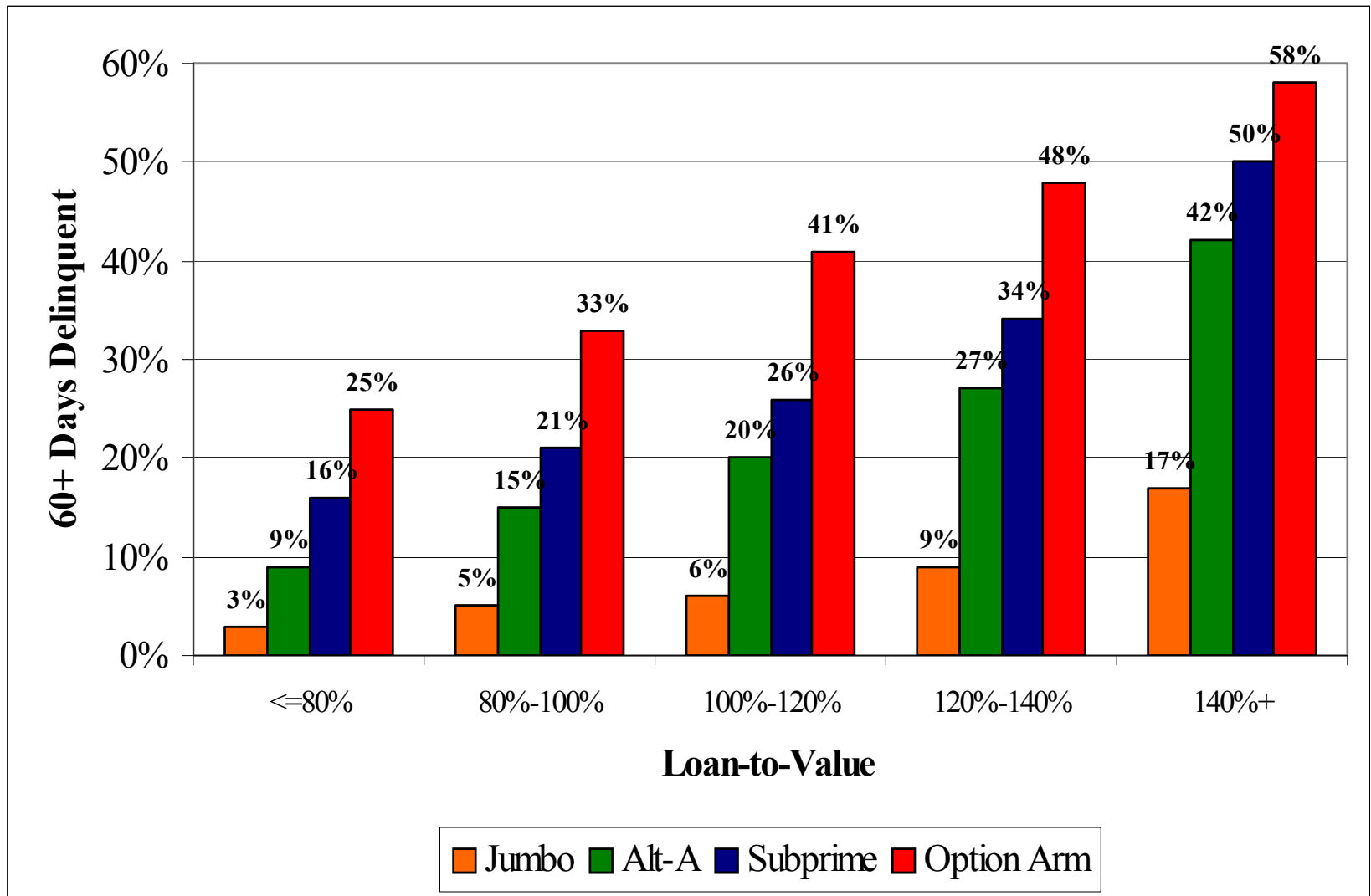
Loan-to-Value by Loan Type

Source: Loan Performance, MBA



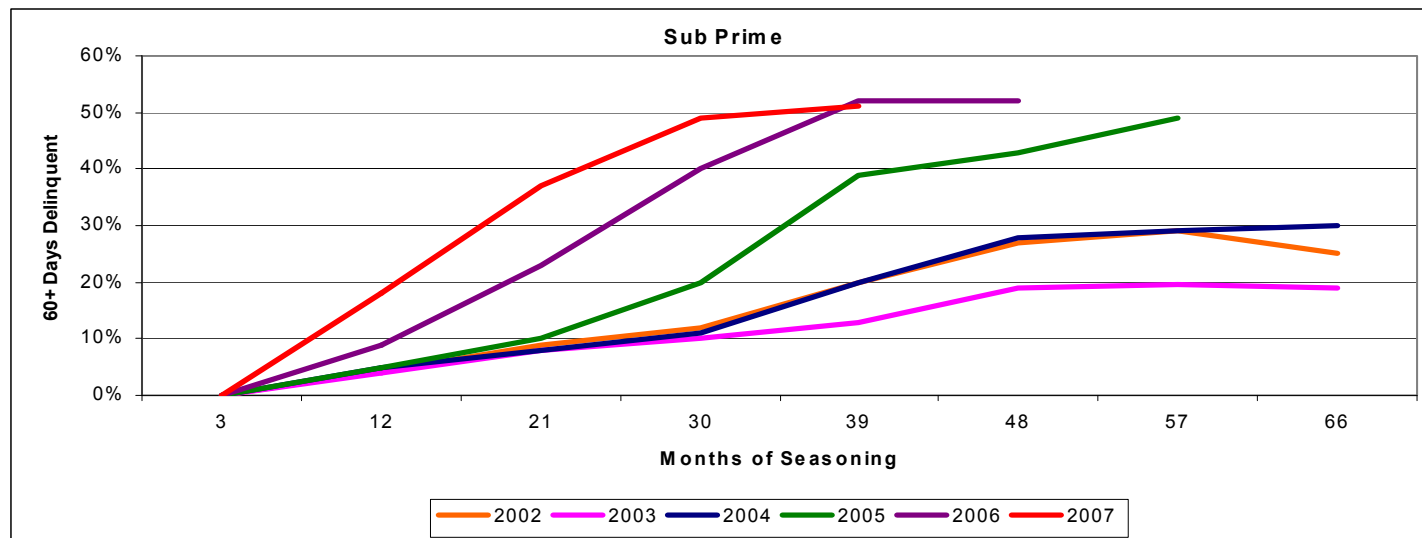
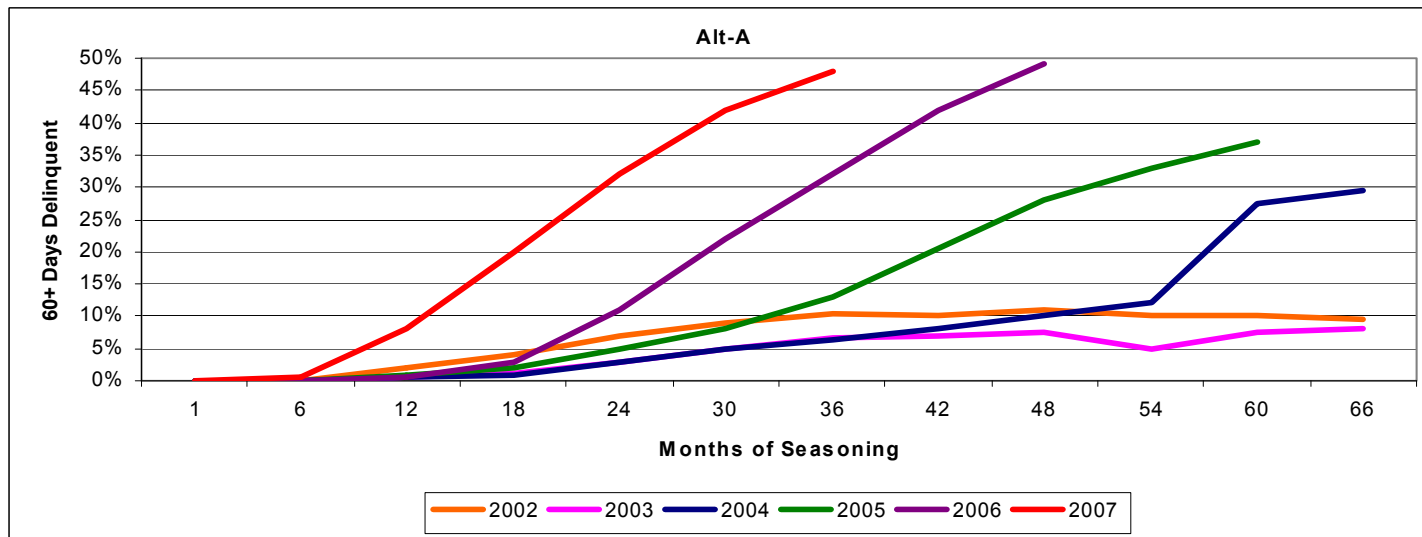
Delinquency by LTV

Source: Loan Performance



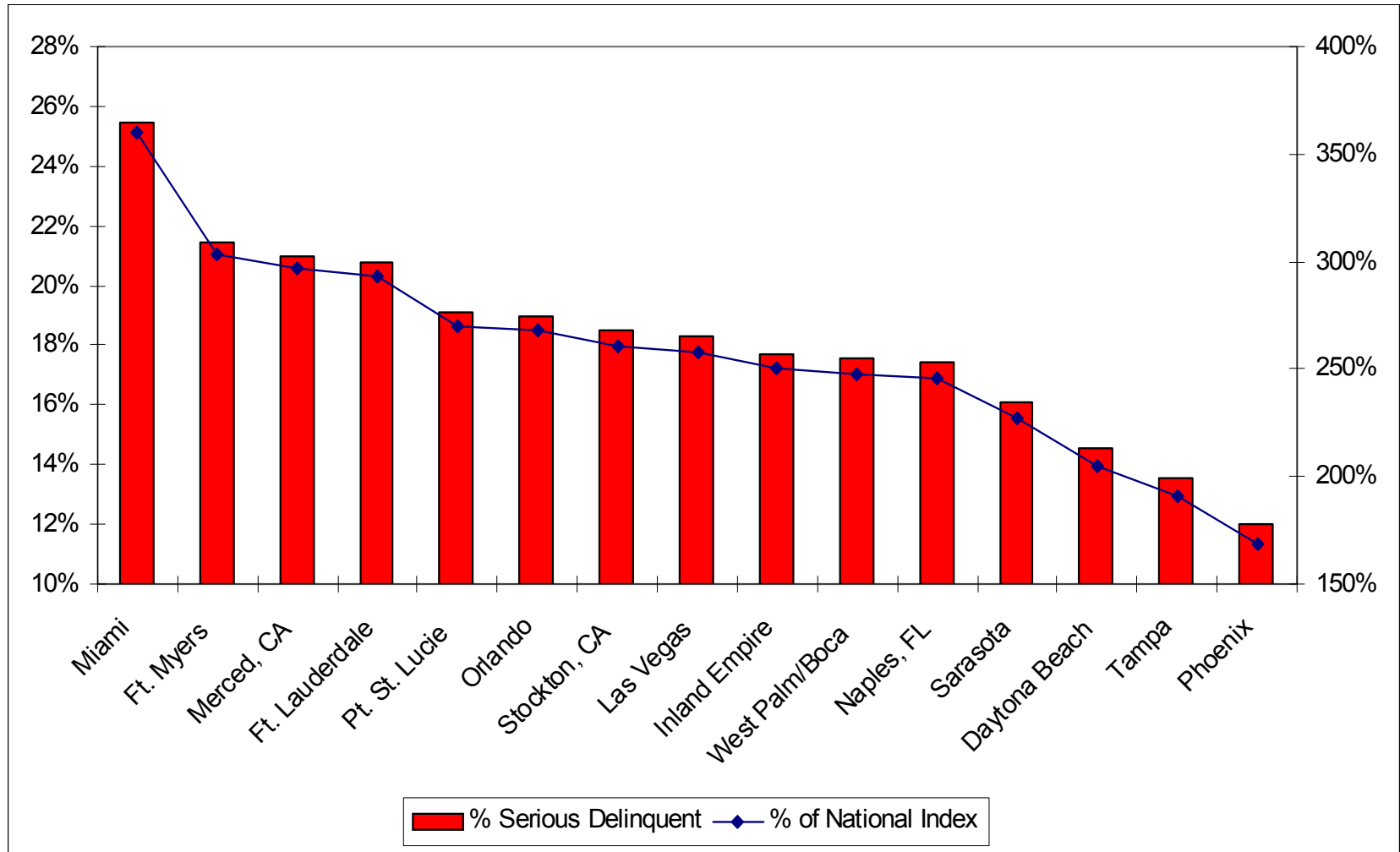
Underwriting Quality Matters

Source: First American Corelogic



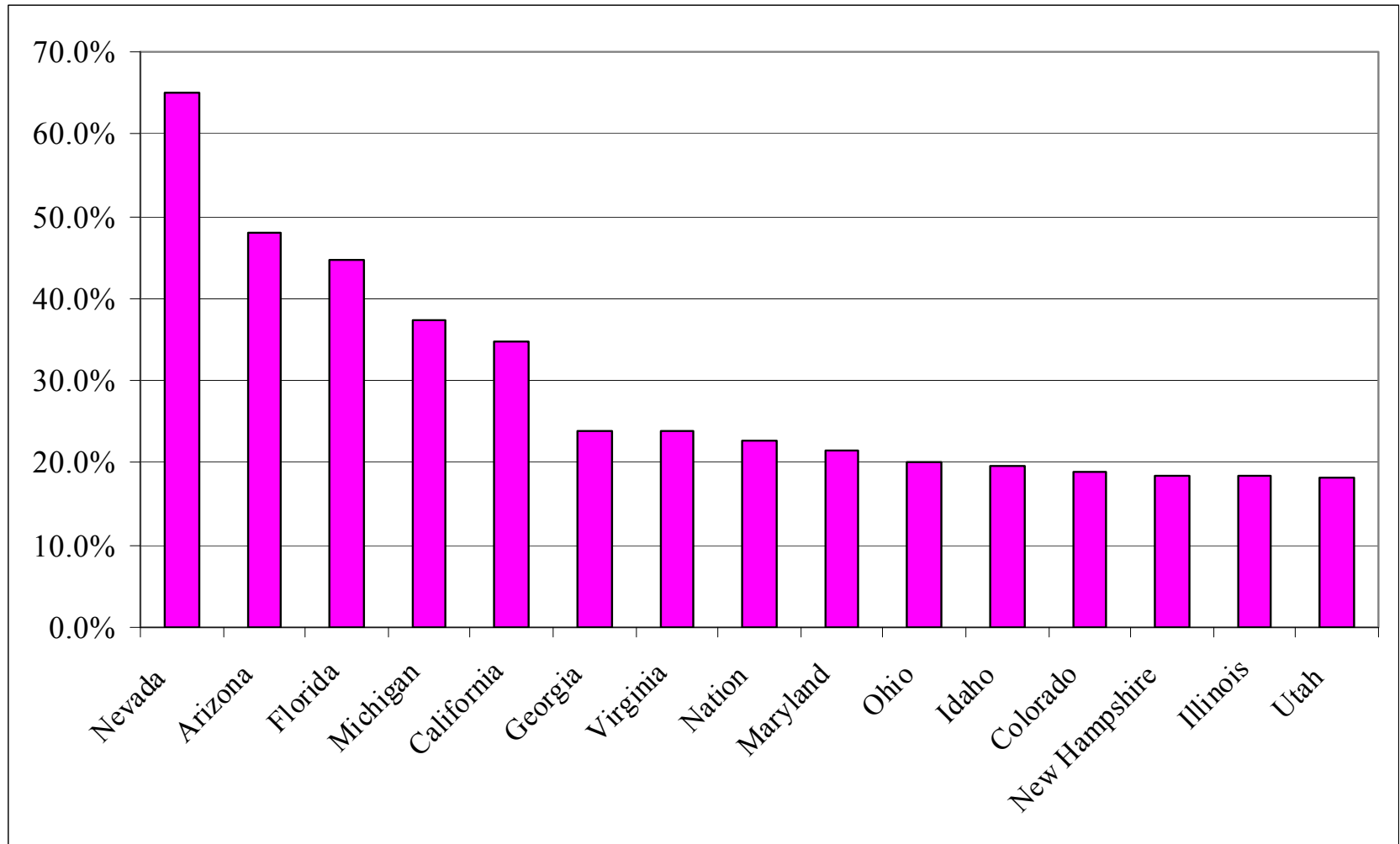
Serious Delinquencies 3Q 2009

Source: First American Core Logic



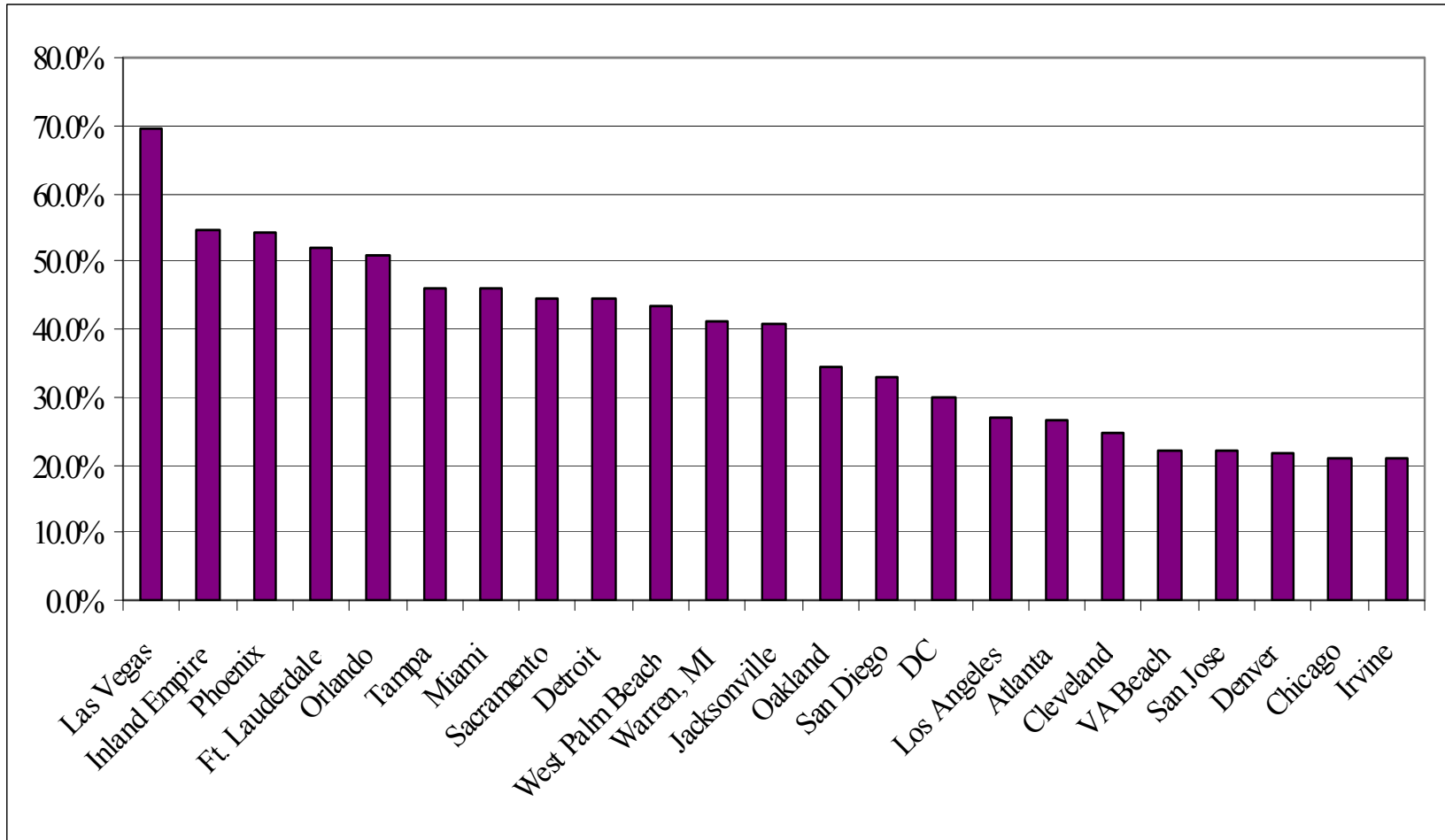
Negative Equity by State

Source: First American Core Logic



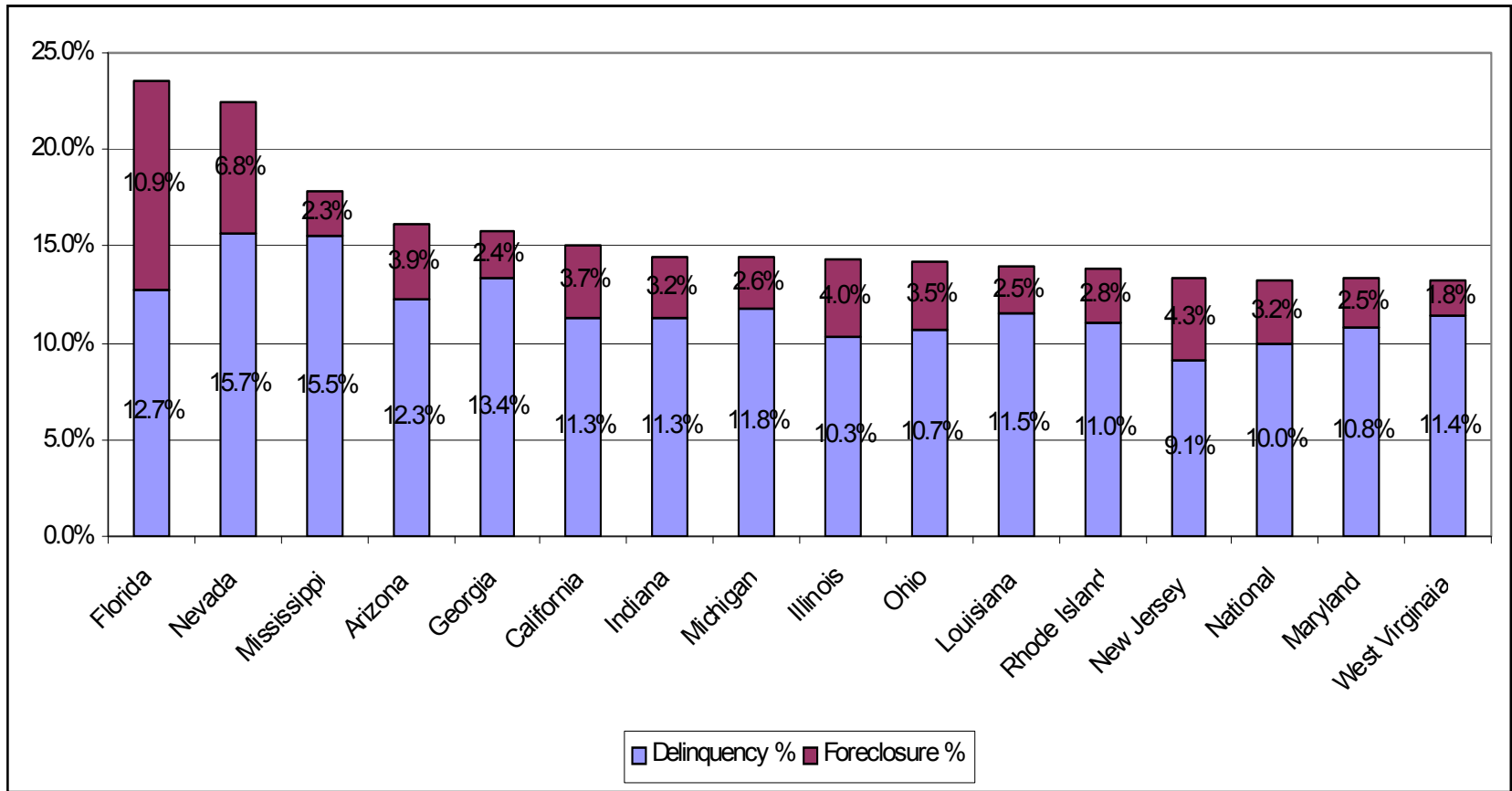
Negative Equity by MSA

Source: First American Core Logic



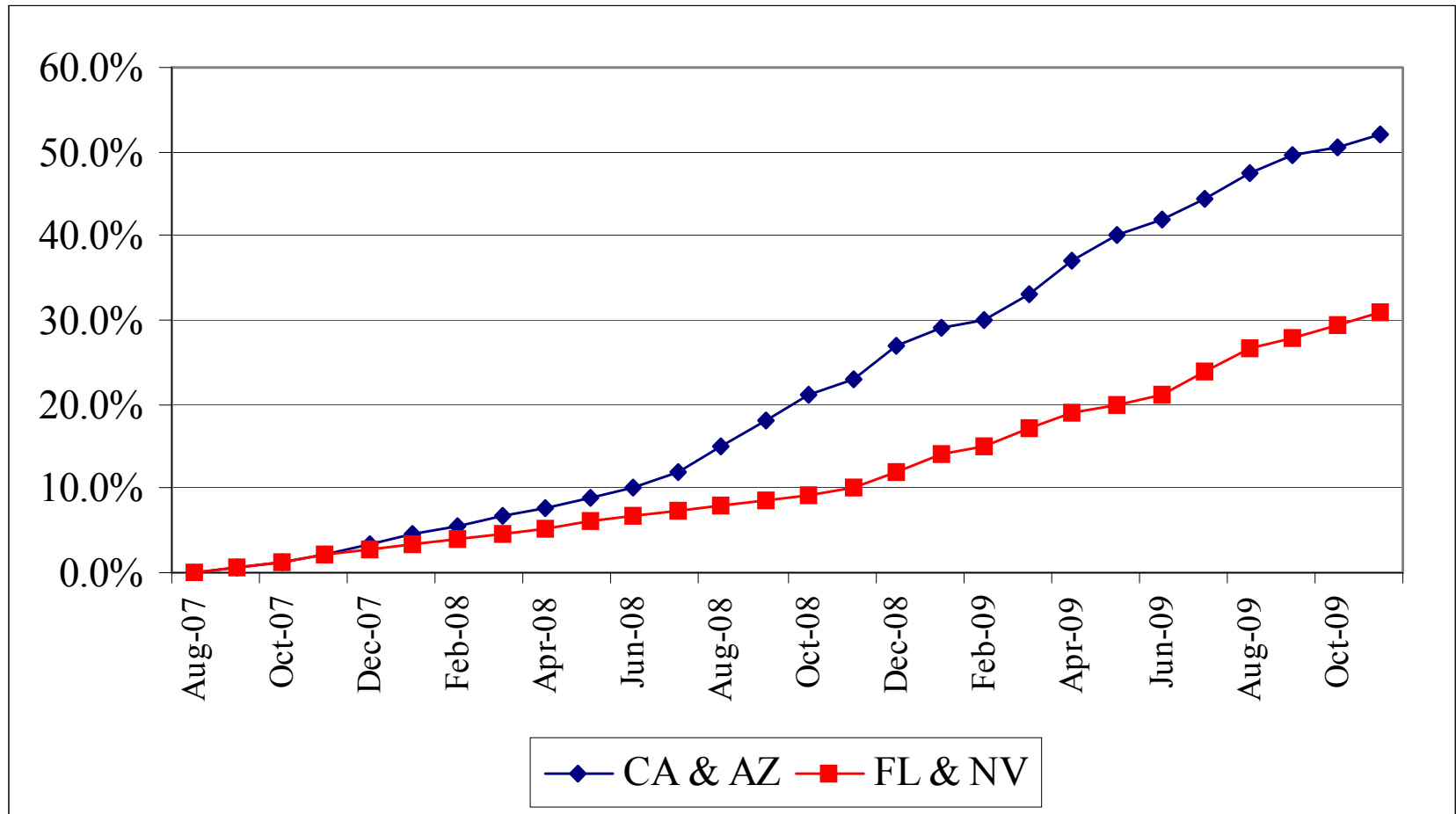
At Risk Mortgages by State

Source: Lender Processing Services

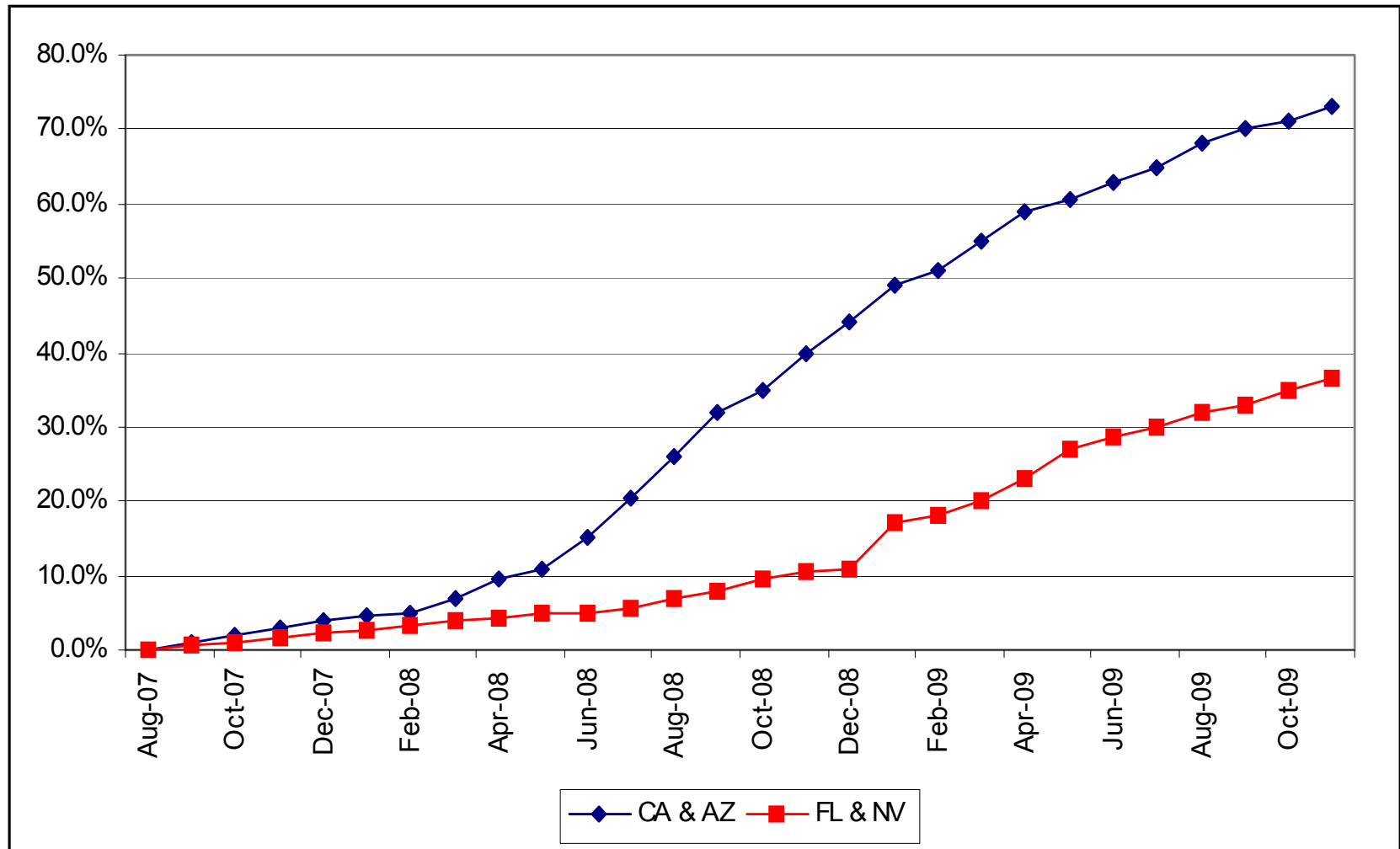


Default Rates – State Laws Matter

Source: Loan Performance

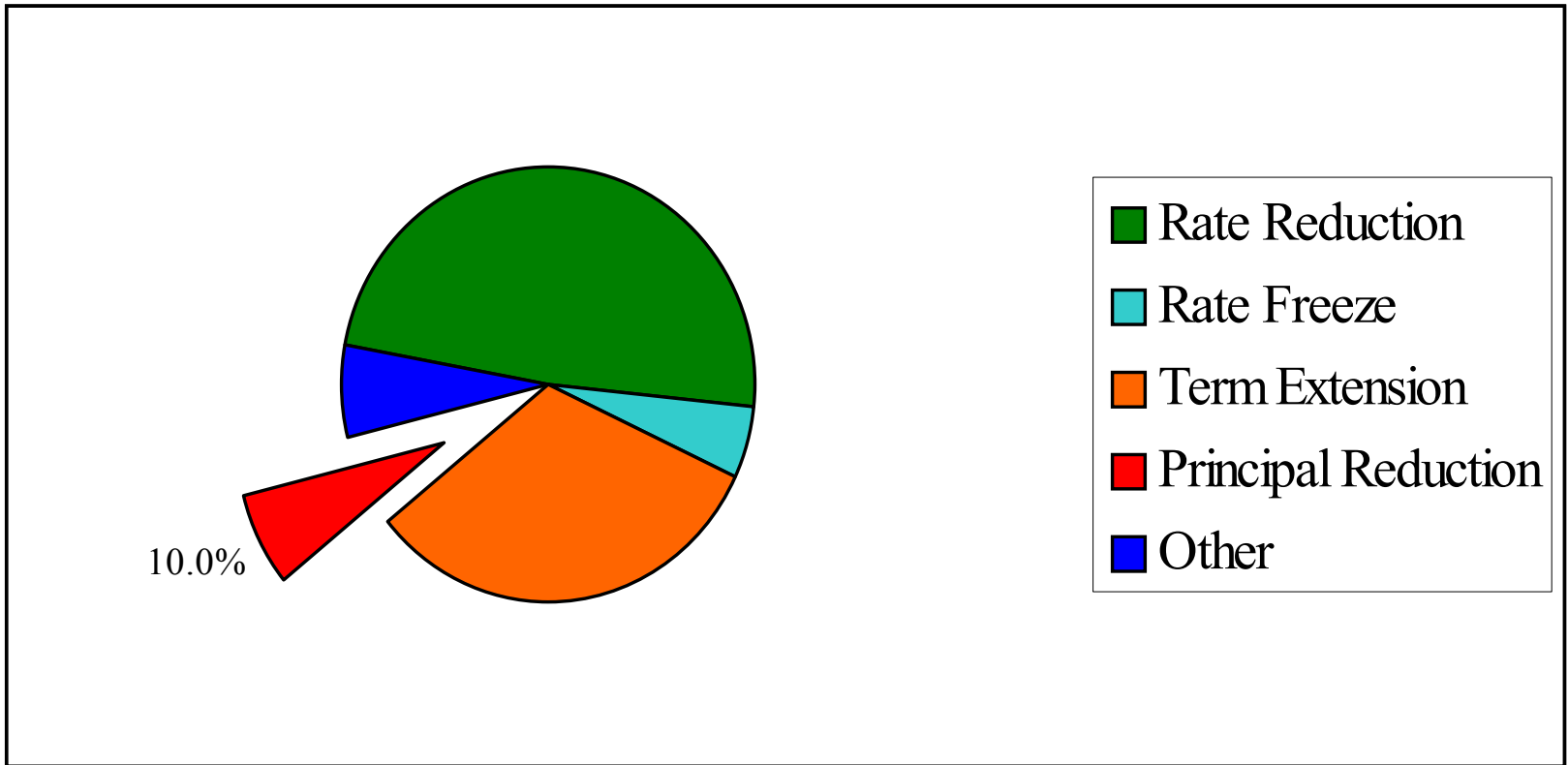


Default Rates (LTV >= 125%) – State Laws Matter Source: Loan Performance



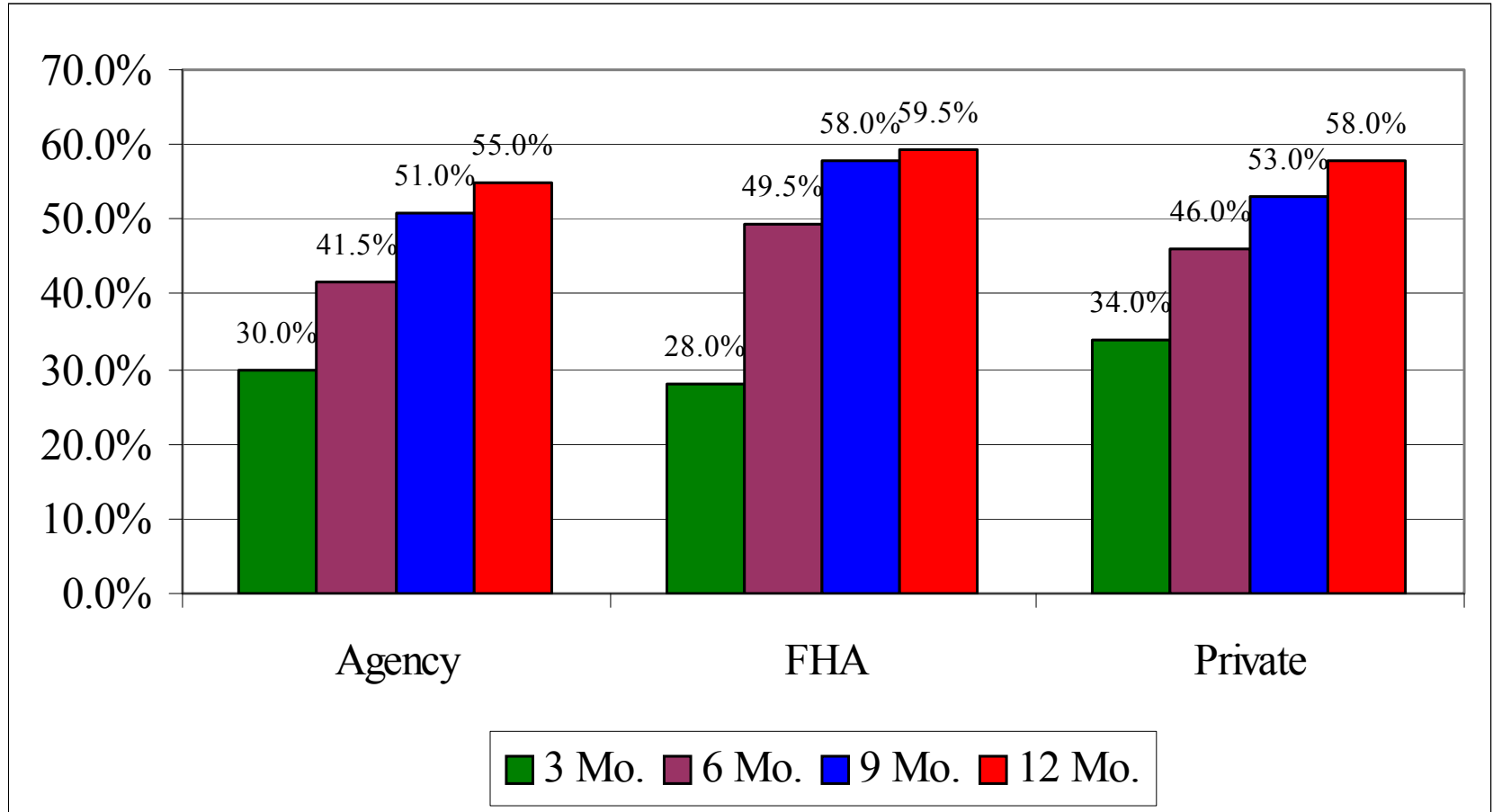
Mortgage Modification Actions

Source: OCC, OTS

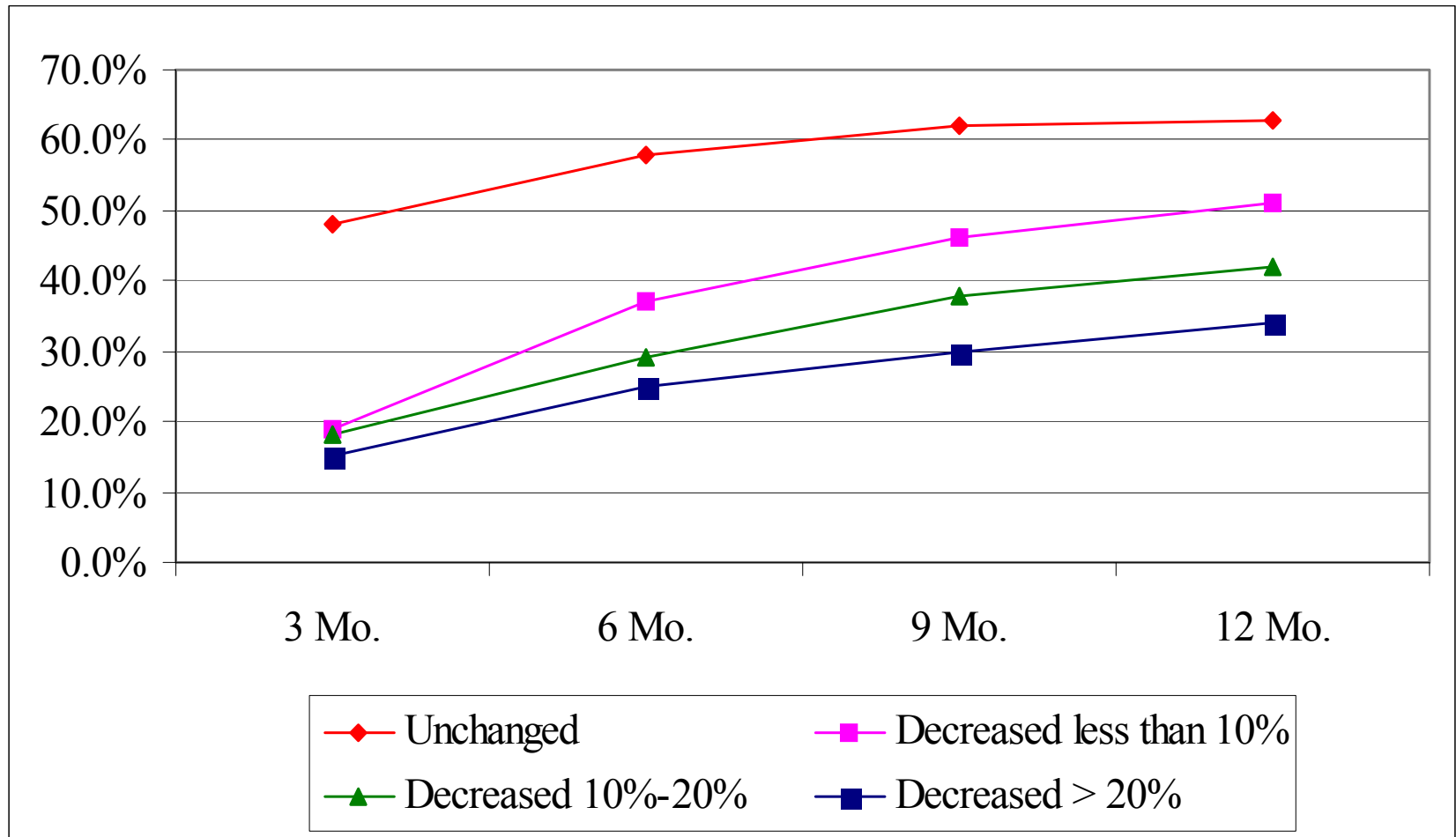


Re-Default Rates as of 2Q 2009

Source: OCC/OTS

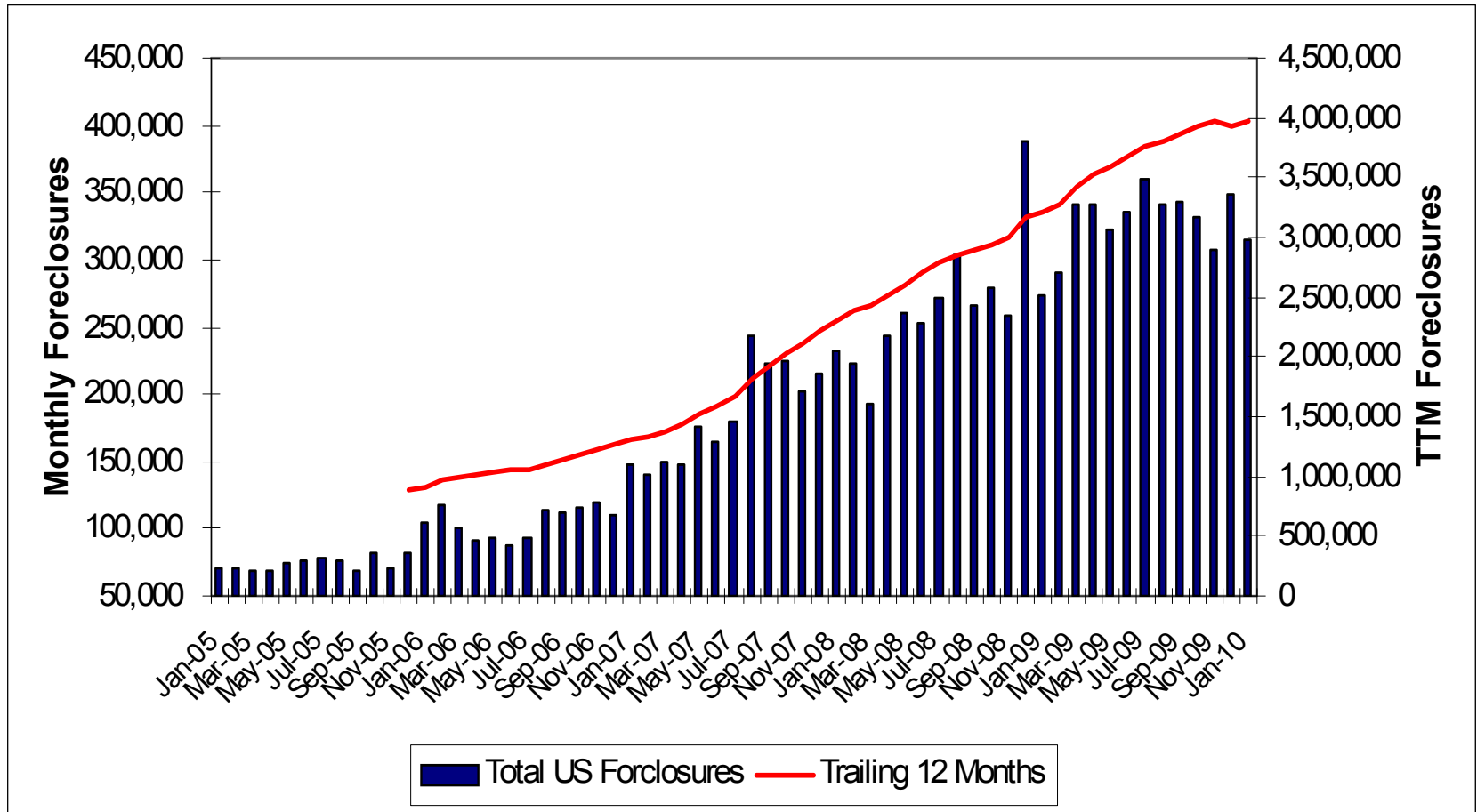


Re-Default Rates With Principal Reduction (2Q 2009) Source: OCC/OTS



National Foreclosure Data

Source: Realtytrac



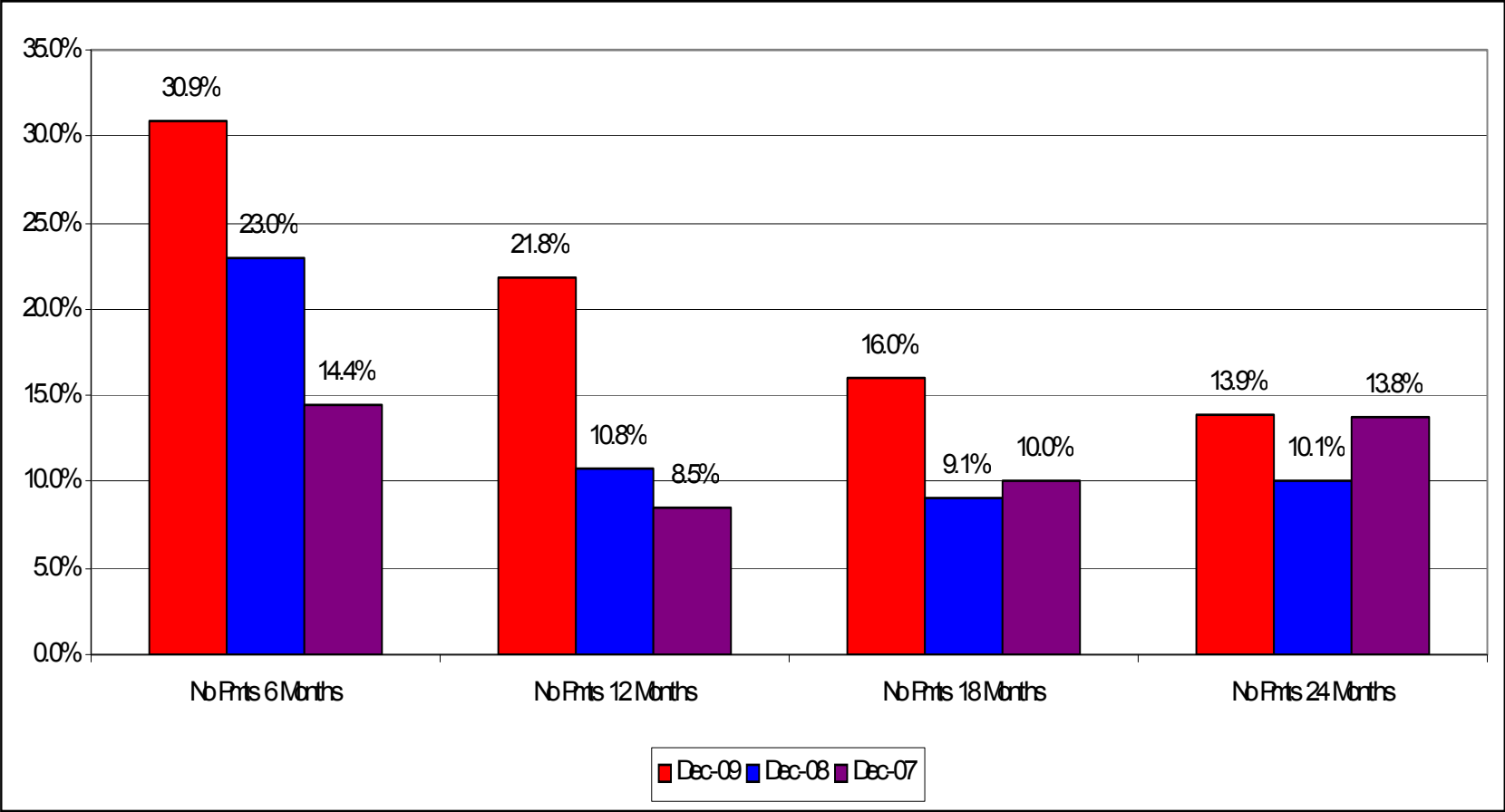
Bubble Market Foreclosure Inventory

Source: Realtytrac, Trulia.com, Zip Realty

	<u>MLS Listings</u>	<u>Foreclosure</u>	
		<u>Inventory</u>	<u>% of MLS Listings</u>
Las Vegas	12,945	60,178	464.9%
Inland Empire	26,604	85,407	321.0%
San Diego	10,300	33,060	321.0%
Los Angeles	32,700	96,515	295.2%
Ventura County	2,448	7,142	291.7%
Phoenix	34,735	83,812	241.3%
Miami	54,525	42,368	77.7%

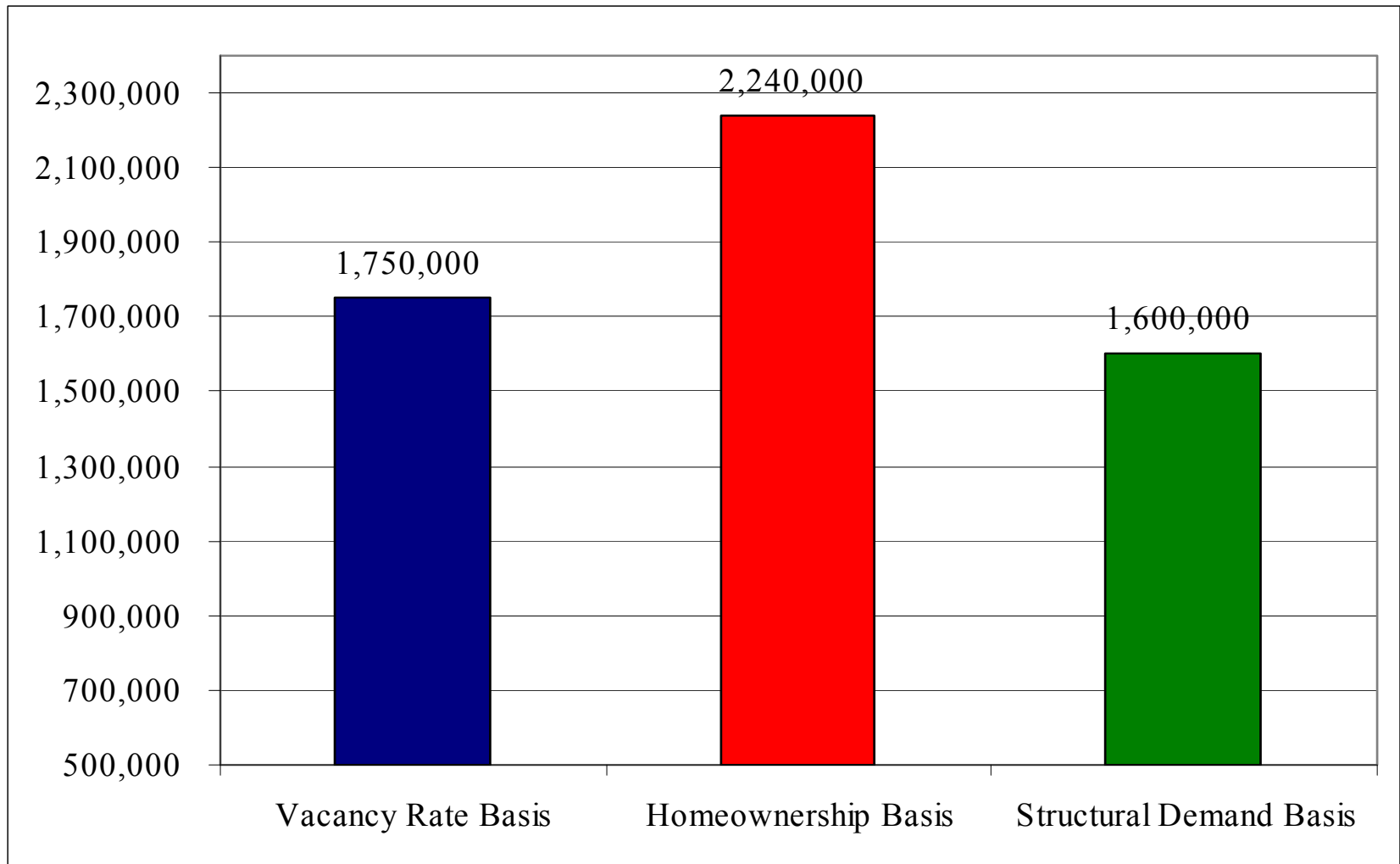
A Clog in the Foreclosure Pipeline?

Source: Lender Processing Services



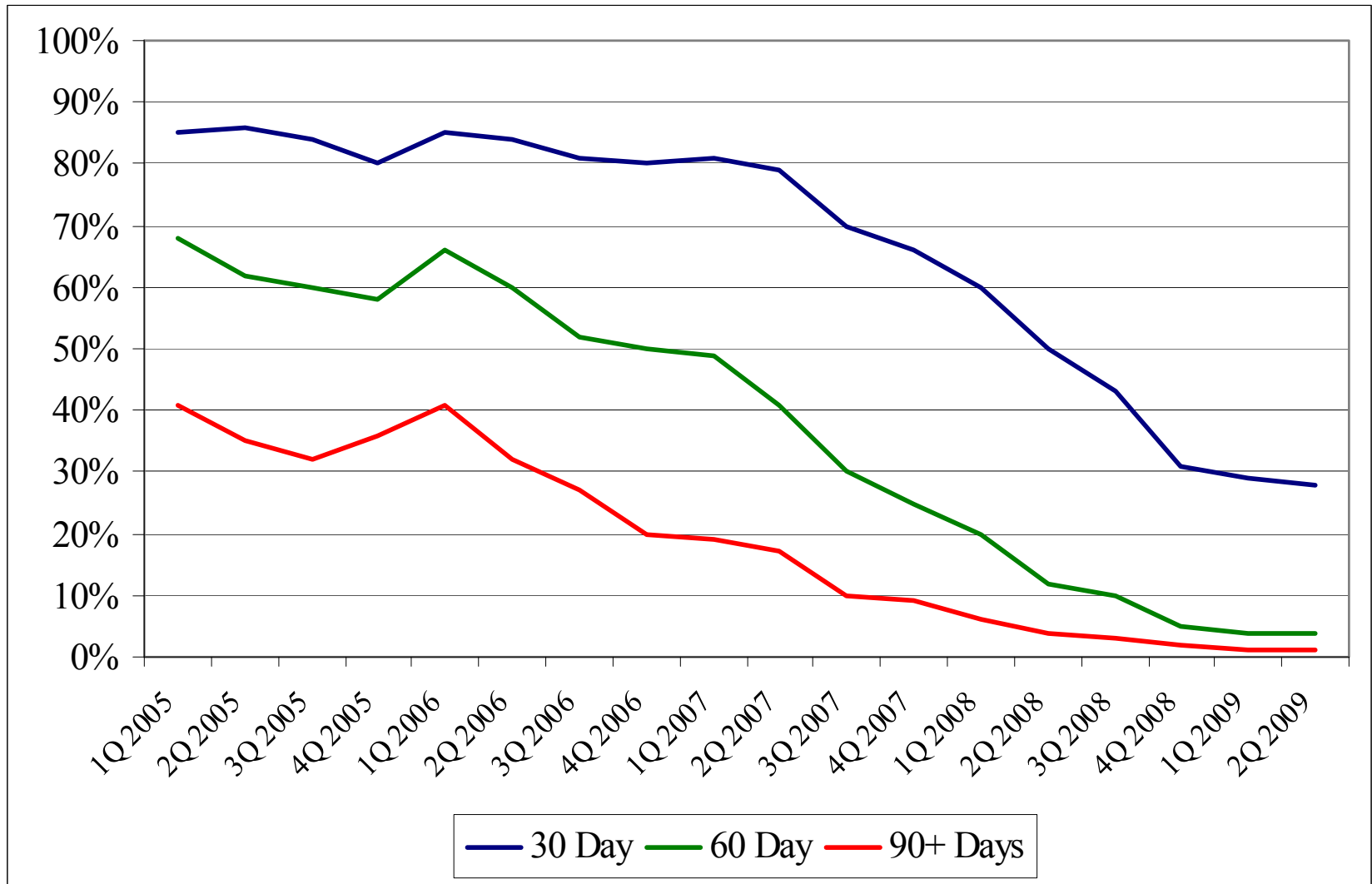
Estimated Existing Excess Housing Units

Source: UBS Estimates



Cure Rates

Source: Loan Performance



Potential Additional National Shadow Supply

Source: MBA, UBS Estimates, LoanPerformance

<u>Mortgage Type</u>	<u>Current MBA Default Rates</u>				<u>Estimated Total # of Mortgages</u>
	<u>30 Days</u>	<u>60 Days</u>	<u>90 Days</u>	<u>Foreclosure</u>	
Prime/Agency	2.49%	1.08%	2.44%	3.00%	38,975,000
Subprime	8.48%	4.51%	11.50%	15.10%	12,500,000
FHA	6.30%	2.61%	4.80%	2.98%	5,700,000
Total	4.18%	1.98%	4.66%	5.64%	57,175,000

<u>2005-Current Average Cure Rates</u>			
<u>30 Days</u>	<u>60 Days</u>	<u>90 Days</u>	<u>Foreclosure</u>
67.00%	38.00%	19.00%	0.00%

<u>Current Cure Rates</u>			
<u>30 Days</u>	<u>60 Days</u>	<u>90 Days</u>	<u>Foreclosure</u>
28.00%	4.00%	1.00%	0.00%

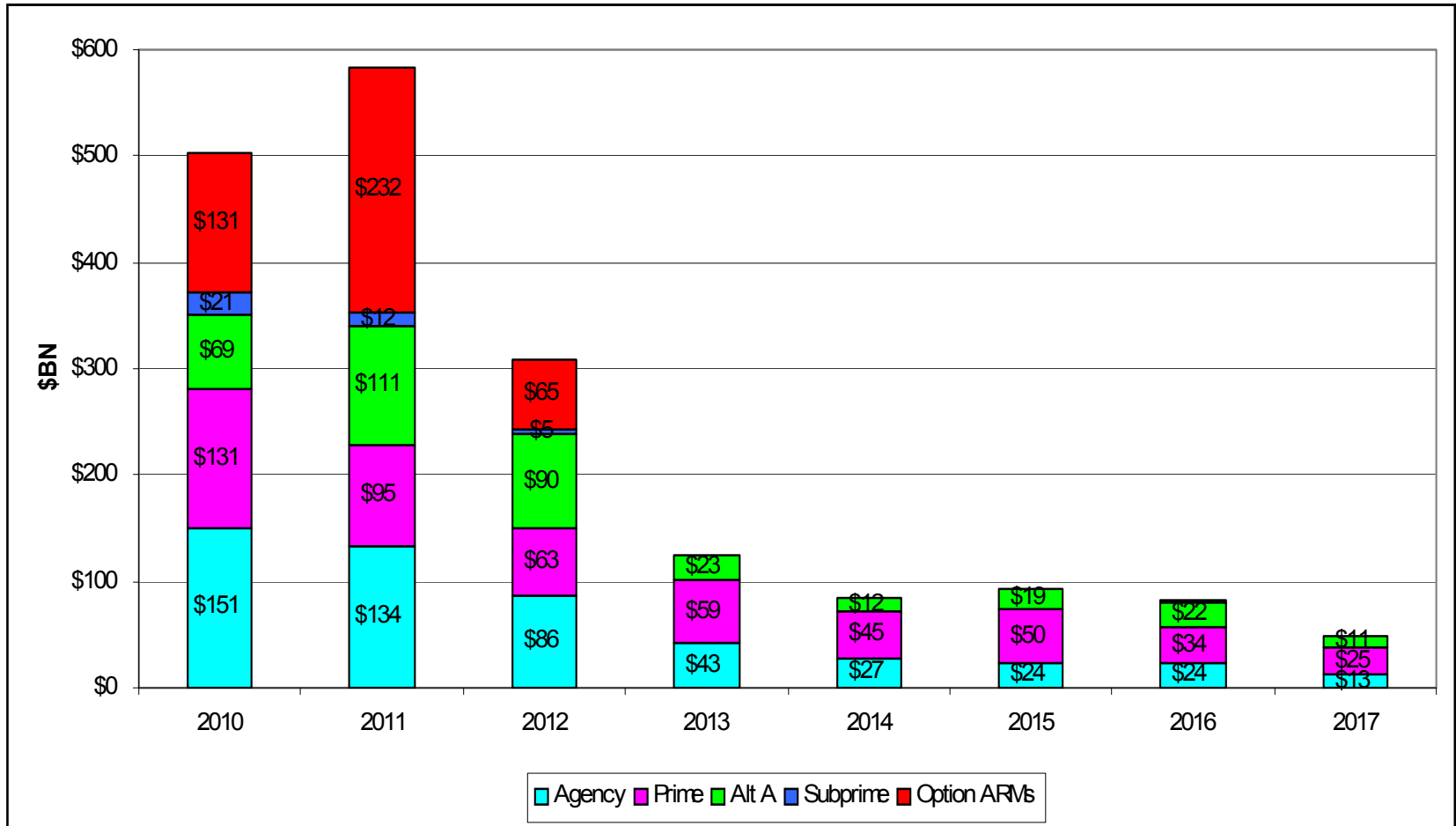
Probability-Weighted Liquidation Potential

	<u>Current MBA Default Rates</u>					<u>Current MBA Default Rates</u>			
	<u>30 Days</u>	<u>60 Days</u>	<u>90 Days</u>	<u>Foreclosure</u>		<u>30 Days</u>	<u>60 Days</u>	<u>90 Days</u>	<u>Foreclosure</u>
Avg Cure Rates	1.38%	1.23%	3.77%	5.64%	Curr Cure Rates	3.01%	1.90%	4.61%	5.64%
New Inventory	788,561	702,739	2,156,293	3,226,610	New Inventory	1,720,496	1,088,112	2,635,469	3,226,610
Total	6,874,202				Total	8,670,687			

THE BAD

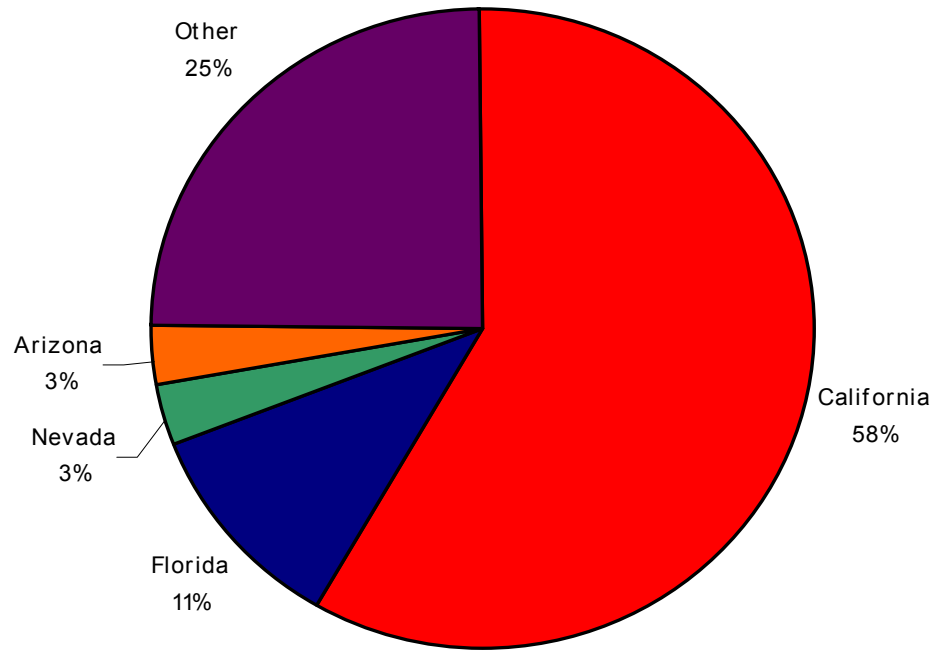
ARM Resets

Source: LoanPerformance, FNMA, FHLMC, GNMA

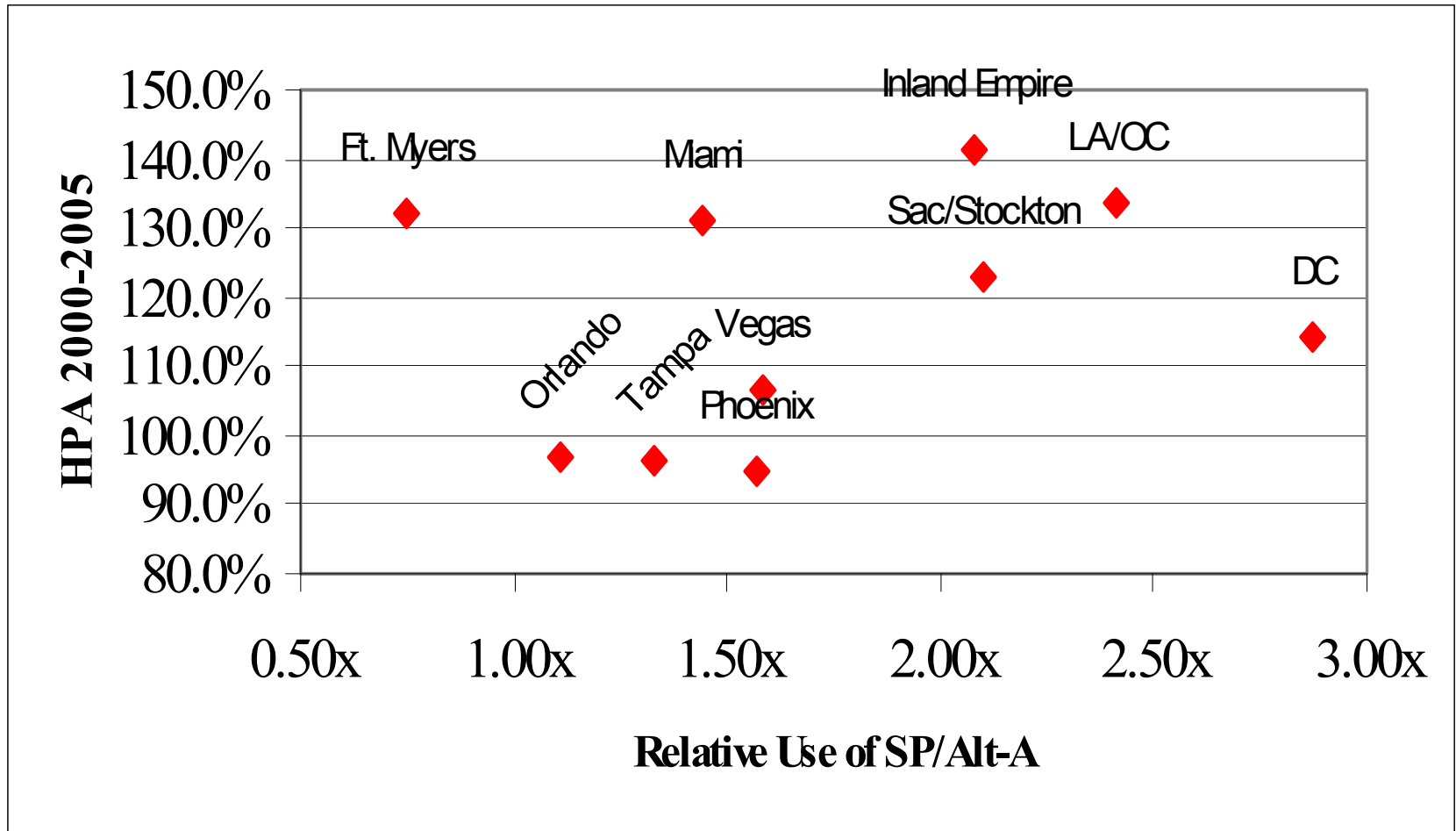


Option ARM Use by State

Source: Loan Performance

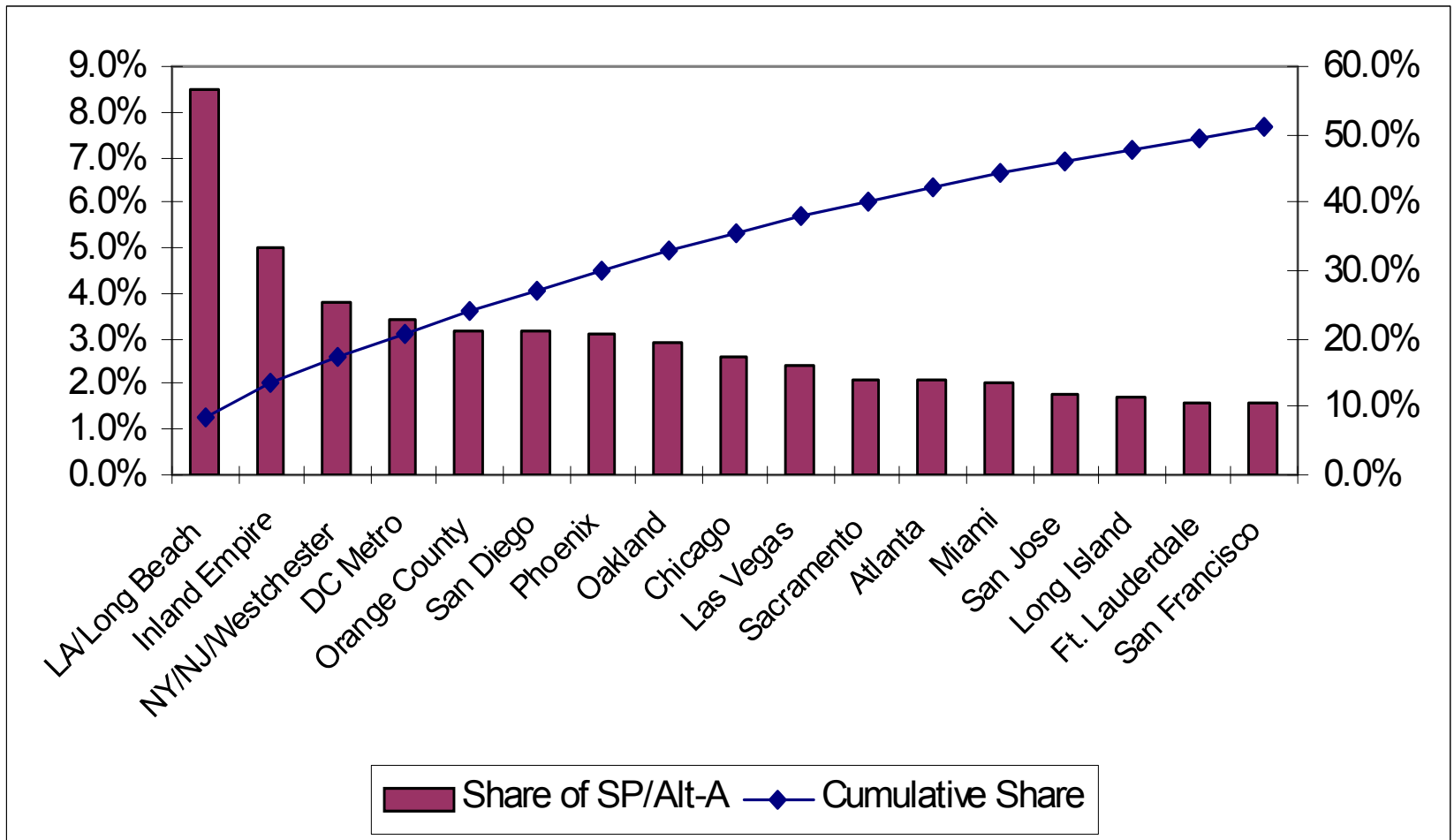


Subprime Mortgages and Price Appreciation Source: Loan Performance, OFHEO



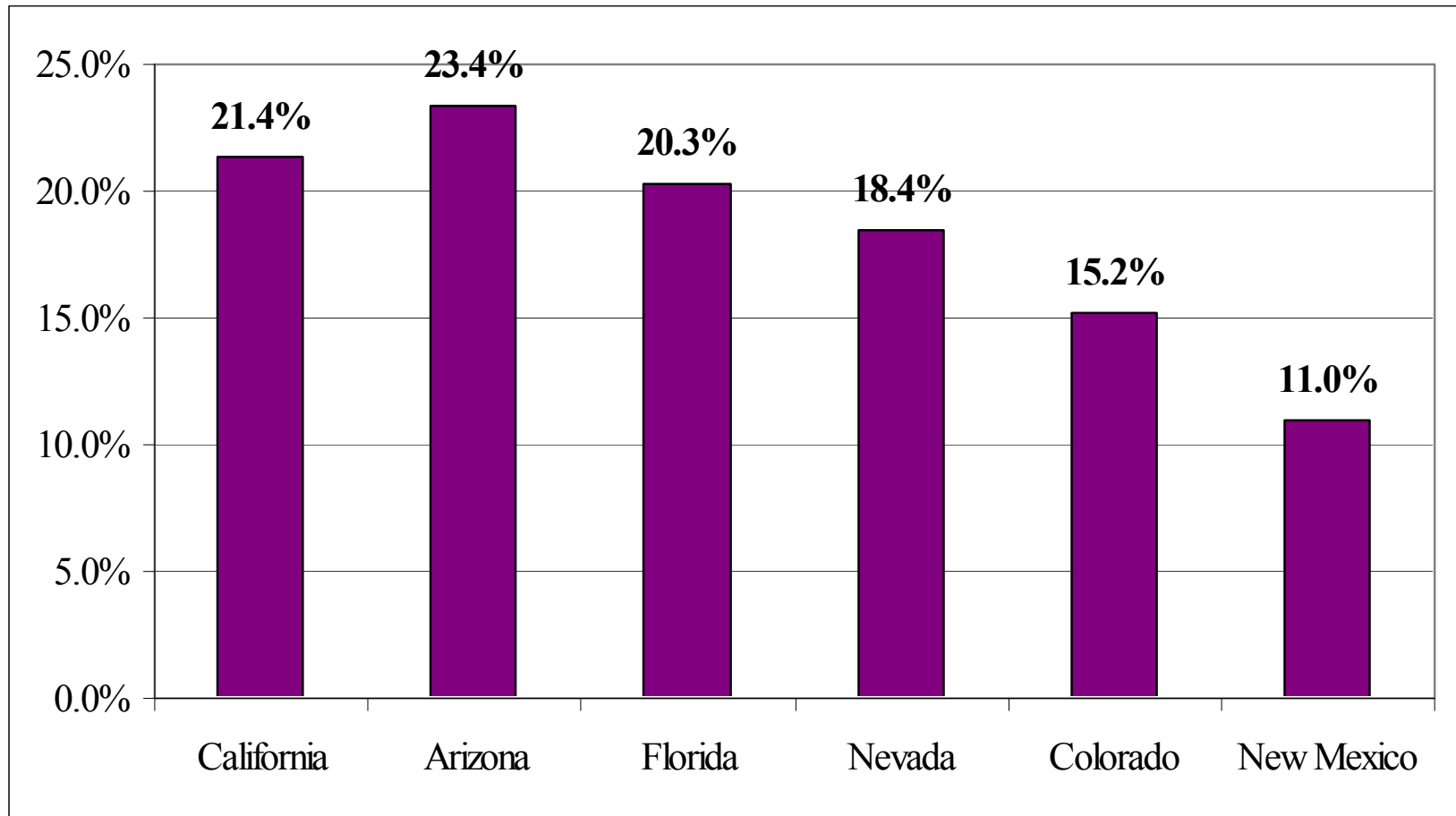
Exposure to Alt-A & Subprime

Source: First American Core Logic



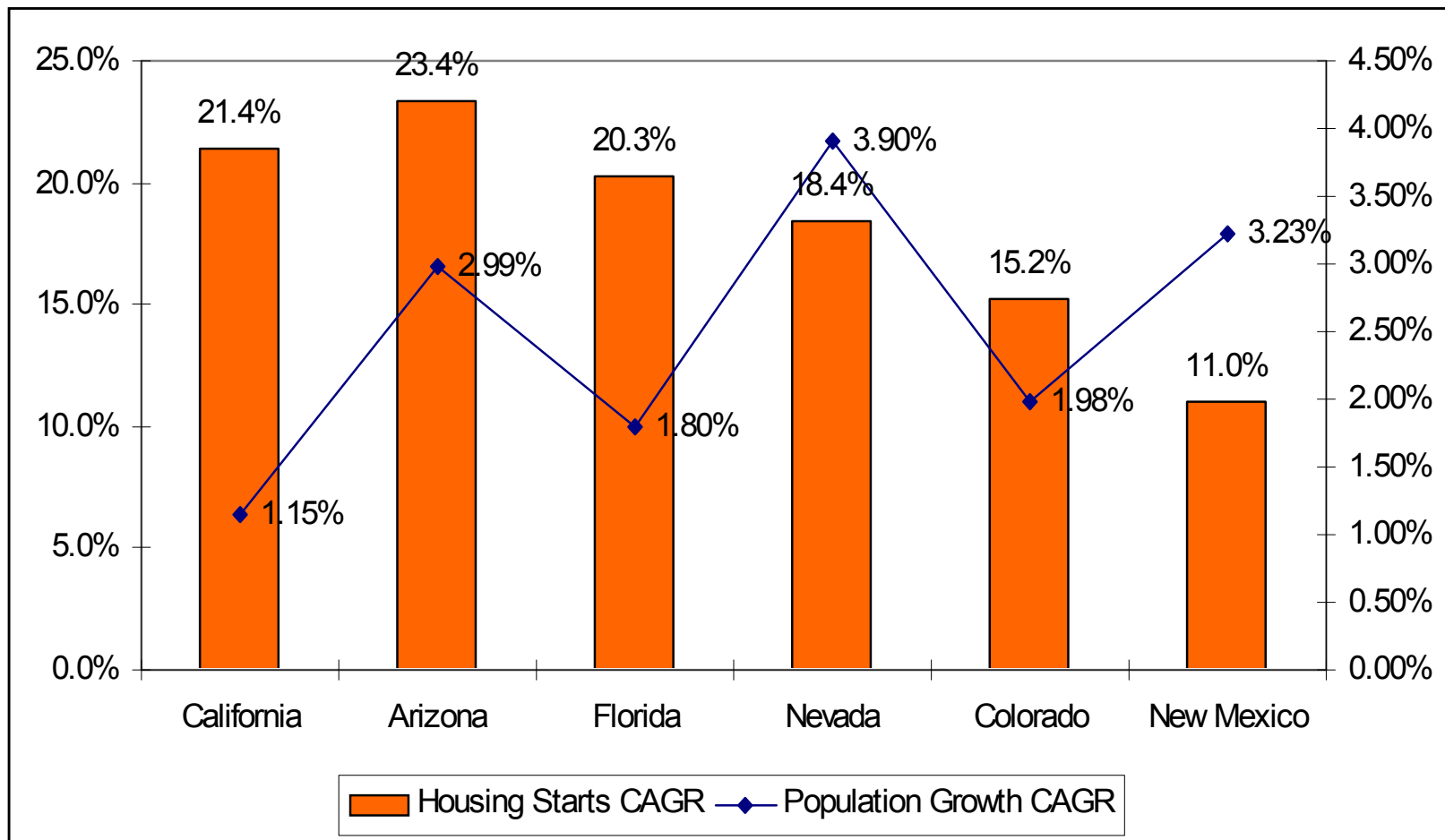
Housing Starts CAGR 11/94 – Peak

Source: US Census



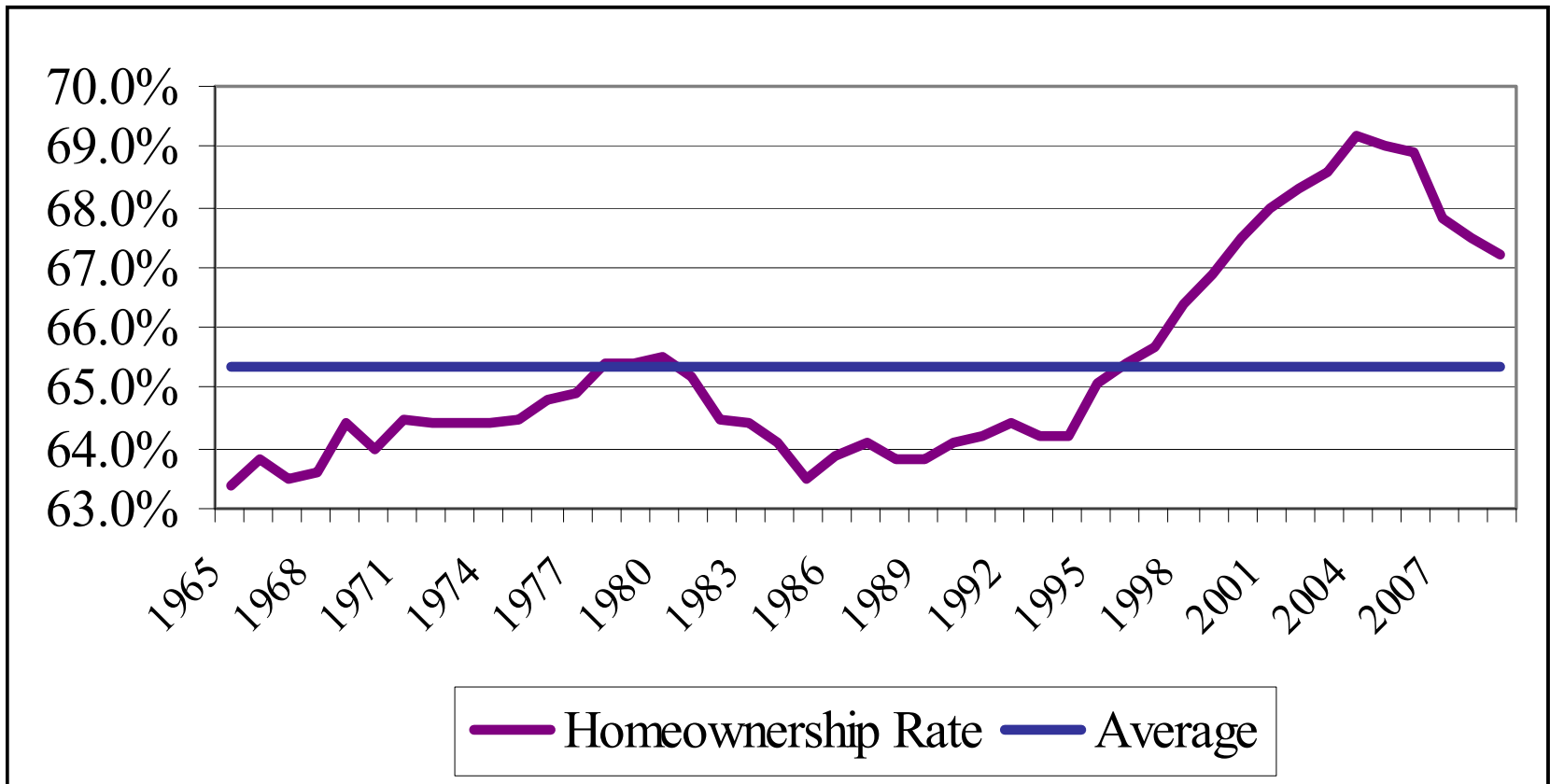
Housing Starts & Population Growth CAGR

Source: US Census



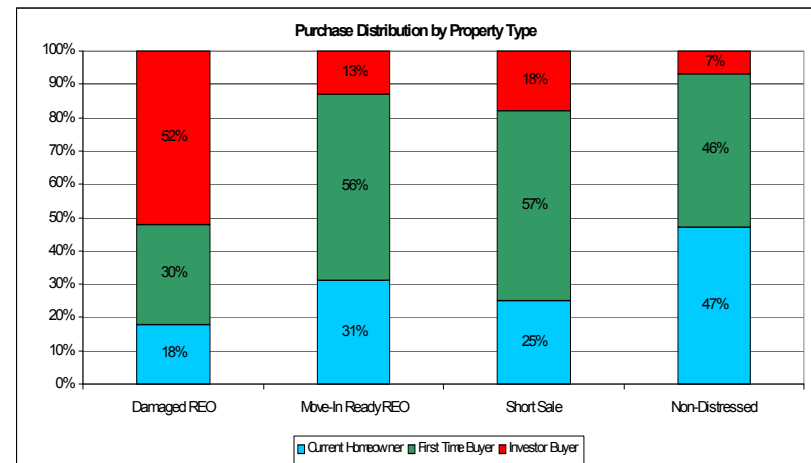
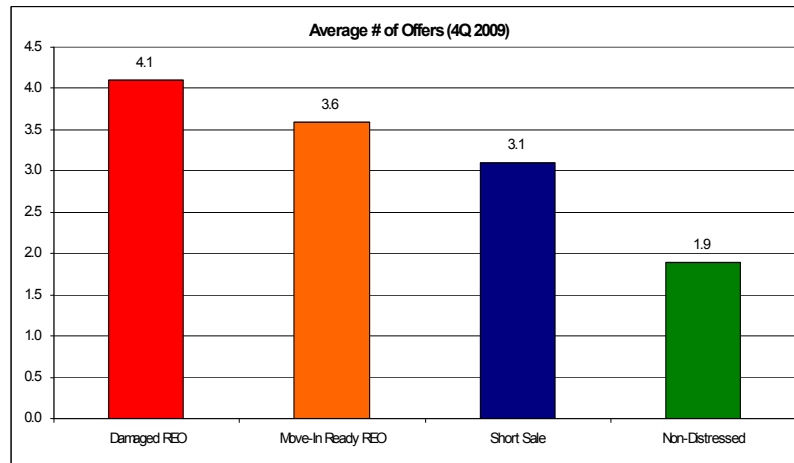
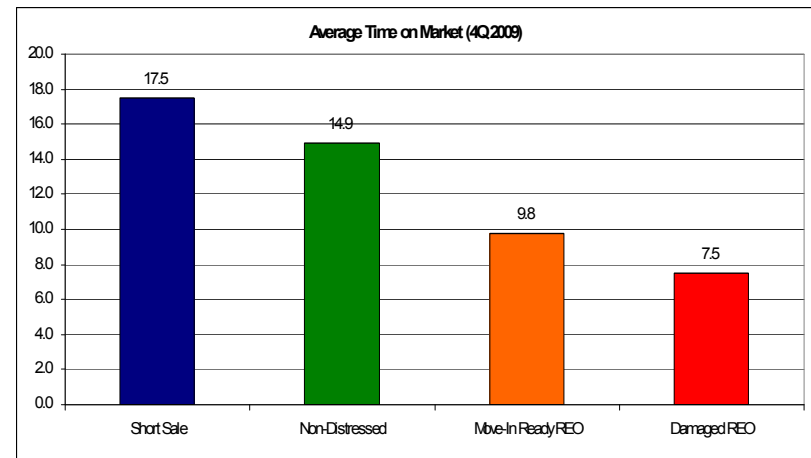
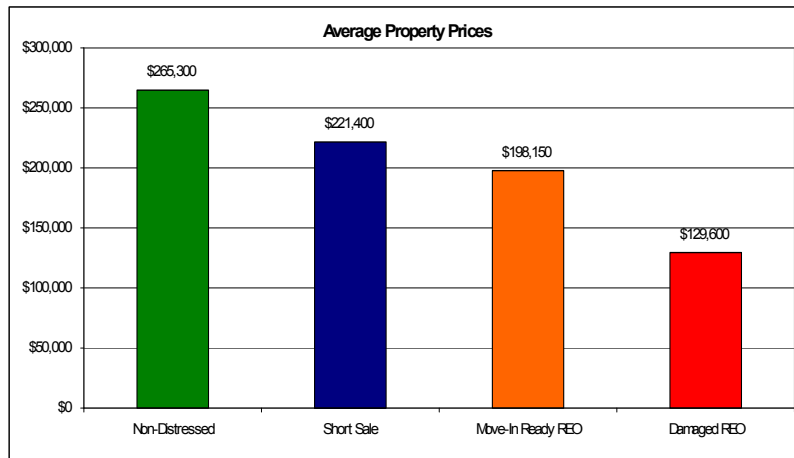
Historical Homeownership Rates

Source: US Census & Harvard JCHS

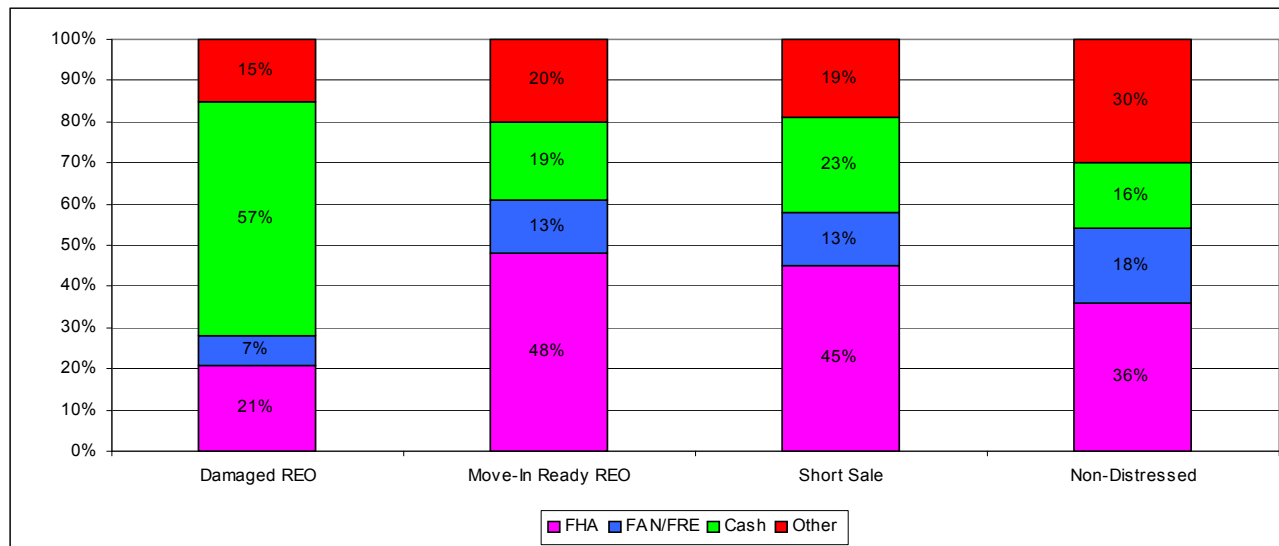
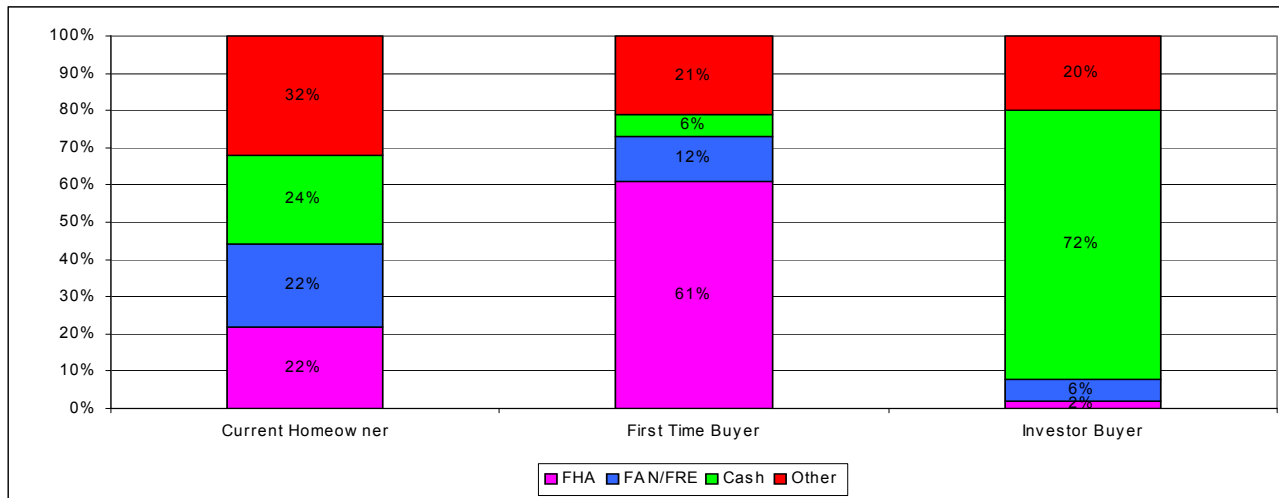


Impact of Distressed Sales

Source: Inside Mortgage Finance/Campbell Communications

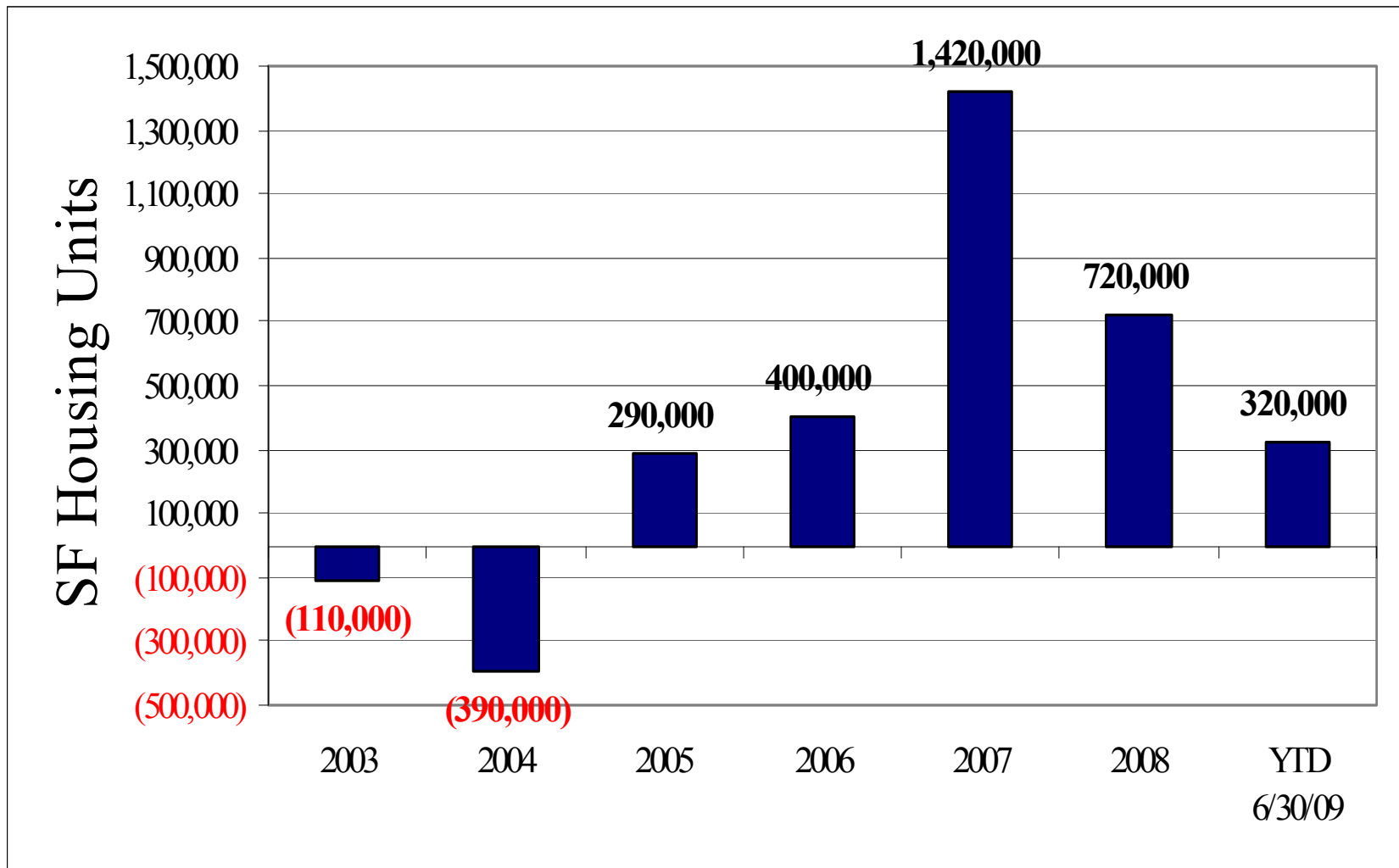


Sources of Financing (4Q 2009) Source: Inside Mortgage Finance/Campbell Communications



SF Homes Converted to Rentals

Source: Foresight Analytics

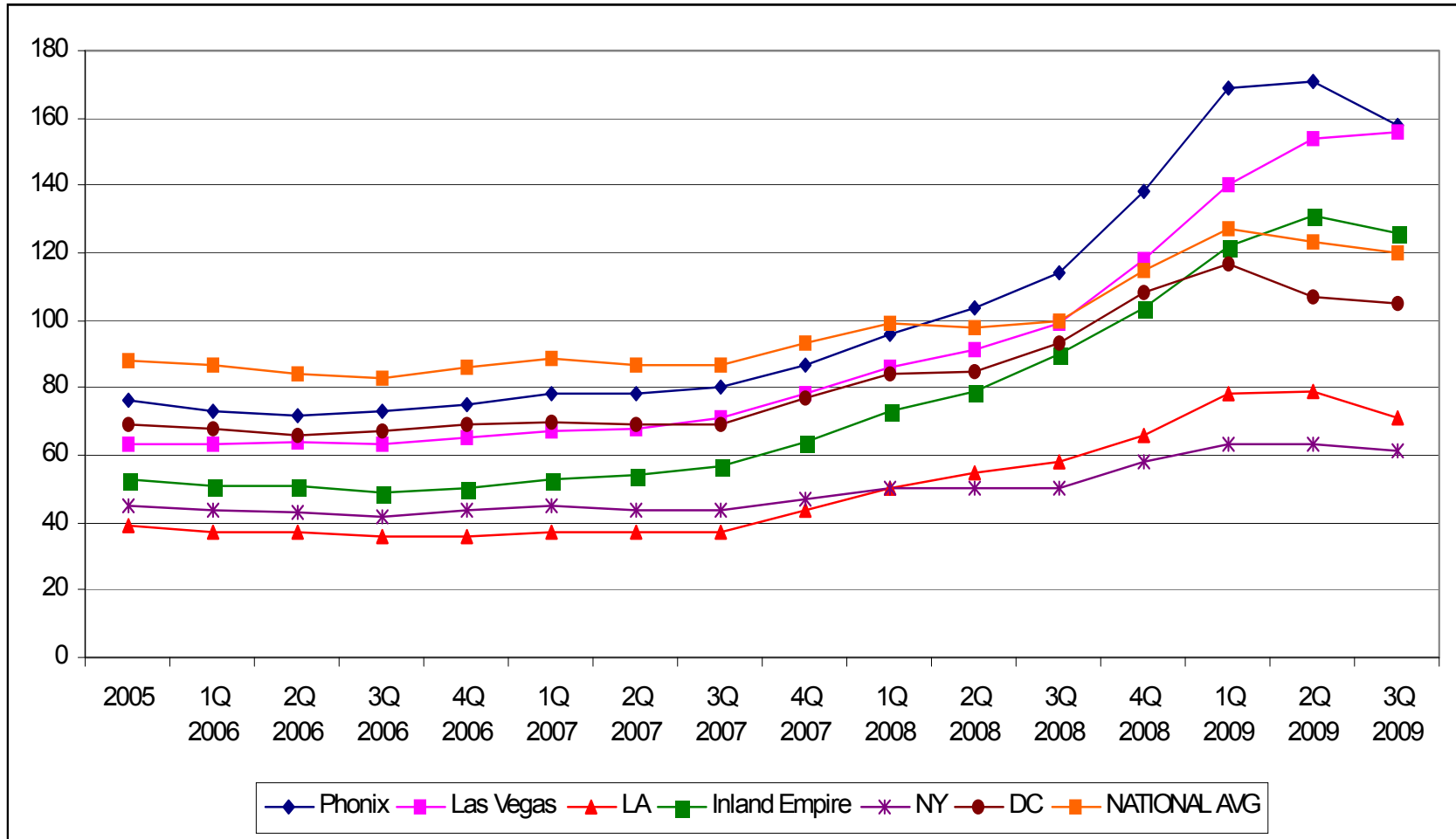


Residential Real Estate

THE GOOD

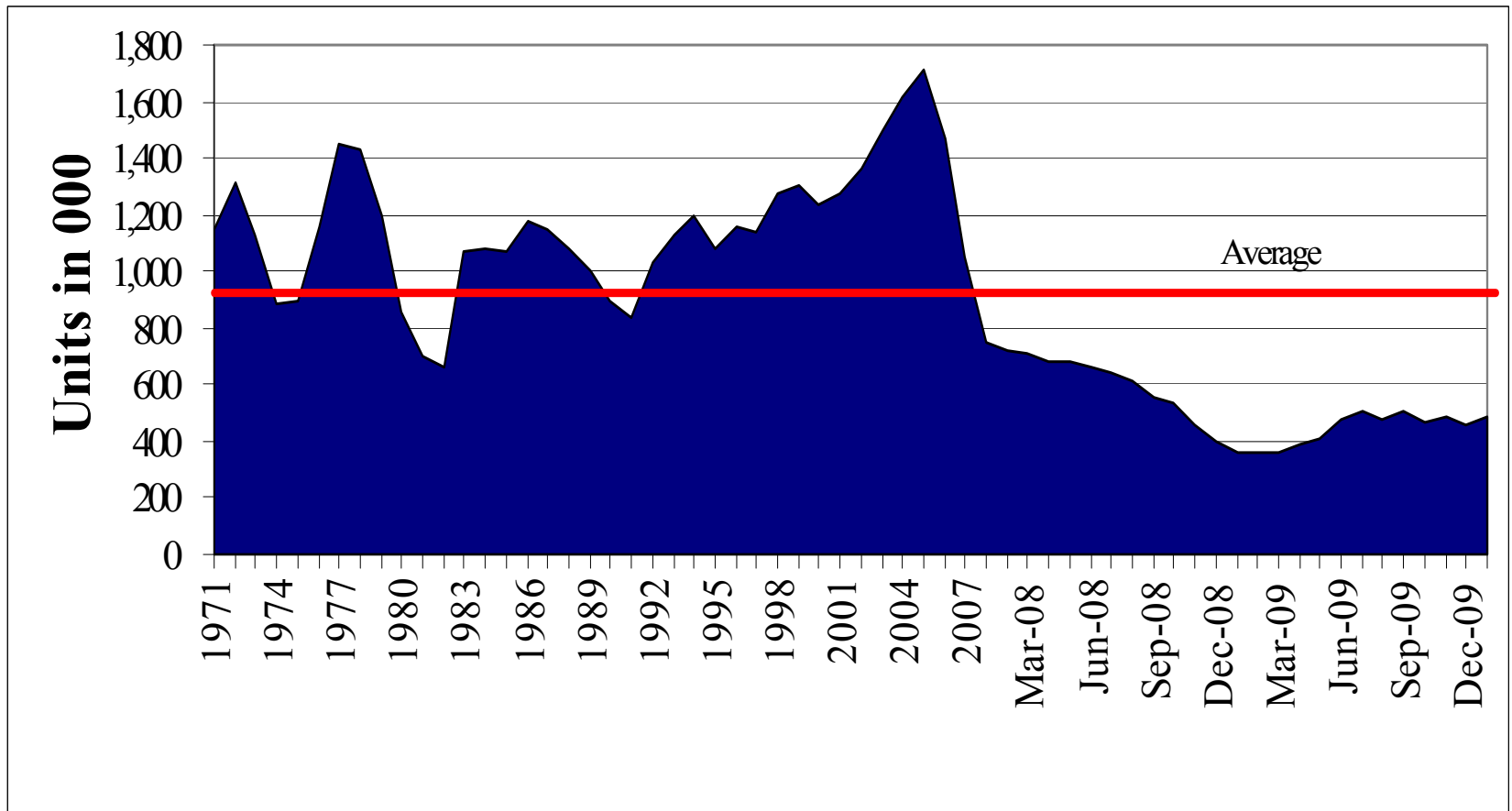
Affordability Index

Source: NAR, FHFA



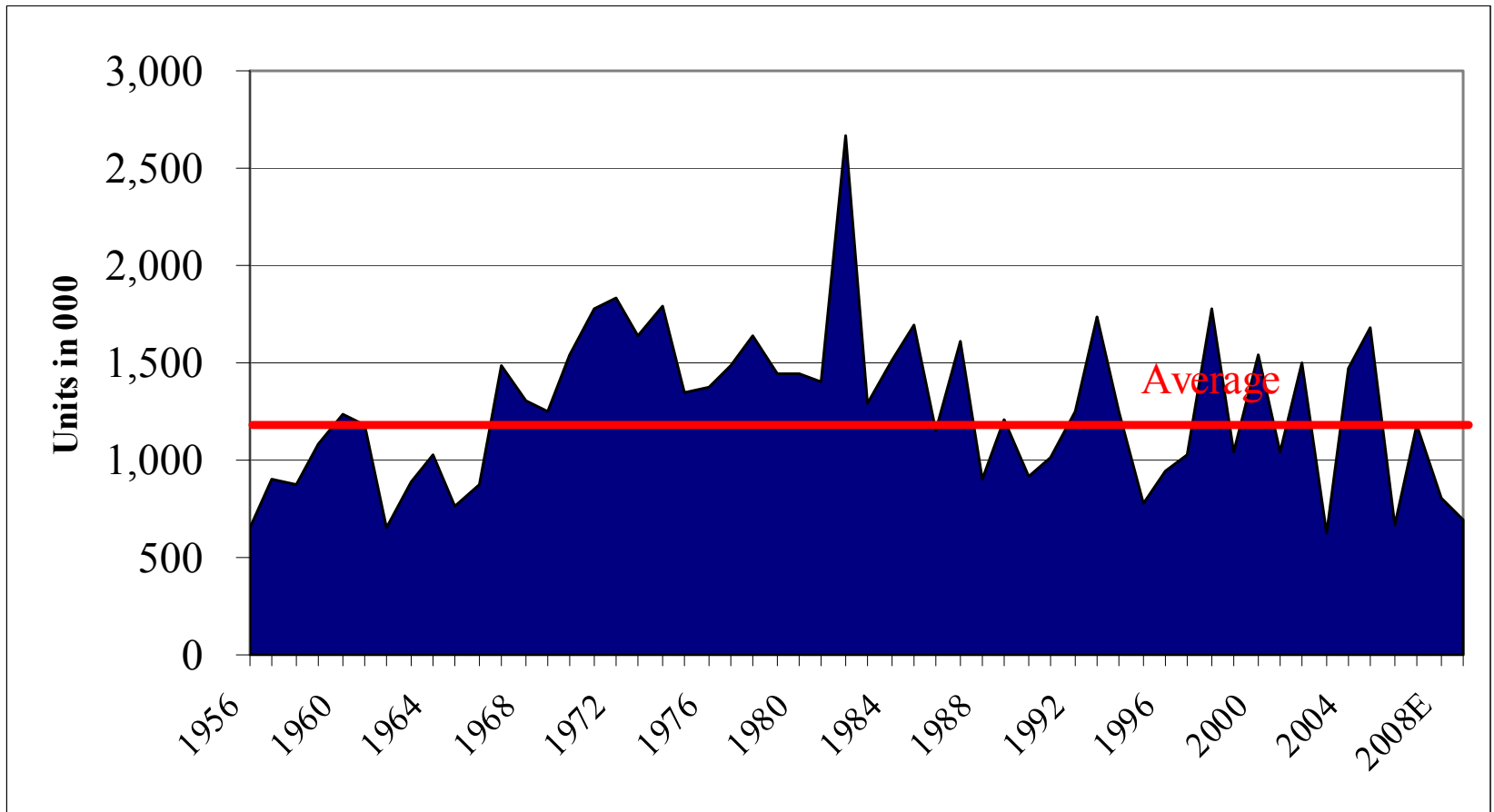
Single Family Housing Starts

Source: US Census



Household Formations

Source: US Census



Prior Housing Cycle Durations

Source: US Census, UBS Estimates

<u>Trough</u>	<u>Peak</u>	<u>Trough</u>	<u>Duration in Months</u>		<u>Change In Unit Sales</u>	
			<u>Peak</u>	<u>Trough</u>	<u>Peak</u>	<u>Trough</u>
Mar-70	Dec-72	Jan-75	34	25	46.1%	-24.1%
Jan-75	Apr-78	Apr-82	40	49	50.0%	-55.0%
Apr-82	Dec-86	Jan-91	57	50	52.4%	-35.3%
Jan-91	Jan-93	Apr-95	24	27	35.3%	-19.9%
			39	38	46.0% #	-33.6%
Apr-95	Sep-05	Dec-09	127	52	50.5%	-39.5%

Housing Supply/Demand Model

Source: UBS Estimates

Normalized Demand

Household Formations	1,100,000
Net Demolitions	200,000
Second Home Demand	150,000
Total	<u>1,450,000</u>

Current Supply

Single Family Housing Starts	550,000
Manufactured Housing	50,000
Total	<u>600,000</u>

Absorption 850,000

Current Excess Supply	2,000,000
Incremental Change in Home Ownership	0
Current Excess Supply	<u>2,000,000</u>
Current Homeownership Rate	67.2%

Years to Absorb Current Excess	2.4
--------------------------------	-----

Housing Supply/Demand Sensitivity Analysis

Source: UBS Estimates

Homeownership

Single Family Housing Starts

Rate	450,000	500,000	550,000	600,000	650,000	700,000	750,000	800,000	850,000	900,000	950,000	1,000,000
68.00%	1.2	1.2	1.3	1.4	1.5	1.6	1.7	1.8	2.0	2.2	2.5	2.8
67.75%	1.5	1.5	1.6	1.7	1.8	2.0	2.1	2.3	2.5	2.8	3.1	3.5
67.50%	1.8	1.8	2.0	2.1	2.2	2.4	2.6	2.8	3.0	3.3	3.7	4.2
67.25%	2.0	2.2	2.3	2.4	2.6	2.8	3.0	3.2	3.5	3.9	4.3	4.9
67.00%	2.3	2.5	2.6	2.8	3.0	3.2	3.4	3.7	4.0	4.4	4.9	5.6
66.75%	2.6	2.8	2.9	3.1	3.3	3.6	3.9	4.2	4.6	5.0	5.6	6.3
66.50%	2.9	3.1	3.3	3.5	3.7	4.0	4.3	4.6	5.1	5.6	6.2	7.0
66.25%	3.2	3.4	3.6	3.8	4.1	4.4	4.7	5.1	5.6	6.1	6.8	7.7
66.00%	3.5	3.7	3.9	4.2	4.5	4.8	5.1	5.6	6.1	6.7	7.4	8.4
65.75%	3.8	4.0	4.3	4.5	4.8	5.2	5.6	6.0	6.6	7.2	8.1	9.1
65.50%	4.1	4.3	4.6	4.9	5.2	5.6	6.0	6.5	7.1	7.8	8.7	9.8
65.25%	4.4	4.6	4.9	5.2	5.6	6.0	6.4	7.0	7.6	8.4	9.3	10.5
65.00%	4.7	5.0	5.3	5.6	6.0	6.4	6.9	7.4	8.1	8.9	9.9	11.2

Incremental Public Builder Potential

Source: US Census, Company Reports, UBS Estimates

	<u>Total New Home Sales</u>	<u>Public Builder Deliveries</u>	<u>Public Builder Market Share</u>
2004	1,203,000	290,000	24.1%
2005	1,283,000	335,000	26.1%
2006	1,051,000	330,000	31.4%
2007	776,000	260,000	33.5%
2008	485,000	170,000	35.1%
2009	340,000	115,000	33.8%

Incremental Market Share & Revenue Potential (\$MM)

<u>Housing Starts</u>	<u>Public Market Share</u>			<u>Average New Home Price</u>		
	<u>35.0%</u>	<u>37.5%</u>	<u>40.0%</u>	<u>\$200,000</u>	<u>\$225,000</u>	<u>\$250,000</u>
500,000	5,882	18,382	30,882	\$1,176	\$4,136	\$7,721
550,000	6,471	20,221	33,971	\$1,294	\$4,550	\$8,493
600,000	7,059	22,059	37,059	\$1,412	\$4,963	\$9,265
650,000	7,647	23,897	40,147	\$1,529	\$5,377	\$10,037
700,000	8,235	25,735	43,235	\$1,647	\$5,790	\$10,809
750,000	8,824	27,574	46,324	\$1,765	\$6,204	\$11,581
800,000	9,412	29,412	49,412	\$1,882	\$6,618	\$12,353
850,000	10,000	31,250	52,500	\$2,000	\$7,031	\$13,125
900,000	10,588	33,088	55,588	\$2,118	\$7,445	\$13,897
950,000	11,176	34,926	58,676	\$2,235	\$7,858	\$14,669
1,000,000	11,765	36,765	61,765	\$2,353	\$8,272	\$15,441
1,050,000	12,353	38,603	64,853	\$2,471	\$8,686	\$16,213
1,100,000	12,941	40,441	67,941	\$2,588	\$9,099	\$16,985

Exorcising The Shoe (aka Where is the Distress?)

Summary

- **We are more constructive on CRE than RRE owing to:**
 - Manageable capacity additions
 - Capital access/capital on the sidelines
 - Government intervention & Bank/Service “Flexibility”

- **However, we are mindful of a number of headwinds including:**
 - Substantial debt maturities
 - An anemic CMBS and transaction market
 - The impact of sublease space
 - Public vs. private – “flight to quality”

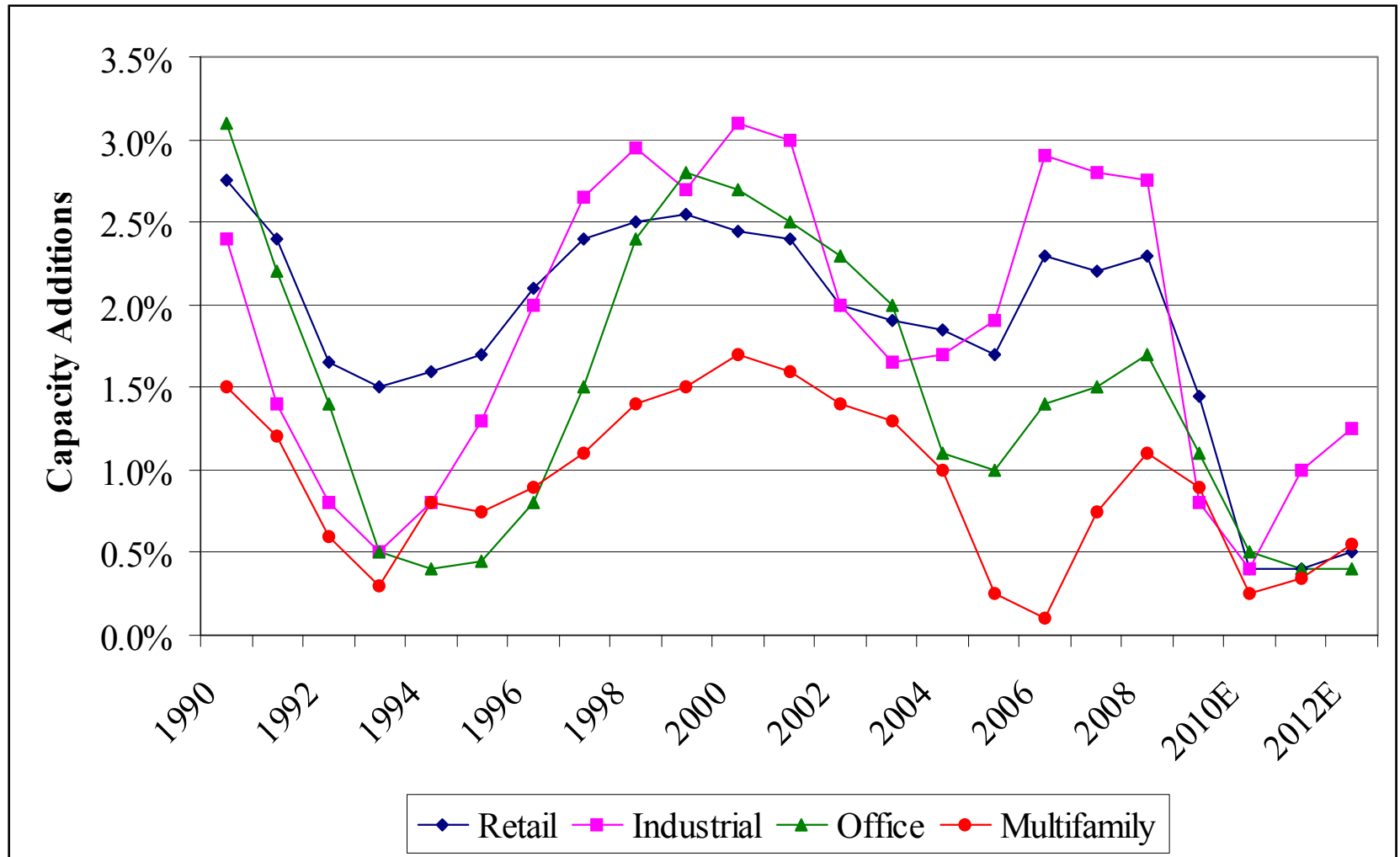
- **Relationships (lender and tenant) have never been more important.**

- **We believe investment opportunities exist in CRE. However, property selection, underwriting and risk adjusted return analysis have never been more important.**

- **For income-oriented investors, we see attractive risk/reward opportunities investing in the capital structure of selected REITs.**

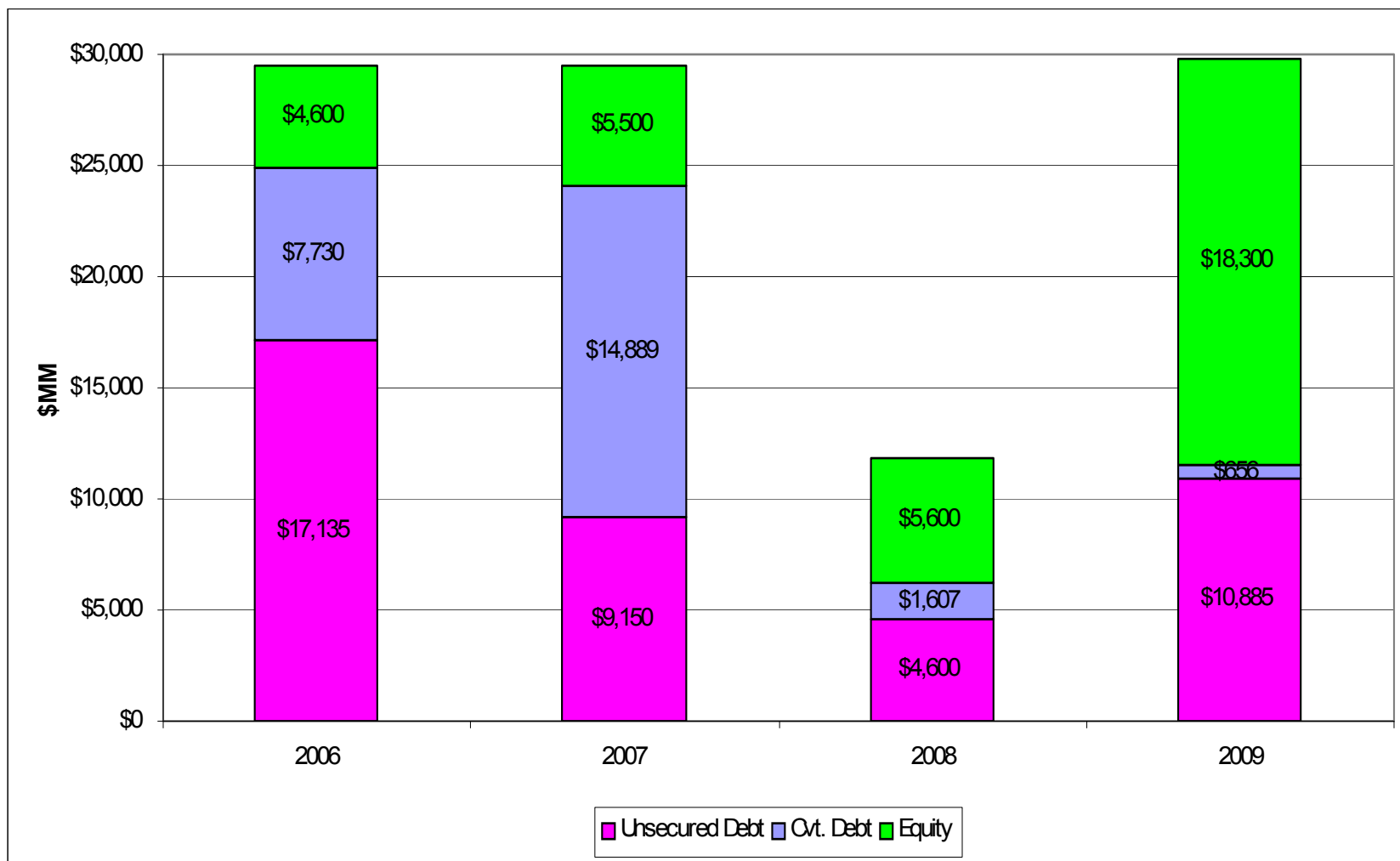
Capacity Additions

Source: PPR



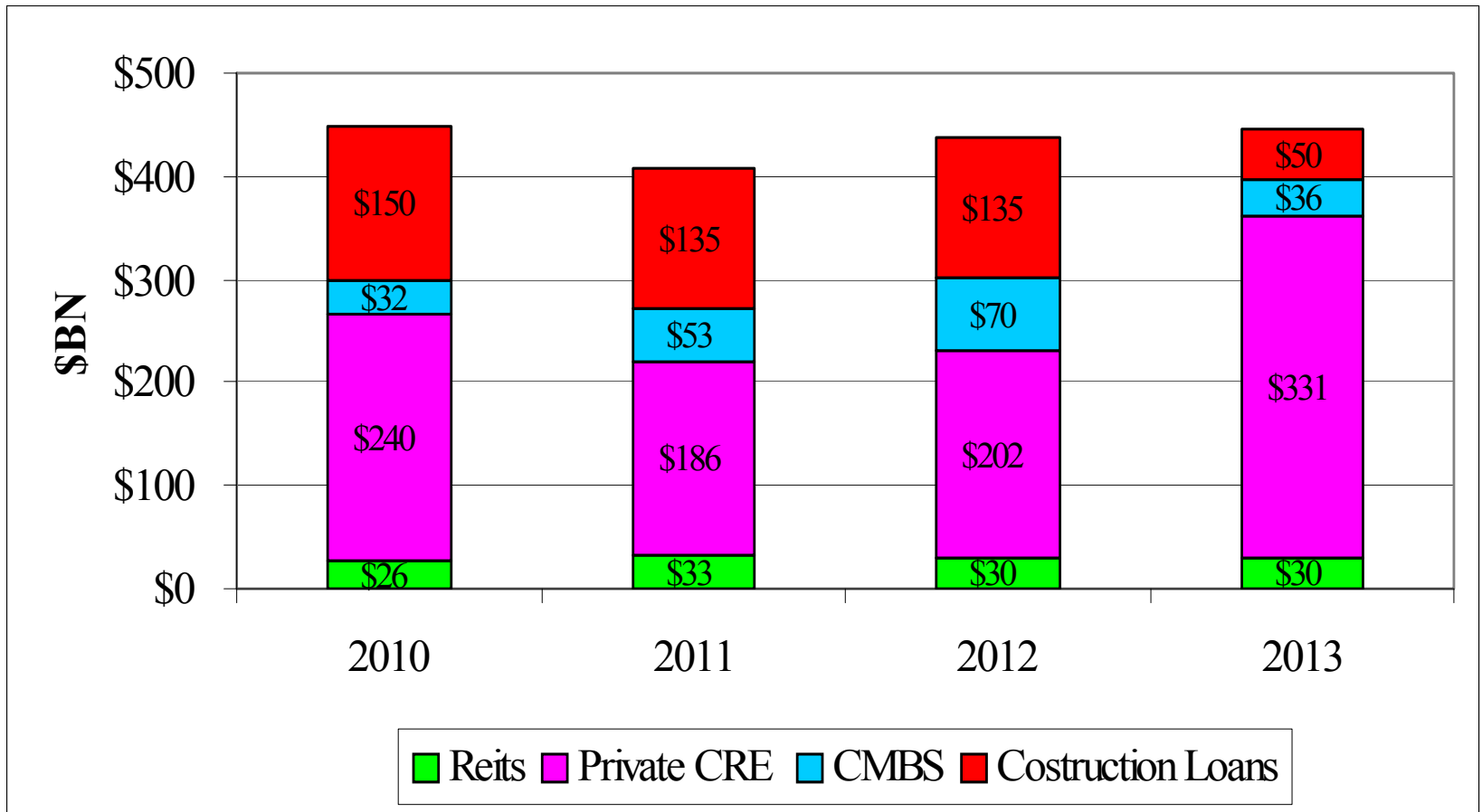
REIT Capital Market Activity

Source: SNL Financial



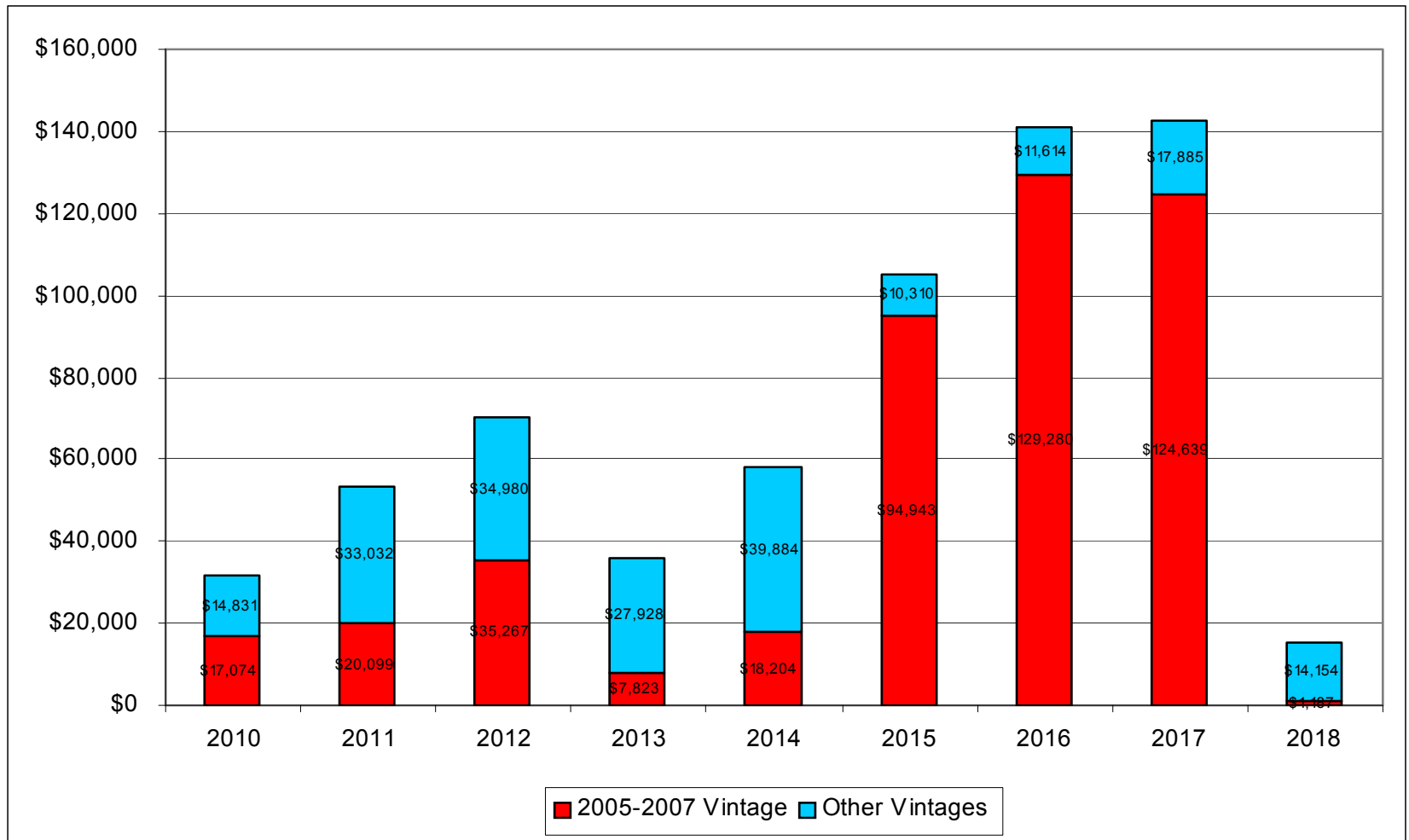
CRE Debt Maturities

Source: Company Reports, Bloomberg, SNL Financial, Trepp, UBS Estimates



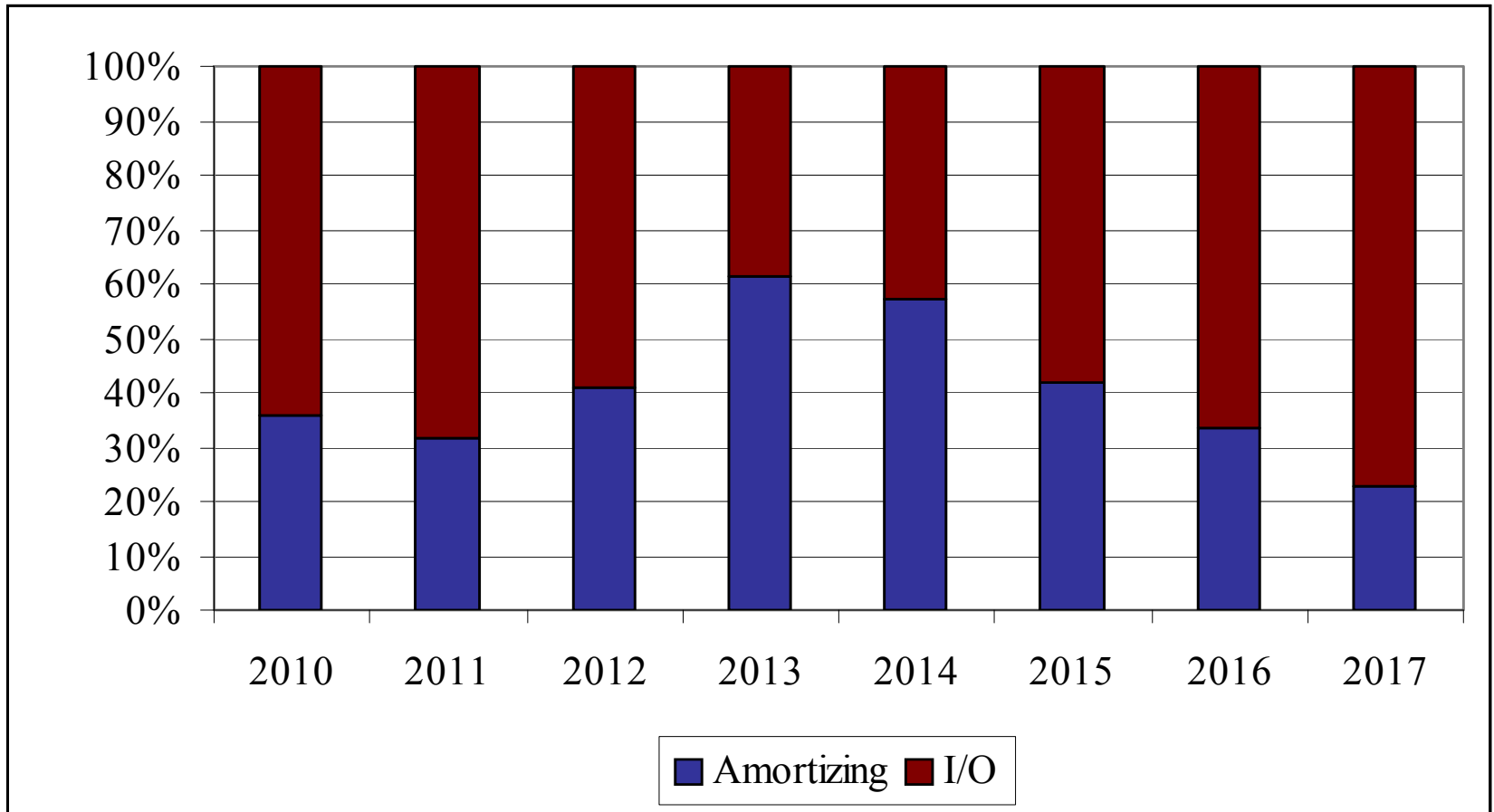
CMBS Maturities 2010-2018

Source: Trepp



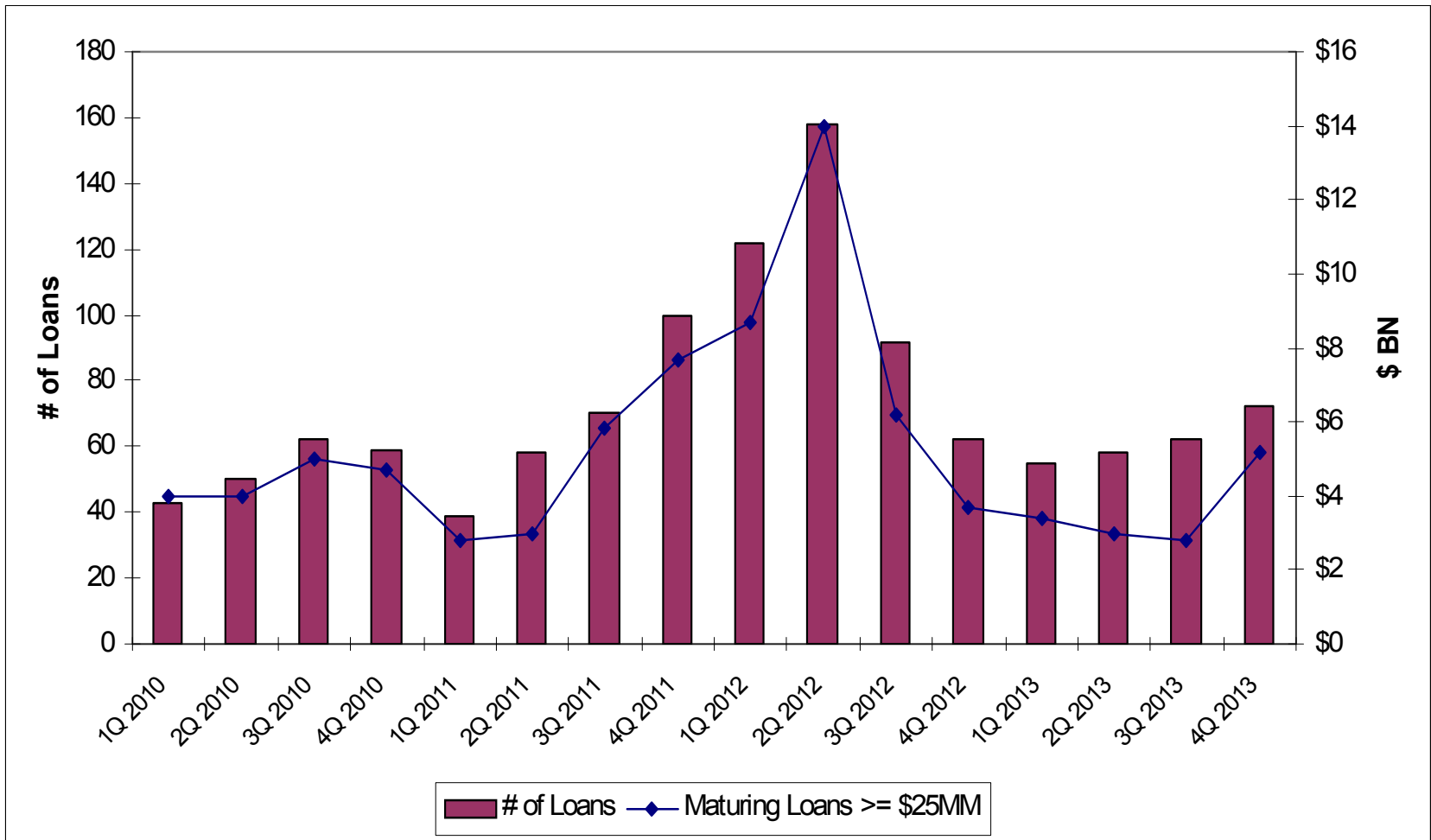
CMBS Maturities 2010-2018

Source: Trepp



CMBS Maturities > \$25MM/Loan

Source: Trepp



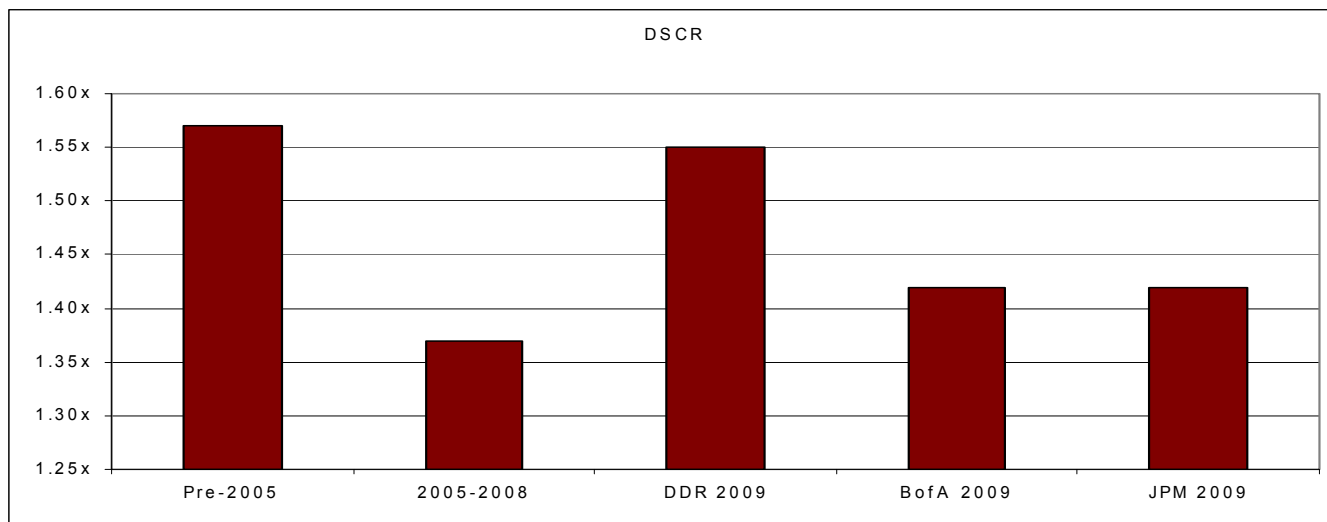
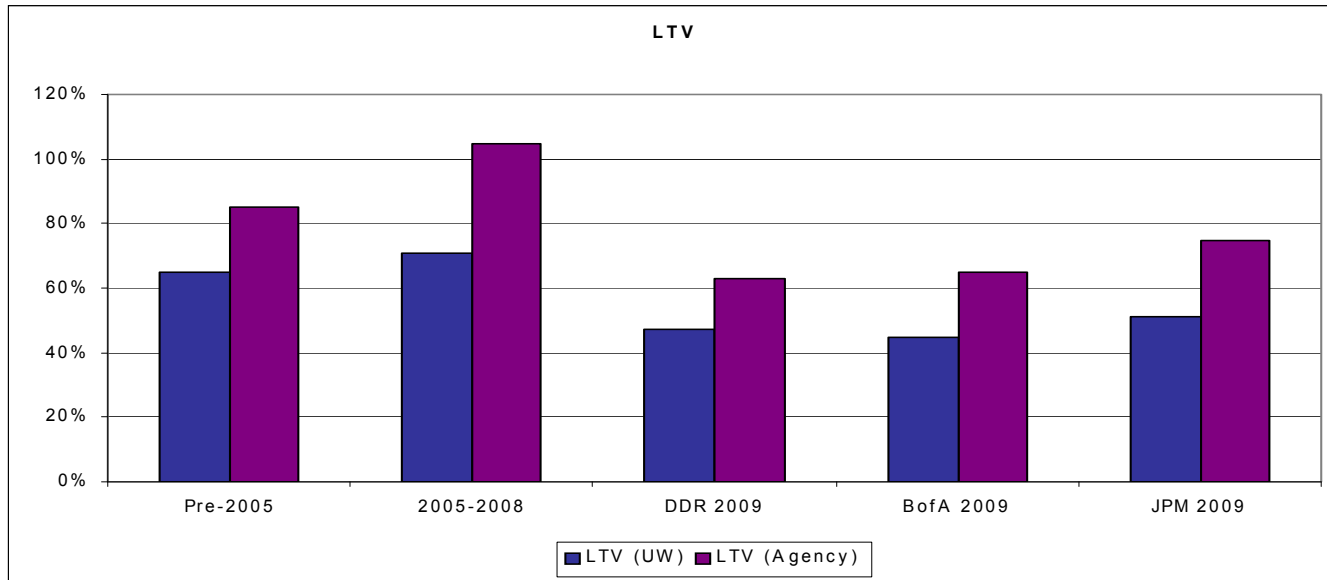
CMBS Loan Characteristics 2010-2012

Source: Trepp

	<u>2010 Unpaid Maturities</u>		<u>2011 Unpaid Maturities</u>		<u>2012 Unpaid Maturities</u>	
	<u>5 Year</u>	<u>10 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>5 Year</u>	<u>10 Year</u>
Avg. Loan Size (\$MM)	\$26.43	\$10.55	\$17.66	\$9.78	\$29.85	\$13.08
DSCR	1.84x	1.69x	1.71x	1.53x	1.41x	1.57x
LTV	61.6%	64.6%	70.9%	65.2%	66.6%	62.1%
Debt Yield	13.1%	14.3%	11.0%	12.7%	9.4%	15.3%

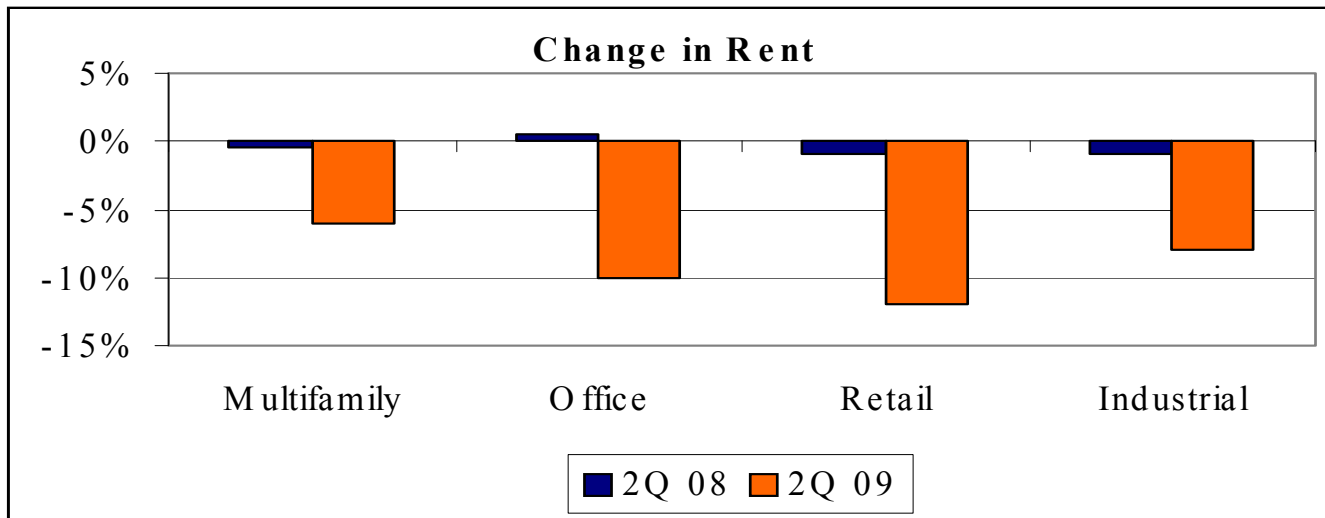
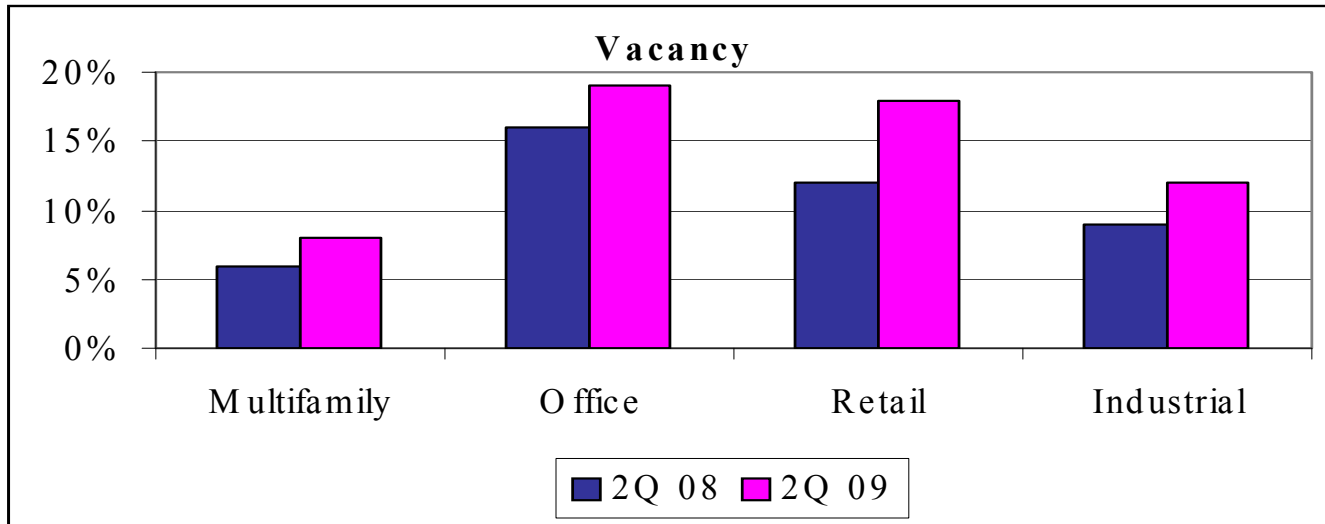
CMBS Underwriting – Back to the Future?

Source: Rating Agency Pre-Sale Reports



CRE Vacancy and Rent Trends

Source: Property Portfolio Report



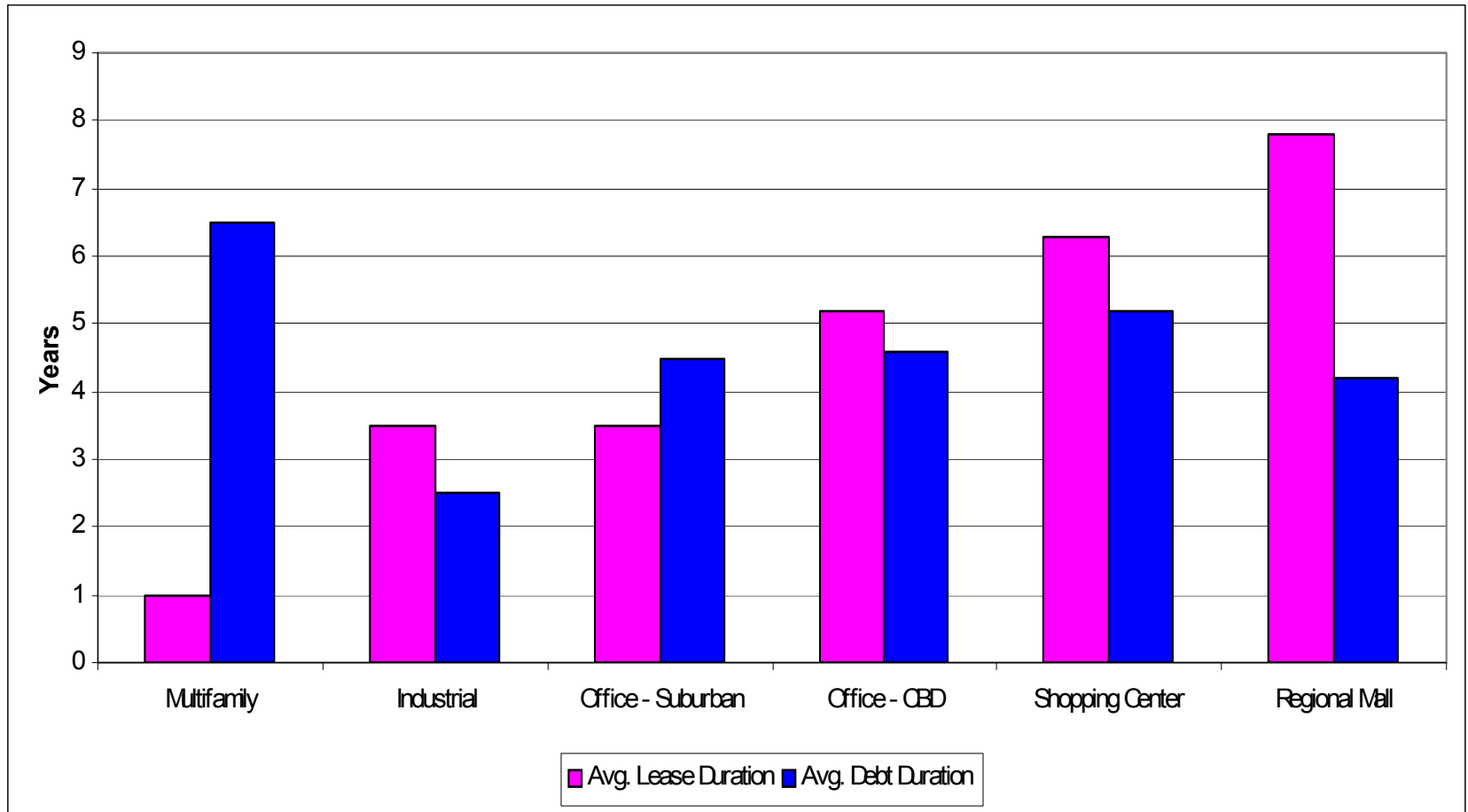
CRE Recession Vacancy

Source: Property Portfolio Report

	<u>Late 80s/Early 90s Recession</u>		<u>2001 Recession</u>		<u>Current Recession</u>	
	<u>Low</u>	<u>Hi</u>	<u>Low</u>	<u>Hi</u>	<u>Low</u>	<u>Hi</u>
Office	14.0%	19.0%	10.0%	18.0%	15.0%	19.0%
Multifamily	6.0%	7.0%	5.0%	7.0%	6.0%	8.0%
Retail	12.0%	19.0%	10.0%	13.0%	10.0%	18.0%
Industrial	7.0%	11.0%	7.0%	11.0%	9.0%	12.0%
Unemployment Rate	5.0%	8.0%	4.0%	6.0%	5.0%	9.7%

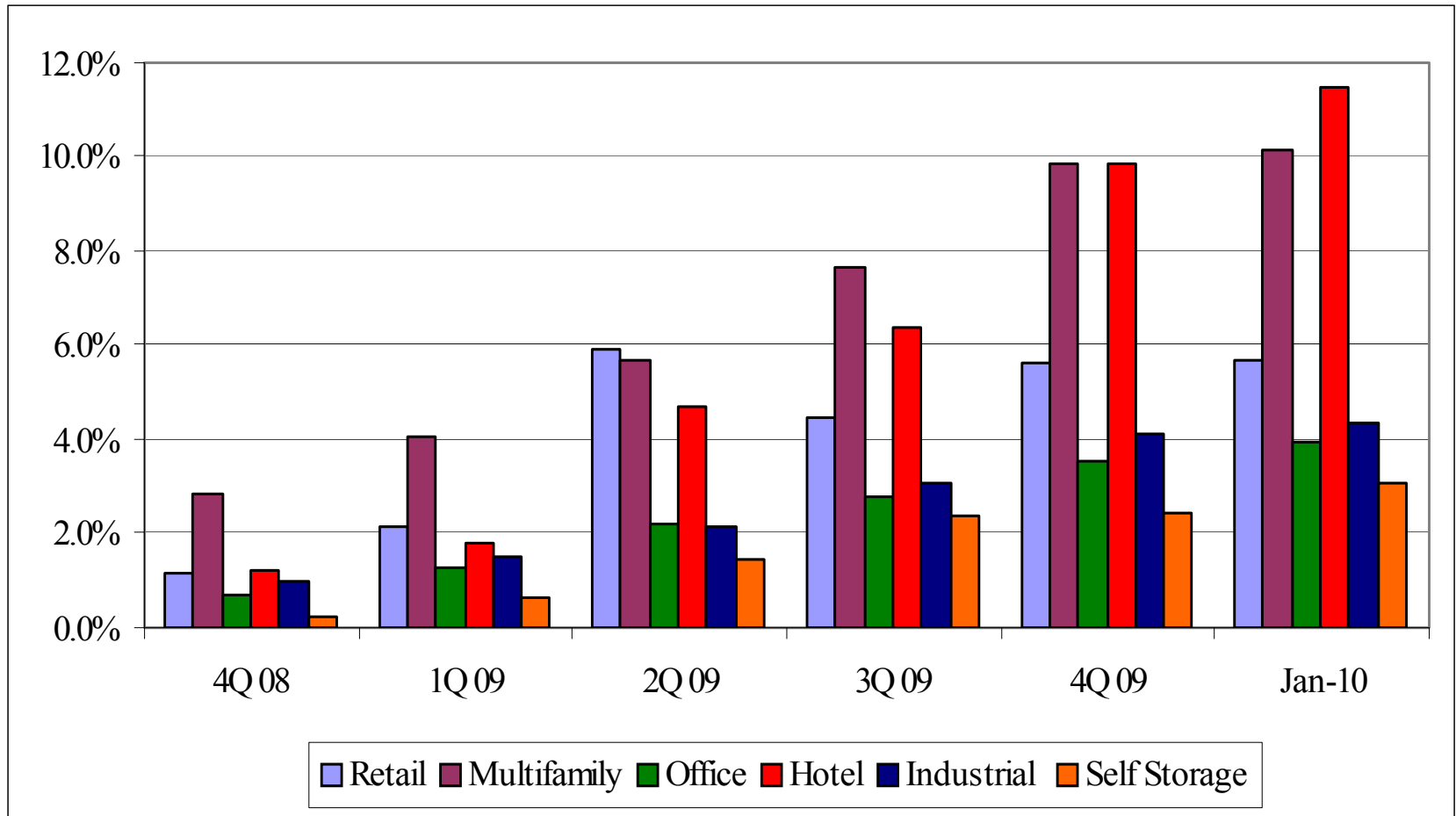
CRE and Inflation – Who is Best Positioned?

Source: SNL Financial, UBS estimates



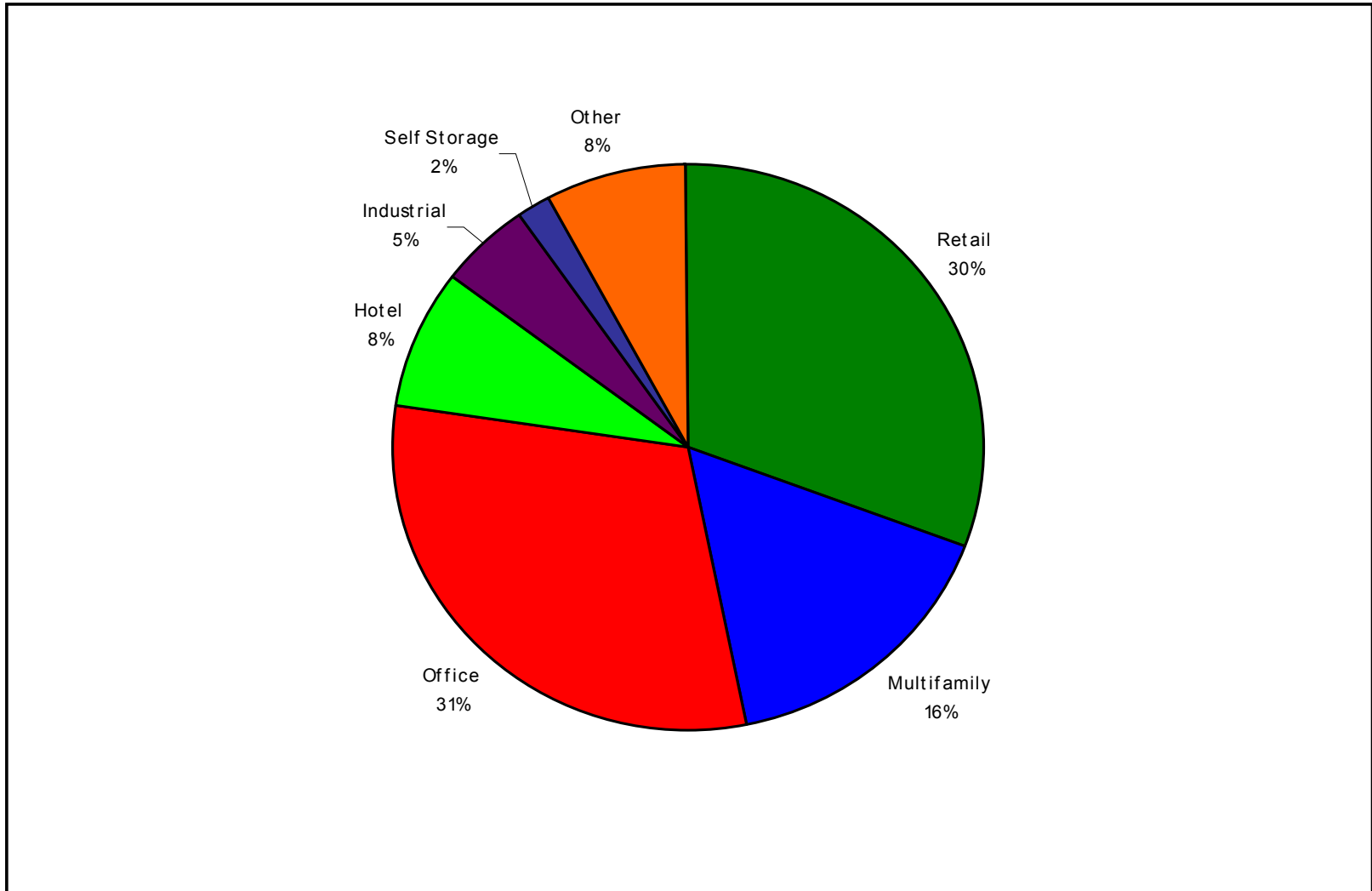
CMBS Delinquency by Property Type

Source: Trepp



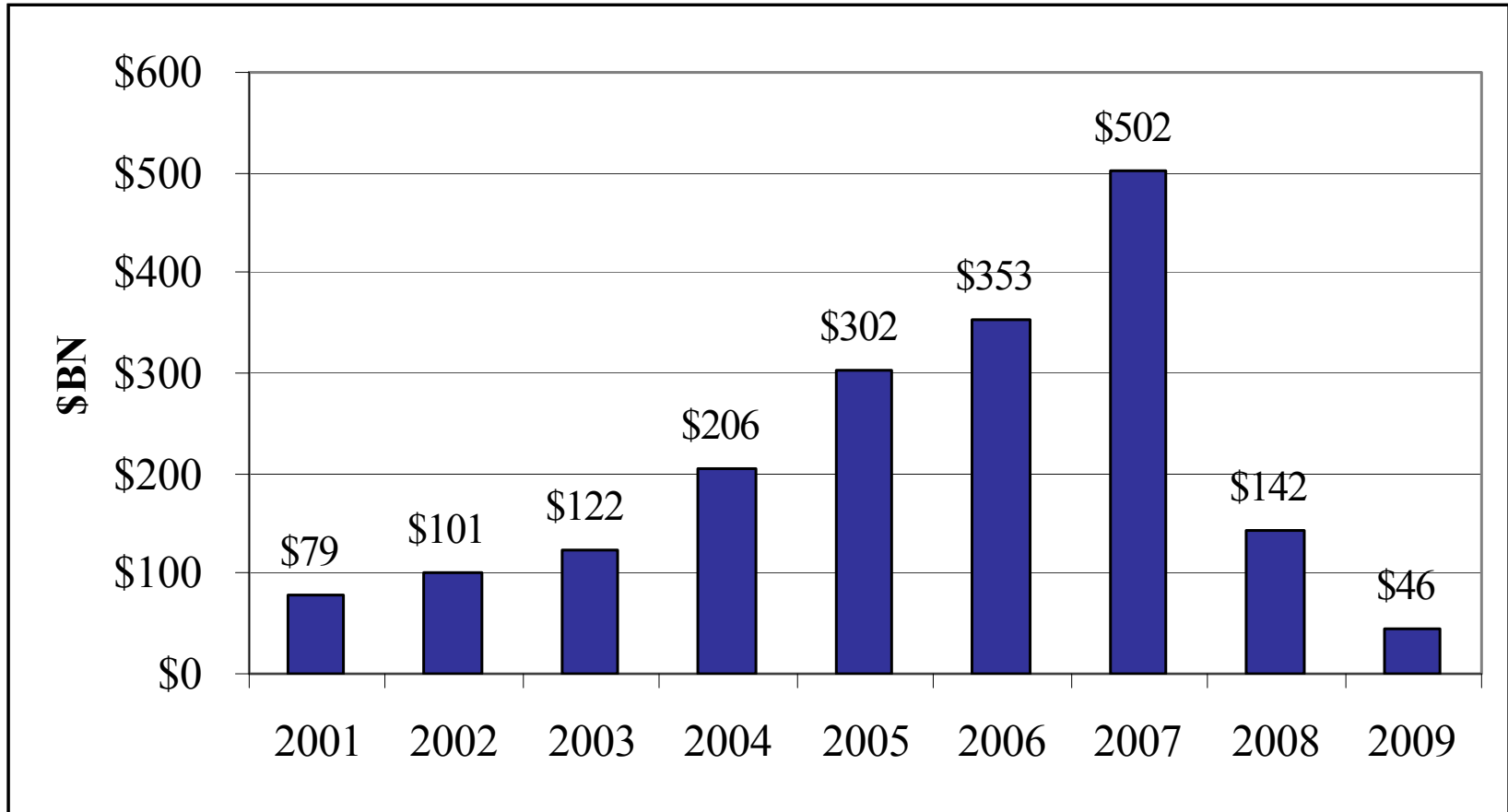
Outstanding CMBS by Property Type

Source: Trepp



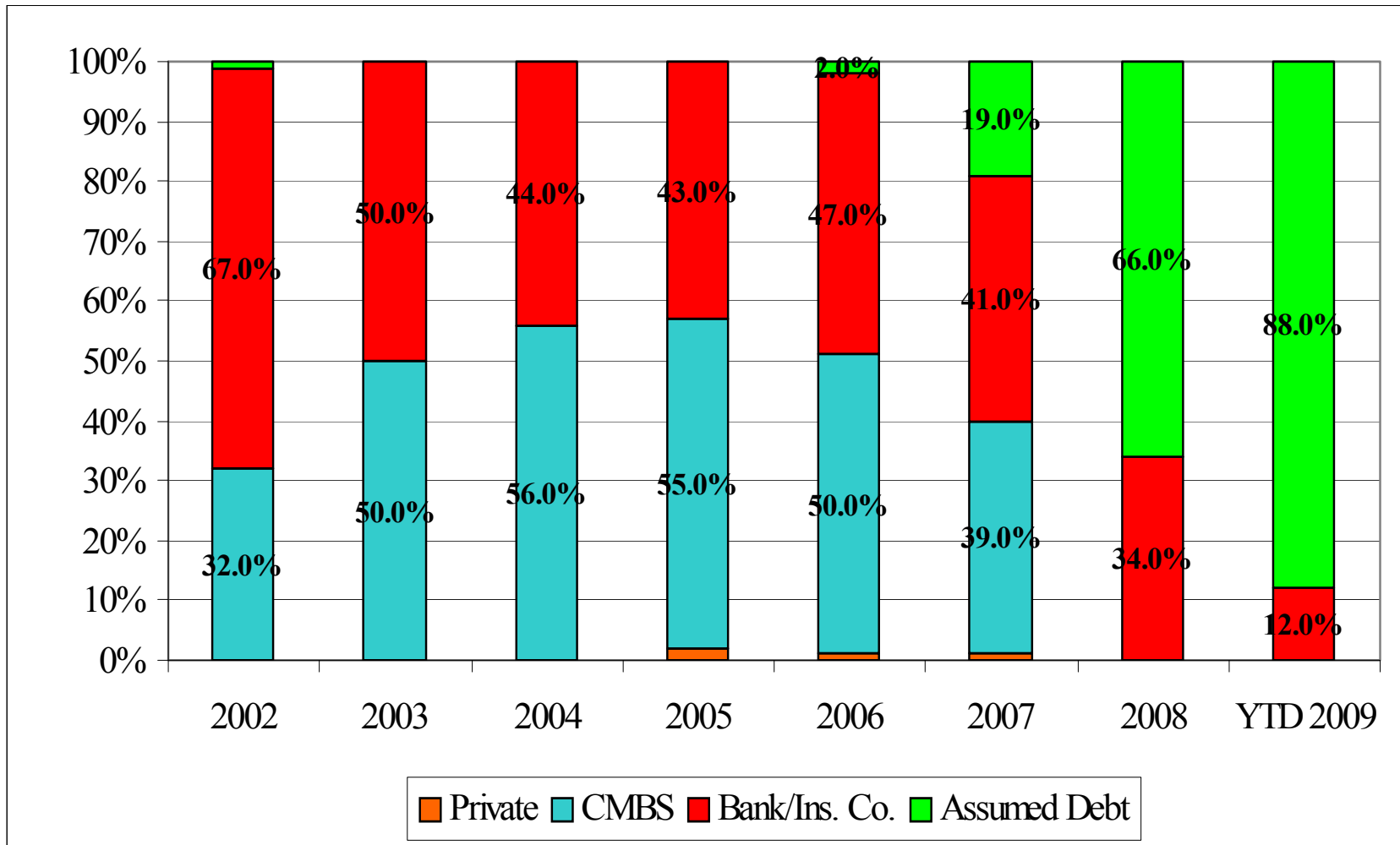
CRE Transaction Market (>\$5MM/TX)

Source: Real Capital Analytics



Manhattan Office Transaction Funding

Source: Real Capital Analytics



Disclaimer

Wealth Management Research is published by Wealth Management & Swiss Bank and Wealth Management Americas, Business Divisions of UBS AG (UBS) or an affiliate thereof. In certain countries UBS AG is referred to as UBS SA. This publication is for your information only and is not intended as an offer, or a solicitation of an offer, to buy or sell any investment or other specific product. The analysis contained herein is based on numerous assumptions. Different assumptions could result in materially different results. Certain services and products are subject to legal restrictions and cannot be offered worldwide on an unrestricted basis and/or may not be eligible for sale to all investors. All information and opinions expressed in this document were obtained from sources believed to be reliable and in good faith, but no representation or warranty, express or implied, is made as to its accuracy or completeness (other than disclosures relating to UBS and its affiliates). All information and opinions as well as any prices indicated are currently only as of the date of this report, and are subject to change without notice. Opinions expressed herein may differ or be contrary to those expressed by other business areas or divisions of UBS as a result of using different assumptions and/or criteria. At any time UBS AG and other companies in the UBS group (or employees thereof) may have a long or short position, or deal as principal or agent, in relevant securities or provide advisory or other services to the issuer of relevant securities or to a company connected with an issuer. Some investments may not be readily realisable since the market in the securities is illiquid and therefore valuing the investment and identifying the risk to which you are exposed may be difficult to quantify. UBS relies on information barriers to control the flow of information contained in one or more areas within UBS, into other areas, units, divisions or affiliates of UBS. Futures and options trading is considered risky. Past performance of an investment is no guarantee for its future performance. Some investments may be subject to sudden and large falls in value and on realisation you may receive back less than you invested or may be required to pay more. Changes in FX rates may have an adverse effect on the price, value or income of an investment. We are of necessity unable to take into account the particular investment objectives, financial situation and needs of our individual clients and we would recommend that you take financial and/or tax advice as to the implications (including tax) of investing in any of the products mentioned herein. This document may not be reproduced or copies circulated without prior authority of UBS or a subsidiary of UBS. UBS expressly prohibits the distribution and transfer of this document to third parties for any reason. UBS will not be liable for any claims or lawsuits from any third parties arising from the use or distribution of this document. This report is for distribution only under such circumstances as may be permitted by applicable law.

Australia: Distributed by UBS Wealth Management Australia Ltd (Holder of Australian Financial Services License No. 231127), Chifley Tower, 2 Chifley Square, Sydney, New South Wales, NSW 2000. **Bahamas:** This publication is distributed to private clients of UBS (Bahamas) Ltd and is not intended for distribution to persons designated as a Bahamian citizen or resident under the Bahamas Exchange Control Regulations. **Canada:** In Canada, this publication is distributed to clients of UBS Wealth Management Canada by UBS Investment Management Canada Inc.. **Dubai:** Research is issued by UBS AG Dubai Branch within the DIFC, is intended for professional clients only and is not for onward distribution within the United Arab Emirates. **France:** This publication is distributed by UBS (France) S.A., French "société anonyme" with share capital of € 125.726.944, 69, boulevard Haussmann F-75008 Paris, R.C.S. Paris B 421 255 670, to its clients and prospects. UBS (France) S.A. is a provider of investment services duly authorized according to the terms of the "Code Monétaire et Financier," regulated by French banking and financial authorities as the "Banque de France" and the "Autorité des Marchés Financiers." **Germany:** The issuer under German Law is UBS Deutschland AG, Stephanstrasse 14-16, 60313 Frankfurt am Main. UBS Deutschland AG is authorized and regulated by the "Bundesanstalt für Finanzdienstleistungsaufsicht." **Hong Kong:** This publication is distributed to clients of UBS AG Hong Kong Branch by UBS AG Hong Kong Branch, a licensed bank under the Hong Kong Banking Ordinance and a registered institution under the Securities and Futures Ordinance. **Indonesia:** This research or publication is not intended and not prepared for purposes of public offering of securities under the Indonesian Capital Market Law and its implementing regulations. Securities mentioned in this material have not been, and will not be, registered under the Indonesian Capital Market Law and regulations. **Italy:** This publication is distributed to the clients of UBS (Italia) S.p.A., via del vecchio politecnico 3 - Milano, an Italian bank duly authorized by Bank of Italy to the provision of financial services and supervised by "Consob" and Bank of Italy. **Jersey:** UBS AG, Jersey Branch is regulated by the Jersey Financial Services Commission to carry on investment business and trust company business under the Financial Services (Jersey) Law 1998 (as amended) and to carry on banking business under the Banking Business (Jersey) Law 1991 (as amended). **Luxembourg/Austria:** This publication is not intended to constitute a public offer under Luxembourg/Austrian law, but might be made available for information purposes to clients of UBS (Luxembourg) S.A./UBS (Luxembourg) S.A. Niederlassung Österreich, a regulated bank under the supervision of the "Commission de Surveillance du Secteur Financier" (CSSF), to which this publication has not been submitted for approval. **Singapore:** Please contact UBS AG Singapore branch, an exempt financial adviser under the Singapore Financial Advisers Act (Cap. 110) and a wholesale bank licensed under the Singapore Banking Act (Cap. 19) regulated by the Monetary Authority of Singapore, in respect of any matters arising from, or in connection with, the analysis or report. **Spain:** This publication is distributed to clients of UBS Bank, S.A. by UBS Bank, S.A., a bank registered with the Bank of Spain. **UAE:** This research report is not intended to constitute an offer, sale or delivery of shares or other securities under the laws of the United Arab Emirates (UAE). The contents of this report have not been and will not be approved by any authority in the United Arab Emirates including the UAE Central Bank or Dubai Financial Authorities, the Emirates Securities and Commodities Authority, the Dubai Financial Market, the Abu Dhabi Securities market or any other UAE exchange. **UK:** Approved by UBS AG, authorised and regulated in the UK by the Financial Services Authority. A member of the London Stock Exchange. This publication is distributed to private clients of UBS London in the UK. Where products or services are provided from outside the UK they will not be covered by the UK regulatory regime or the Financial Services Compensation Scheme. **USA:** Distributed to US persons by UBS Financial Services Inc., a subsidiary of UBS AG. UBS Securities LLC is a subsidiary of UBS AG and an affiliate of UBS Financial Services Inc. UBS Financial Services Inc. accepts responsibility for the content of a report prepared by a non-US affiliate when it distributes reports to US persons. All transactions by a US person in the securities mentioned in this report should be effected through a US-registered broker dealer affiliated with UBS, and not through a non-US affiliate. Version as per October 2009.

© UBS 2010. The key symbol and UBS are among the registered and unregistered trademarks of UBS. All rights reserved.