



Wall Street and Real Estate

By

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Goals of Presentation

- **CMBS / CDO Industry**
- **Risk Rating (MBS Ratings / Basel)**
- **REIT Industry**
- **Hottest Issue in Commercial Real Estate**
- **Investor (Cap Rate) Trends**
- **Real Estate Market (Rents, Prices) Trends**
- **Market Data Sources**

What is a CMBS?

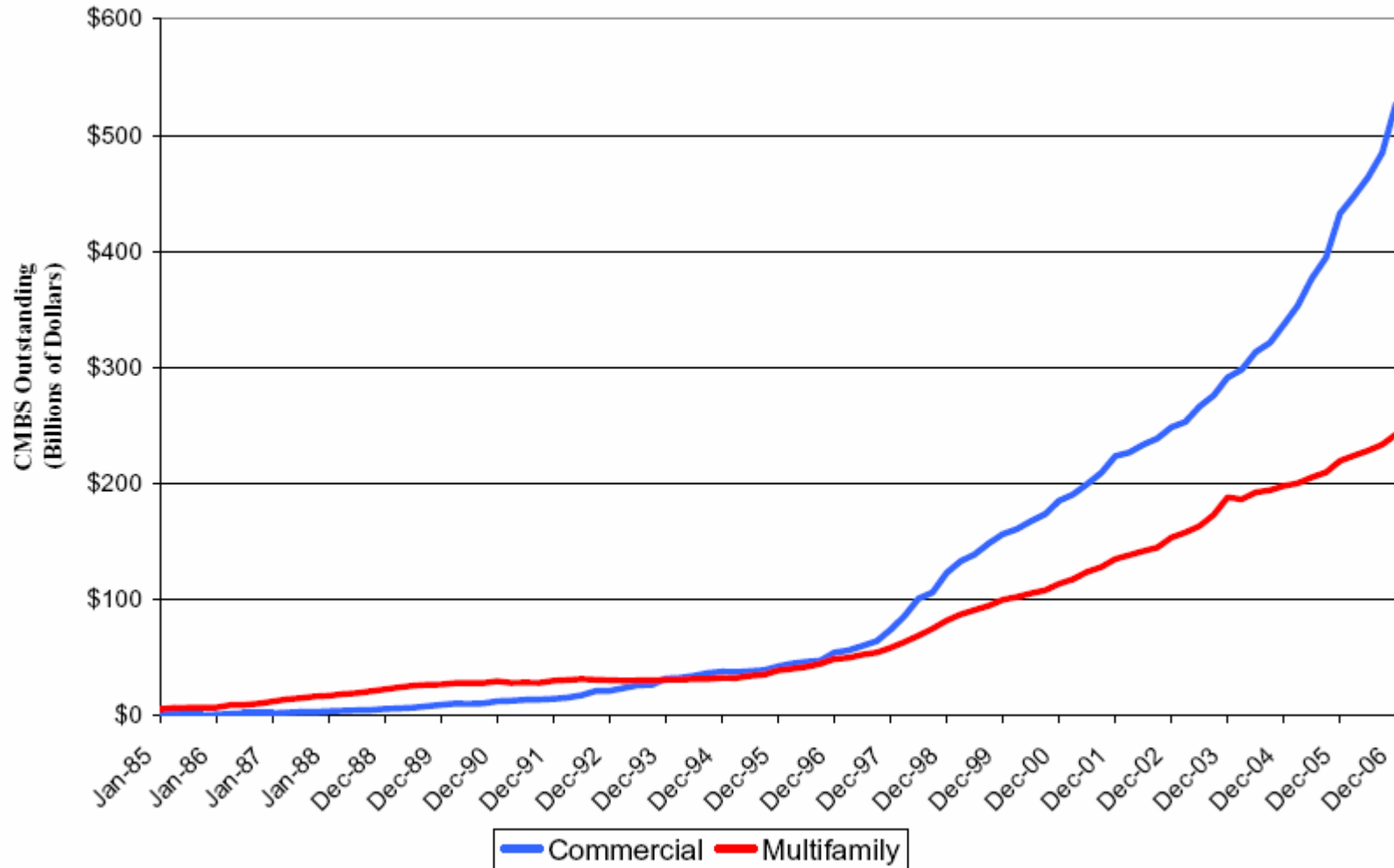
Commercial Mortgage Backed Security

Type of Pass-through Security

Commercial Mortgages are securitized into a pool. Rights to the revenue from the mortgages are divided into many smaller pieces (aka tranches, strips, slices), each with differing priorities. Proceeds are distributed to investors based on the priority of their tranche.

CMBS – Size of Market

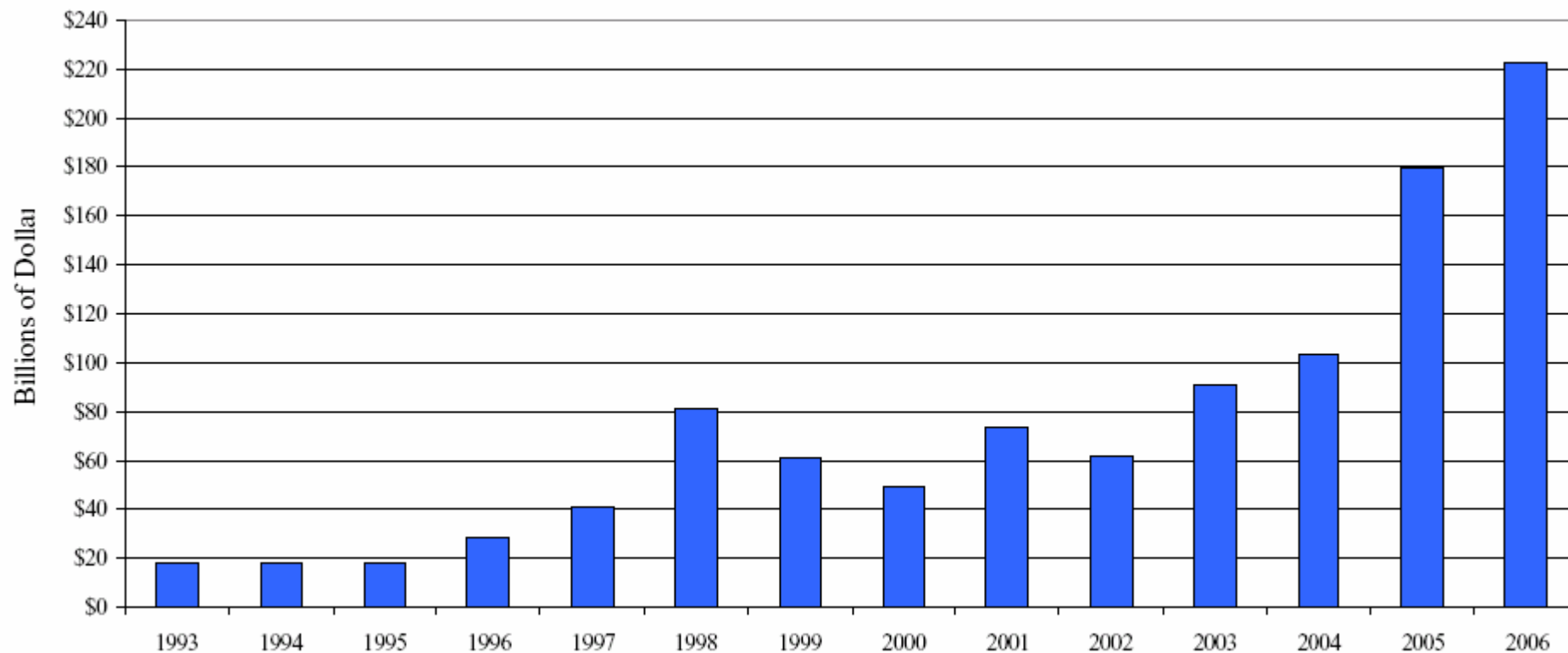
Outstanding CMBS



Source: Bank of America Securities, LLC, Federal Reserve

CMBS – Issuance

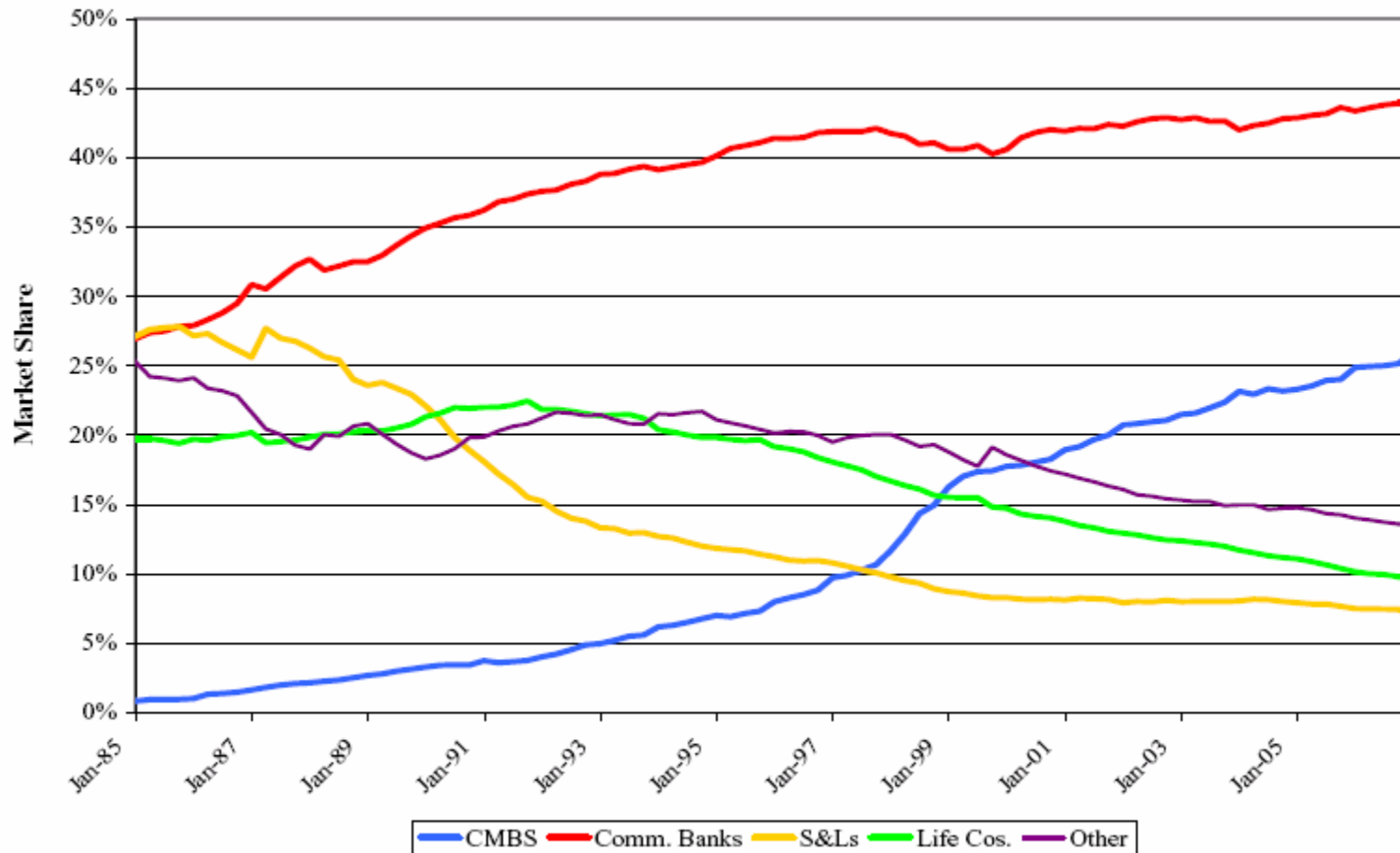
CMBS – Issuance by Year



Source: Bank of America Securities, LLC, Intex, Bloomberg, CM Alert, CRE News, AB Alert, Thompson, Informa

CMBS – Share of Market

CMBS – Share of Commercial R.E. Lending Market by Year



Source: Bank of America Securities, LLC, Federal Reserve

Players in a CMBS

Borrowers

Mortgage Banker / Loan Originator

Investment Banker

Trustee (fiscal agent)

Rating Agencies

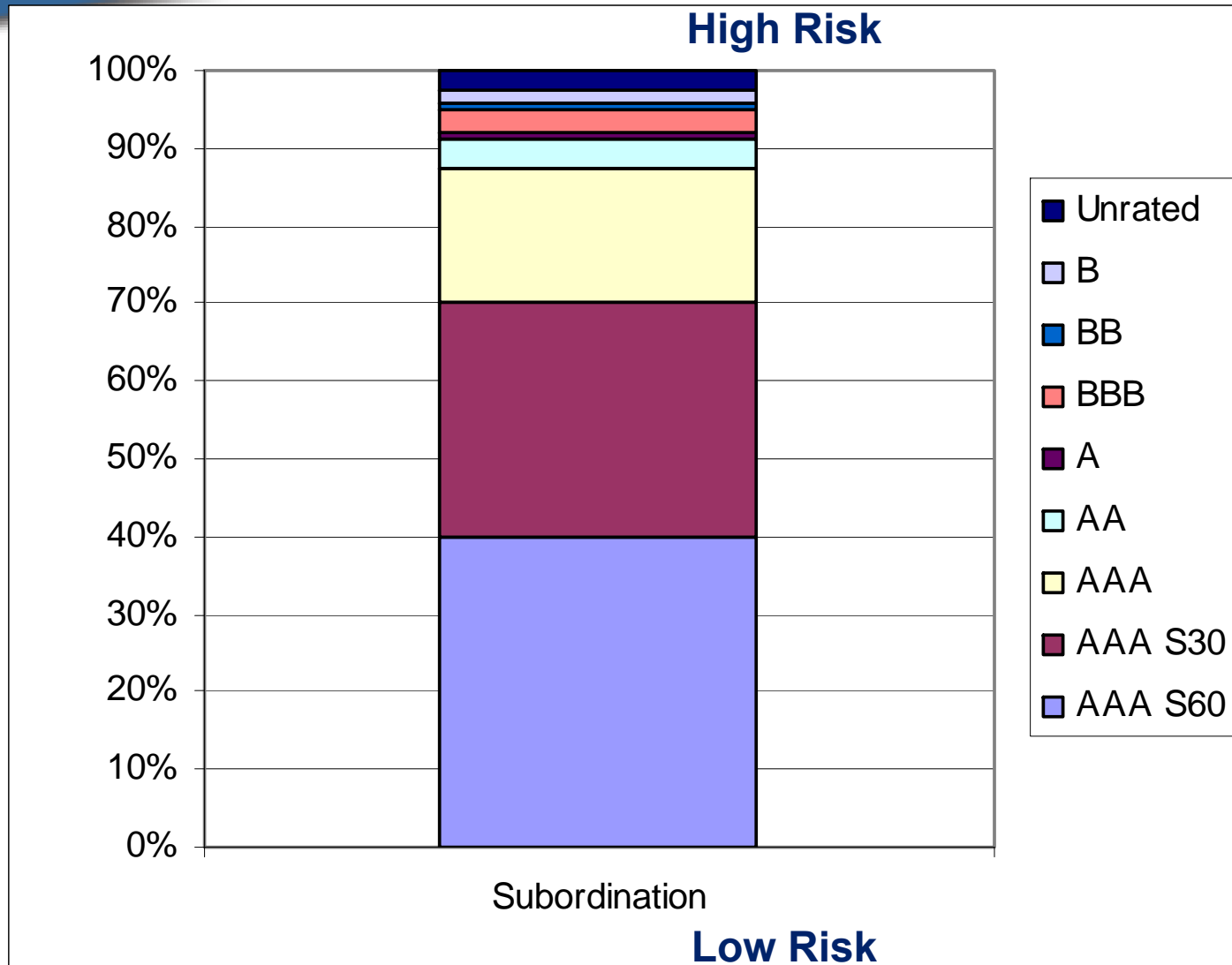
Servicers (Master, Primary, Special)

Investors

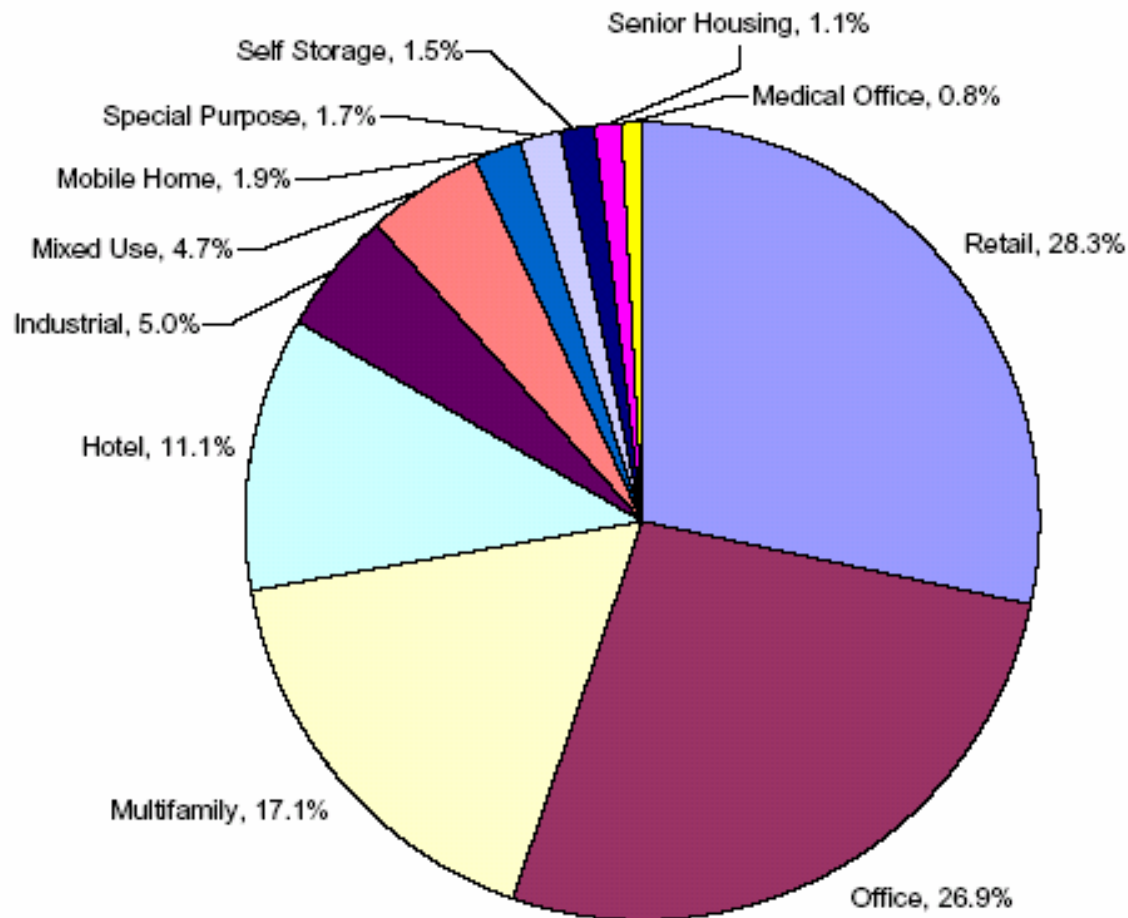
Example of a CMBS

	No. Loans	250		
	Avg. Loan Size	\$10,000,000		
	Total Loan Amt.	\$2,500,000,000		
	Index Name	10-Year Treasury		
	Index Rate	5.000%		
	Avg. Margin	1.750%		
	Avg Yield	6.750%		
Current Spread	Traunche Rating (10Y)	Approximate Subordination	Implied Yield	Yield x Weight%
0.22%	AAA S60	60.0%	5.22%	2.088%
0.25%	AAA S30	30.0%	5.25%	1.575%
0.30%	AAA	12.5%	5.30%	0.928%
0.40%	AA	9.0%	5.40%	0.189%
1.00%	A	8.0%	6.00%	0.060%
1.75%	BBB	5.0%	6.75%	0.202%
2.50%	BB	4.0%	7.50%	0.075%
4.00%	B	2.5%	9.00%	0.135%
5.00%	Unrated	0 to <2.5%	10.00%	0.250%
		Weighted Average Yield		5.502%
	* Implied Annual Excess Return			1.248%
				\$31,200,000
	* note: excludes swap, agency, trust, servicer and other fees			

Example of Subordination



CMBS – Property Distribution



Source: Bank of America Securities, LLC, Intex

CMBS – Default Performance

- by Property Type, as of June 2007

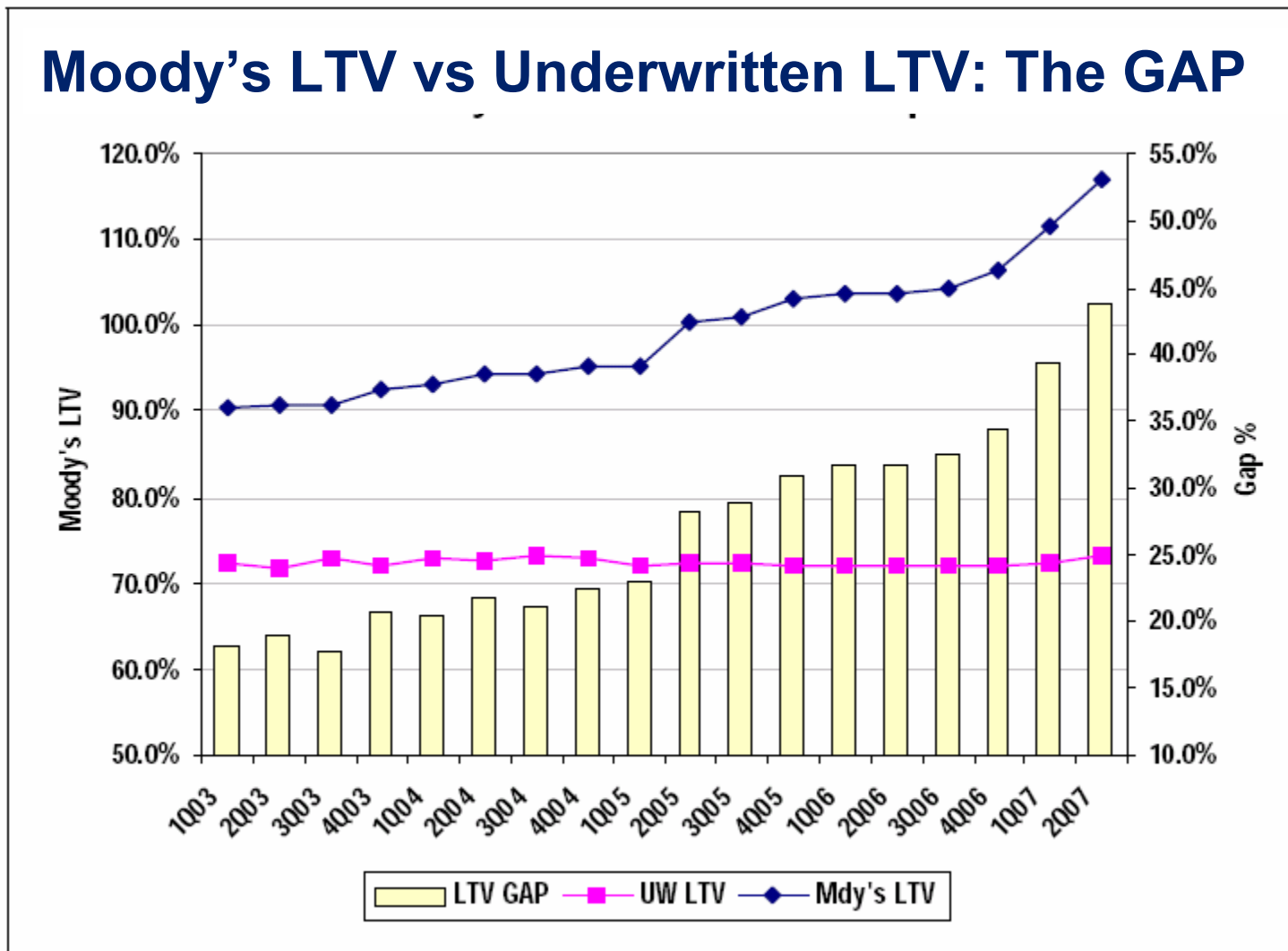
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total	Standard Deviation
Hotel	0.75%	0.16%	1.19%	0.91%	3.25%	2.91%	4.48%	0.27%	1.32%	0.50%	1.91%	1.64%	1.39%
Multifamily	0.78%	0.53%	0.28%	0.31%	0.49%	0.66%	1.02%	1.54%	1.43%	0.75%	0.31%	0.87%	0.43%
Industrial	0.55%	0.46%	0.11%	0.41%	0.31%	0.75%	1.42%	1.36%	0.77%	0.53%	-0.10%	0.74%	0.47%
Office	0.73%	0.32%	0.19%	0.15%	0.30%	0.38%	1.22%	0.95%	0.60%	0.27%	0.04%	0.51%	0.37%
Retail	0.55%	0.26%	0.57%	0.21%	0.70%	1.02%	0.99%	0.43%	0.25%	0.20%	0.06%	0.44%	0.32%
Total	0.60%	0.33%	0.49%	0.46%	0.86%	0.87%	1.30%	0.85%	0.68%	0.38%	0.23%	0.67%	0.31%

Notes: The presented default rates are net default rates by balance. It is possible for net defaults in a year to be negative if the balance of loans that recover from default is greater than the balance of loans that enter and/or remain in default.

Source: Bank of America Securities, LLC, Intex

CMBS – Moody's Changes Values

Moody's LTV vs Underwritten LTV: The GAP



Source: Moody's

Sub-Prime MBS – Upgrades: Downgrades

- Week of July 9, reported July 17

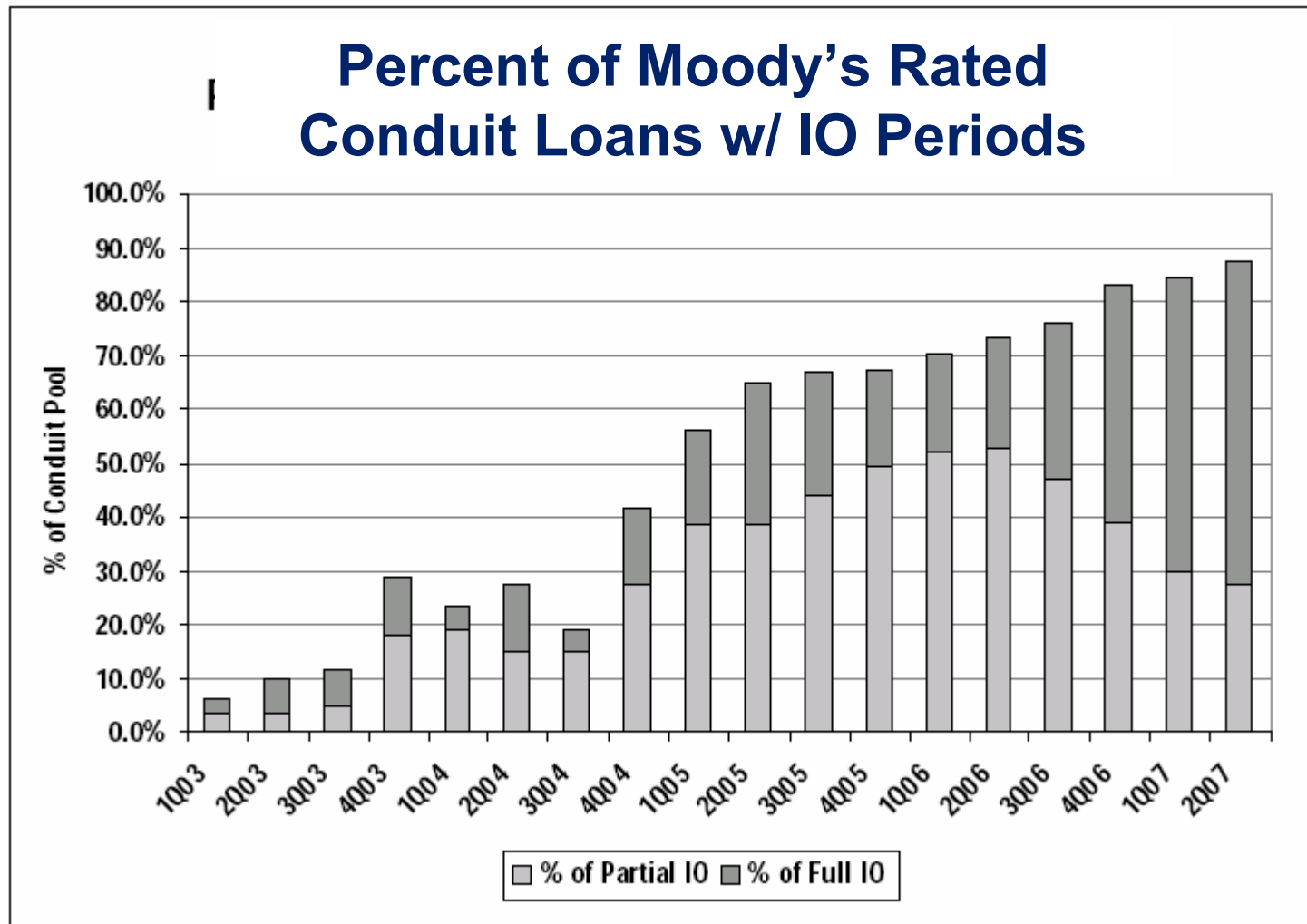
Summary of Rating Actions Taken by SRAs

Subprime RMBS	Downgraded	399	498	
	Negative Review	32	26	170
Original Rating	A and Above	2%	13%	
	BBB	55%	56%	
	BB or Below	43%	30%	

Note: The 26 issues are on negative watch by the S&P as the issuers have appealed the agency's downgrade decision.

Source: Bank of America Securities, LLC, Moody's, Standard & Poor's, Fitch

CMBS – Interest Only Periods



Source: Moody's

Risk Rating

- Wall Street - Rating Agencies
- Banking - Basel Accord

$$\begin{array}{ccccc} \text{Estimated} & & \text{Loss} & & \text{Expected} \\ \text{Default} & & \text{Given} & & \text{Loss} \\ \text{Frequency} & \times & \text{Default} & = & \\ (\text{EDF, DP, PD}) & & (\text{LGD, LR,...}) & & (\text{EL...}) \end{array}$$

What are the drivers?

Your answer is your Risk Rating Model

**Risk-based pricing will create
borrower/property specific interest rate**

Risk Rating Systems

- Two Basic Tools

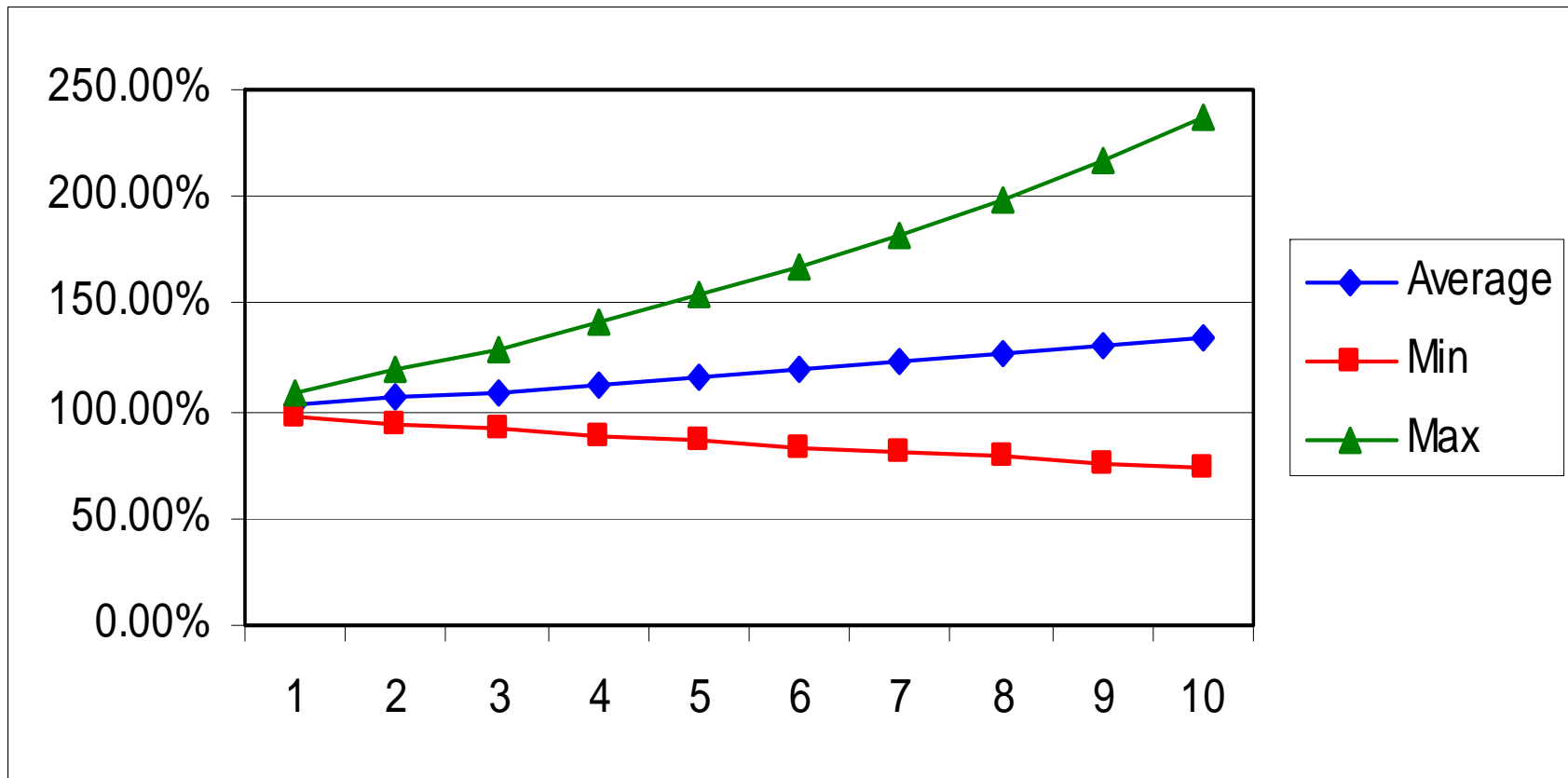
- **Loan to Value Ratio = LTV**
- **Debt Service Coverage Ratio = DSC**

Many studies show that Default is correlated DSC. If a borrower can't make the payment, the property is "given back.

Studies show that "Loss Given Default" is correlated with LTV. Loss increases as the LTV increases.

Example of Cone Analysis

Average = 3%, 1 Std Dev = 4%, 10 Years



Types of Risks Impacting Loans

- **Market Risk**
- **Banking Industry**
- **Real Estate Industry**
- **Interest Rate Risk**
- **Operational Risk**
- **Originator Bias**
- **Property Type**
- **Location of Collateral**
- **Strength of Borrower**
- **Guarantee**
- **Ability to Exit**
- **Prepayment Lockouts**

Real Estate Investment Trust (REIT)

Pass-through Investment

Effectively a Corporation

95% of income passed through to shareholders. No “corporate” tax. All earnings single-taxed at shareholder level.

Current Issues:

Definition of Assets

Leverage

Real Estate Investment Trust (REIT)

- on line resources

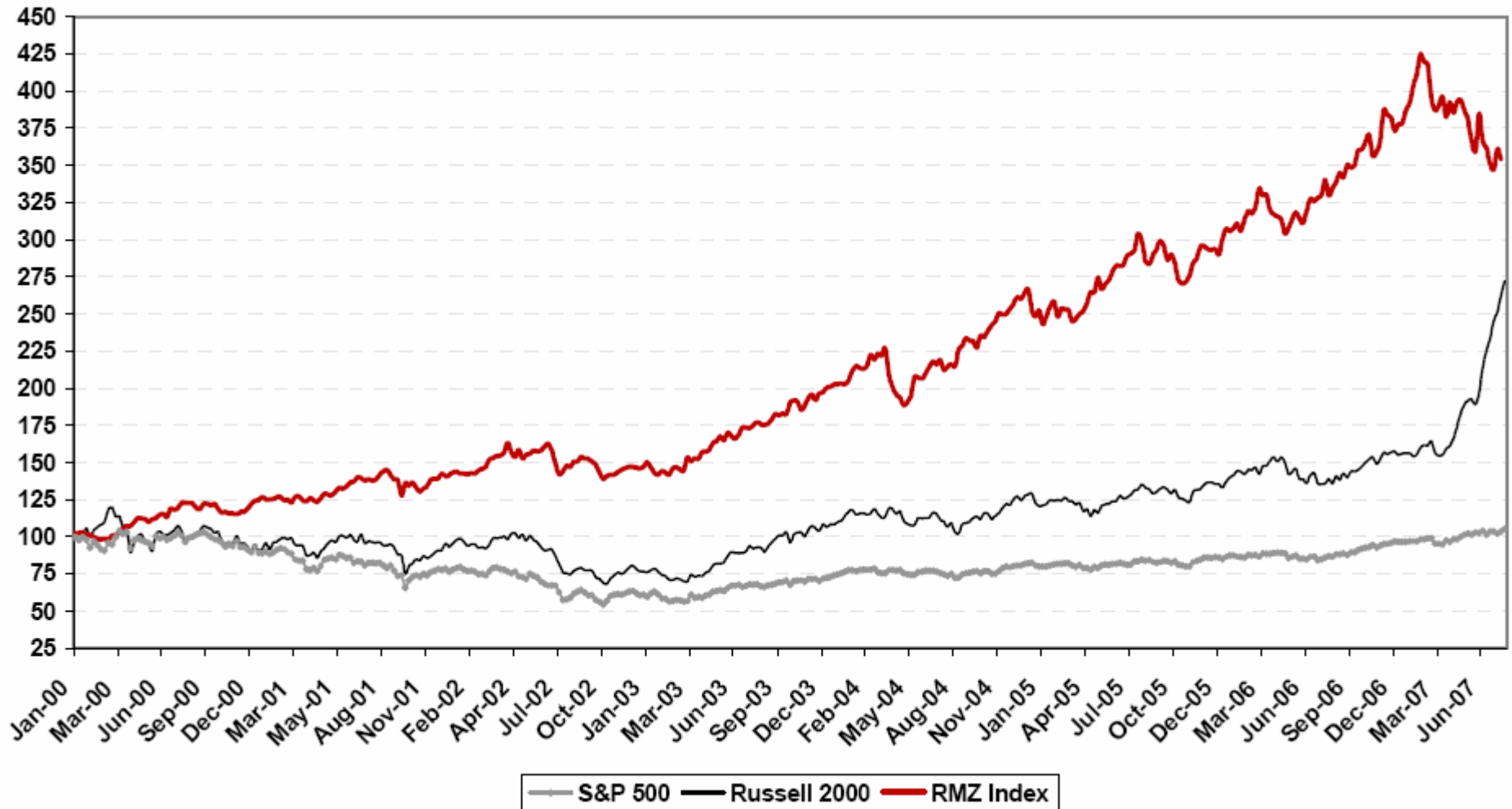
**Great Site to see Investor Presentations for IPO:
<http://www.retailroadshow.com>**

Site to Look Up SEC Filings: <http://www.sec.com>

**Another great Site:
<http://www.google.brand.edgar-online.com/?sym=HCN>**

Real Estate Investment Trust (REIT)

- Price Index Performance Analysis

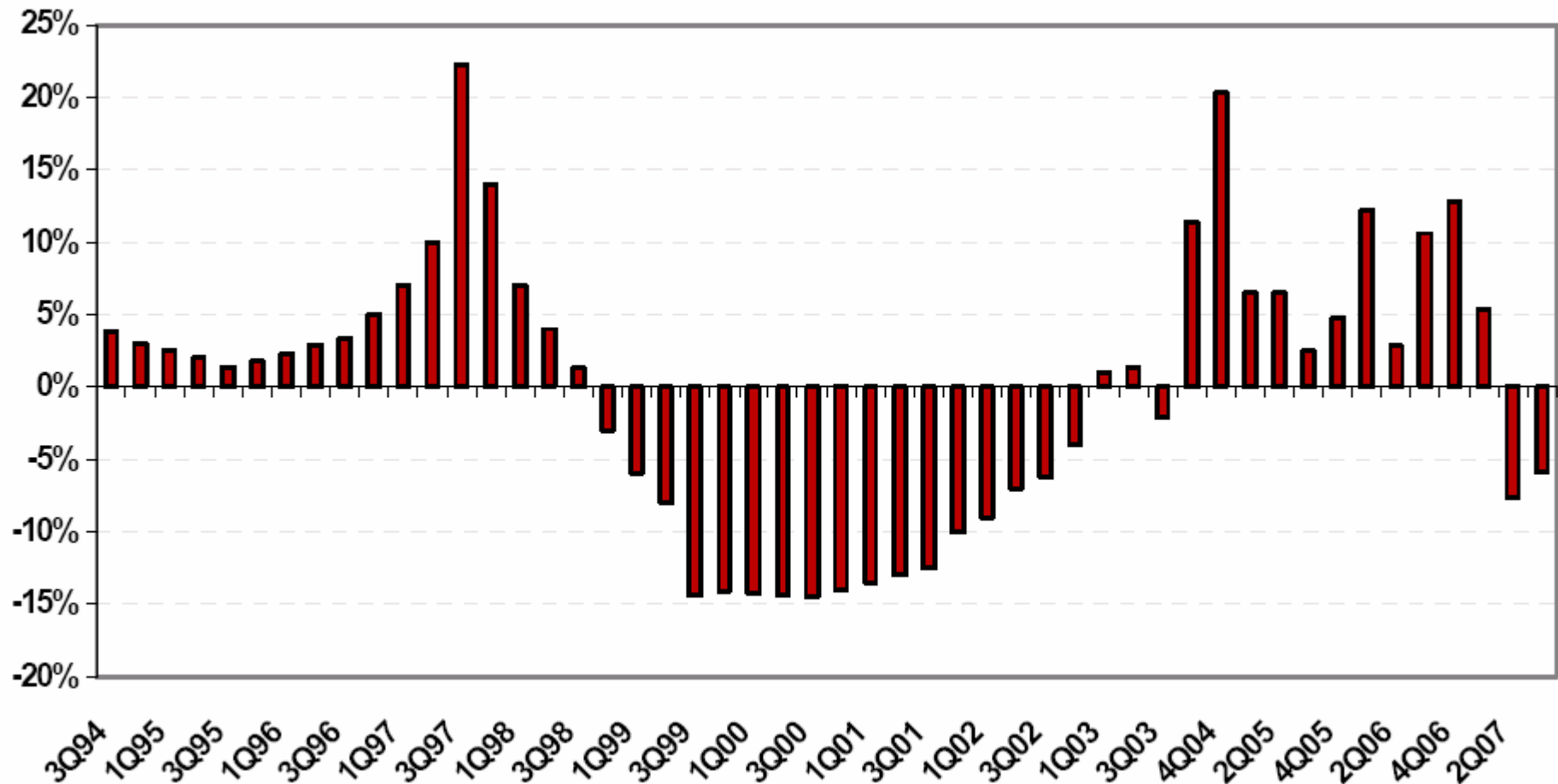


Source: Bank of America Securities, LLC, FactSet, SNL Financial, Reuters

Real Estate Investment Trust (REIT)

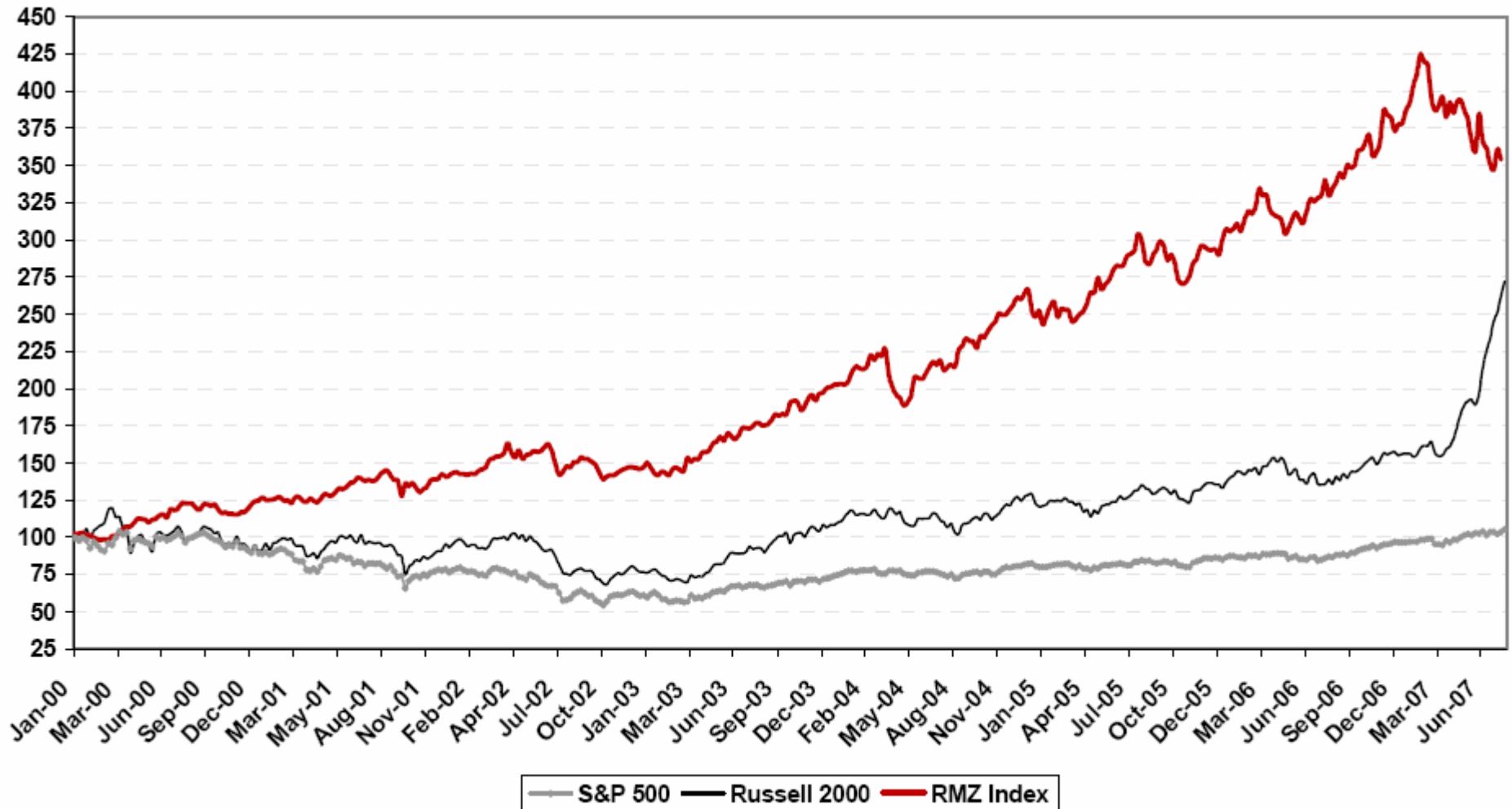
- Price versus NAV

REITS Trading @ 6% Discount to current NAV, 10% Discount to Forward NAV



Source: Bank of America Securities, LLC, FactSet, SNL Financial

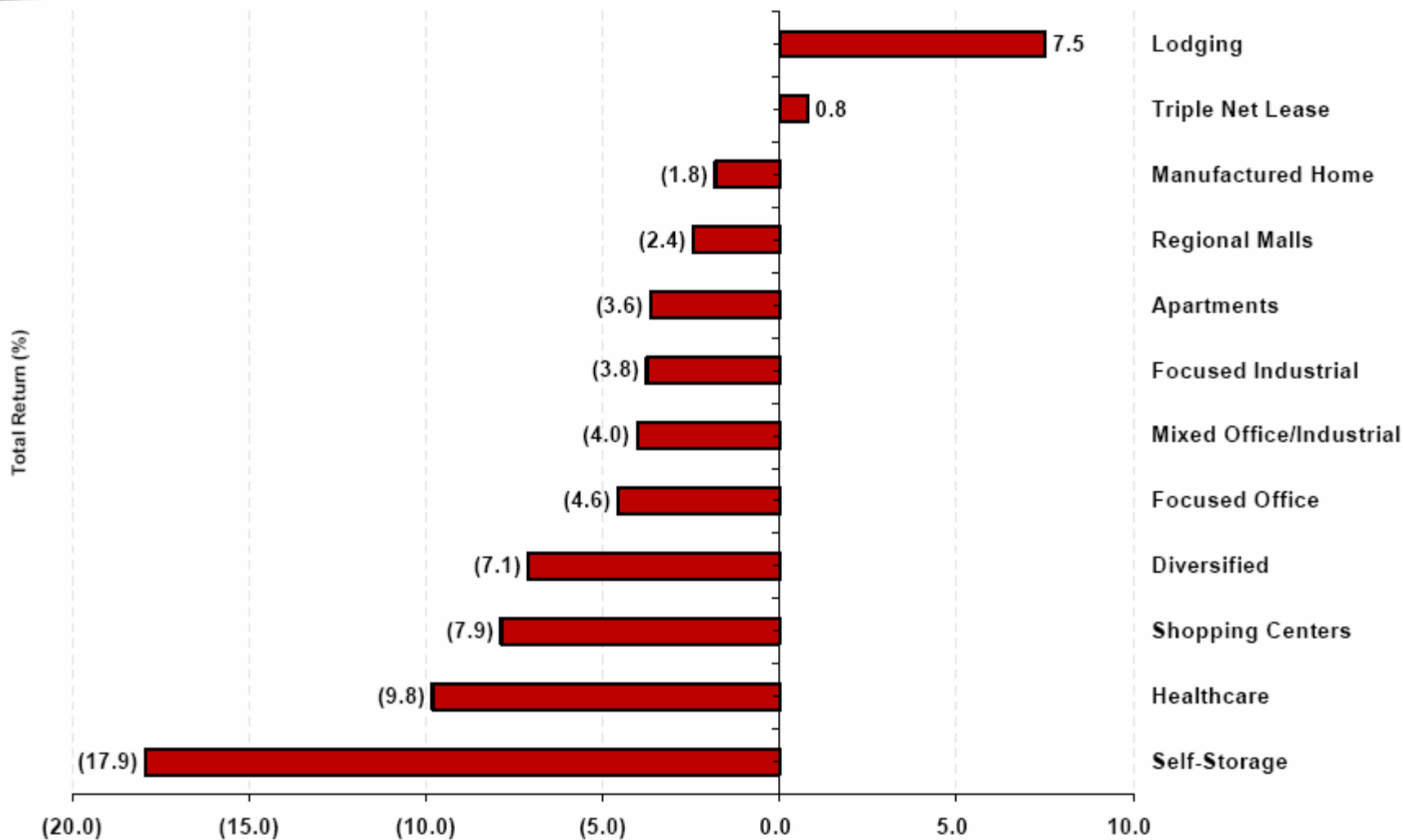
Real Estate Investment Trust (REIT) - Price Index Performance Analysis



Source: Bank of America Securities, LLC, FactSet, SNL Financial, Reuters

Real Estate Investment Trust (REIT)

- YTD REIT Sector Performance as of July 2007



Source: Bank of America Securities, LLC, FactSet, Reuters

Hot Issue in Commercial Real Estate - Cap Rate

$$R_0 = Y_0 - \Delta$$

Cap Rate = Yield Rate minus Growth

Growth – what are drivers?

No rental Growth

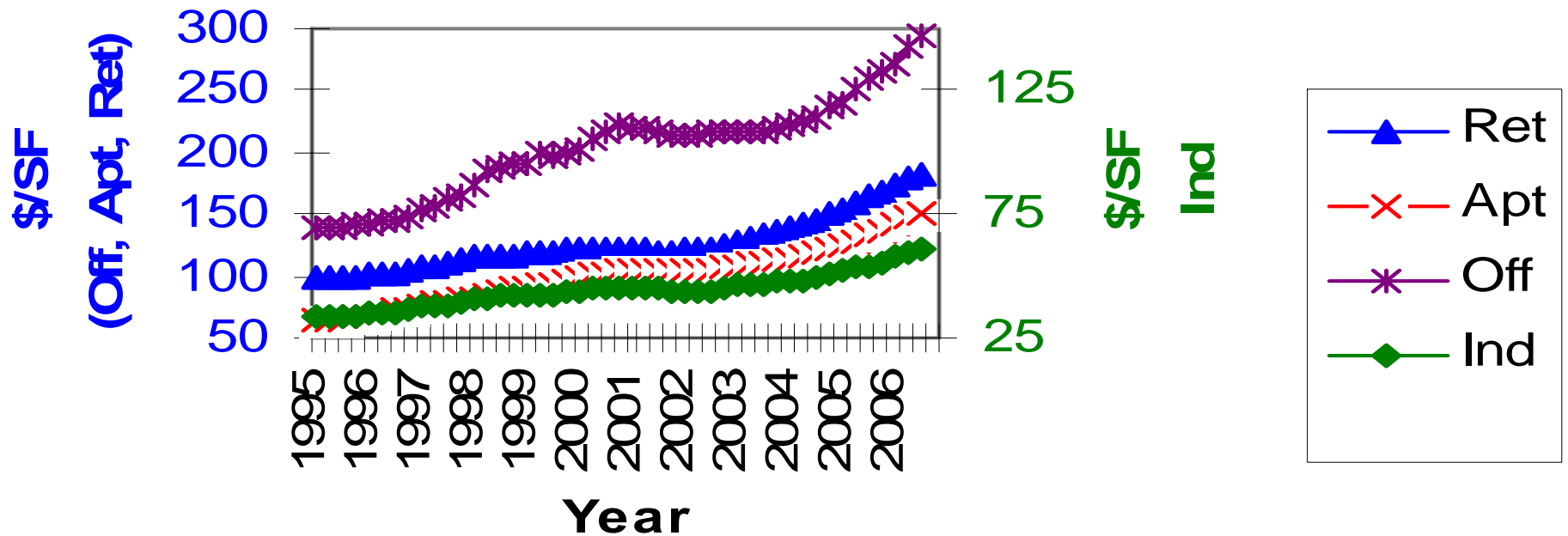
Only interest rate change

Lag Effect

What happens when rates stop declining?

Market Trends - National - Value by Property Type

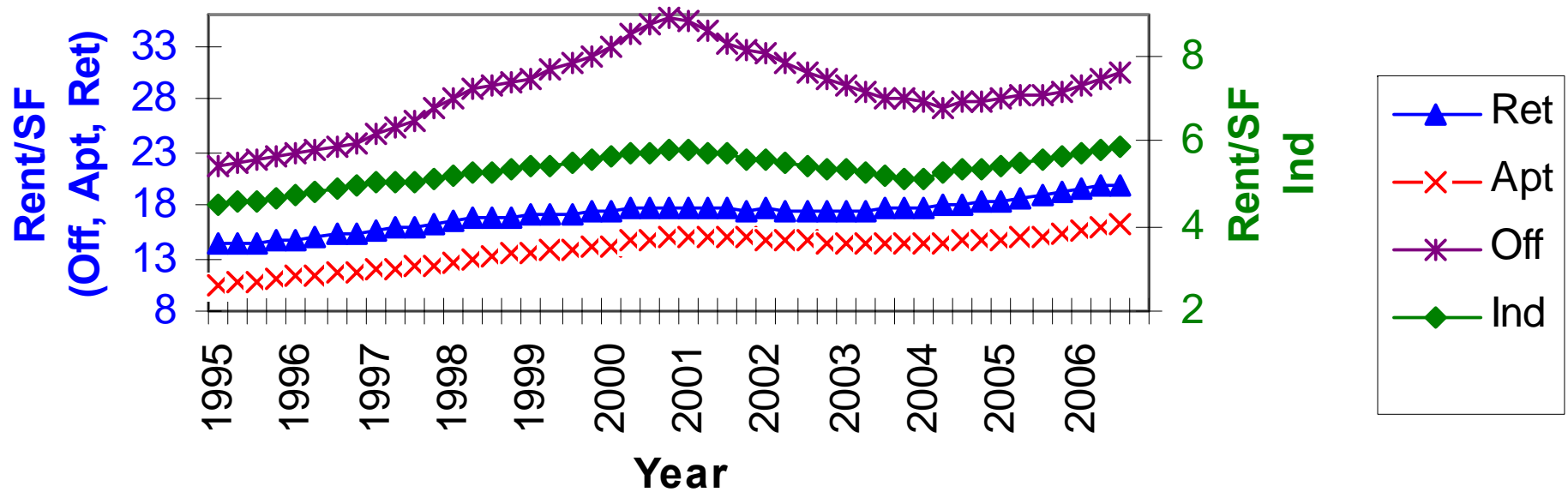
Market Trends - Value/SF National Averages



Source: National Real Estate Index, and Bank of America - Real Estate Research

Market Trends - National - Rent by Property Type

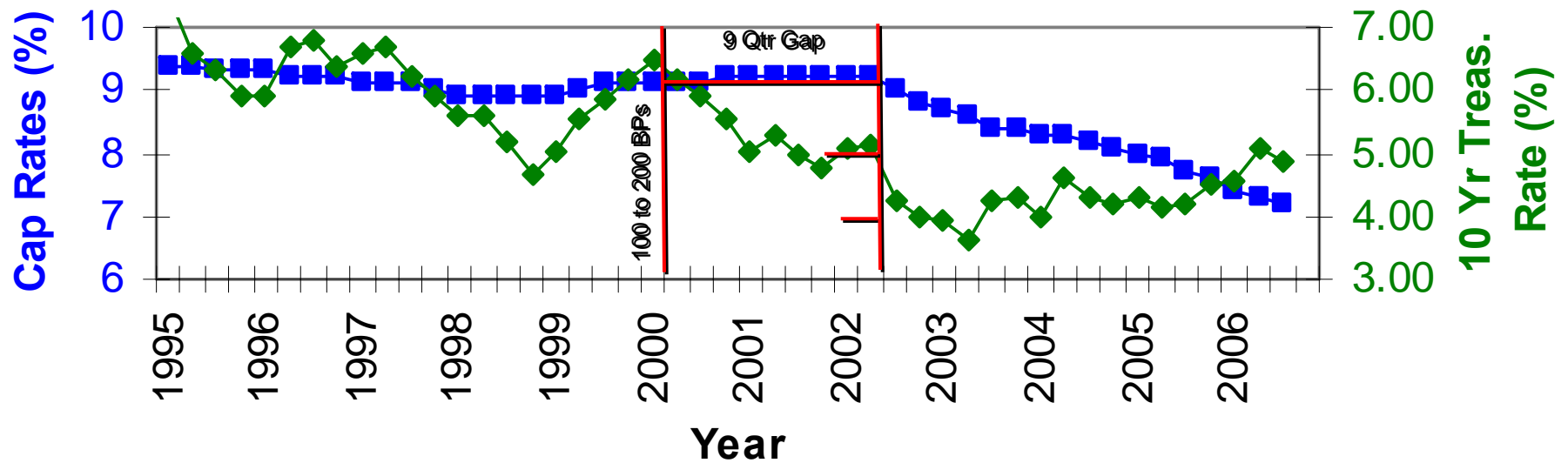
Market Trends - Rent/SF National Averages



Source: National Real Estate Index, and Bank of America - Real Estate Research

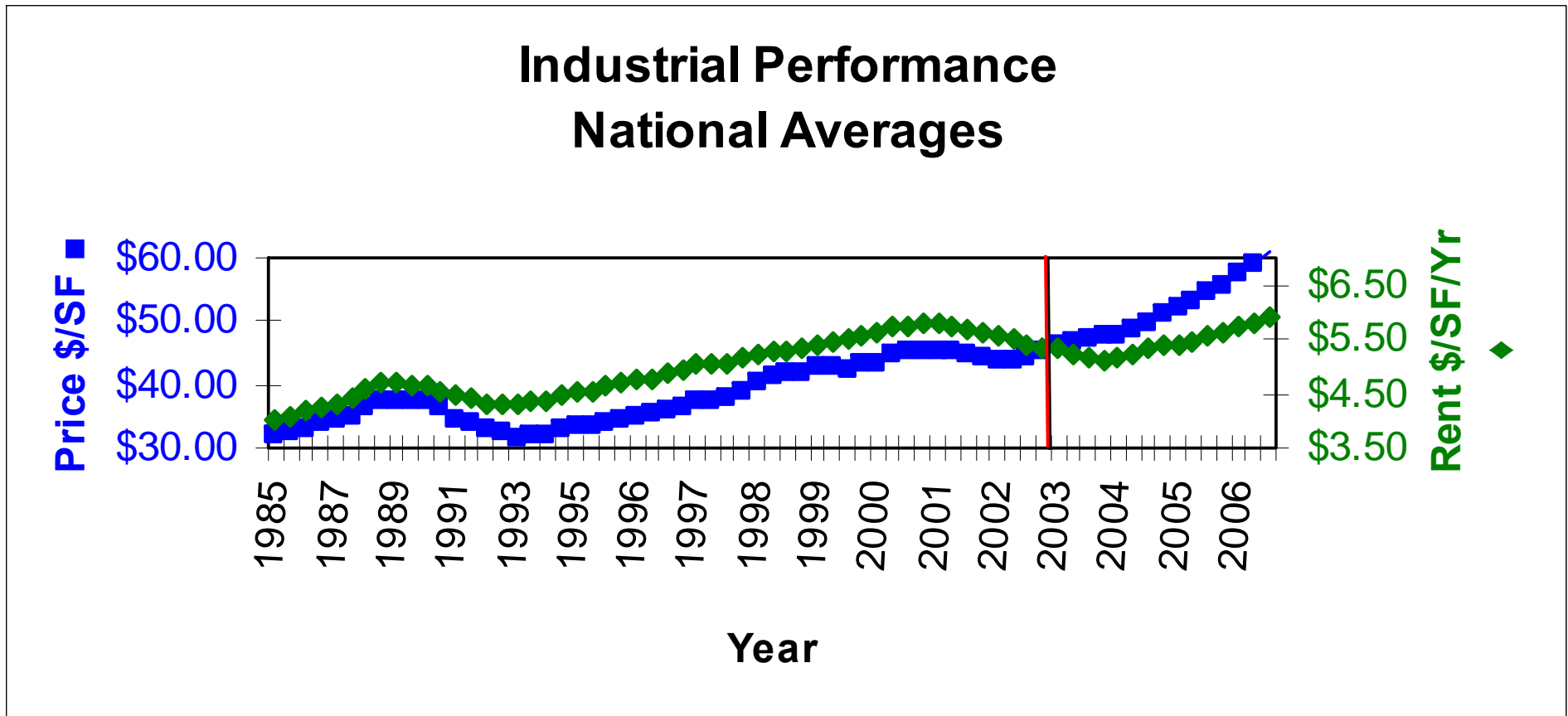
Interest Rate & Investor Trends - National Industrial Market

Interest Rates vs. Industrial Cap Rates National Average



Source: National Real Estate Index, and Bank of America - Real Estate Research

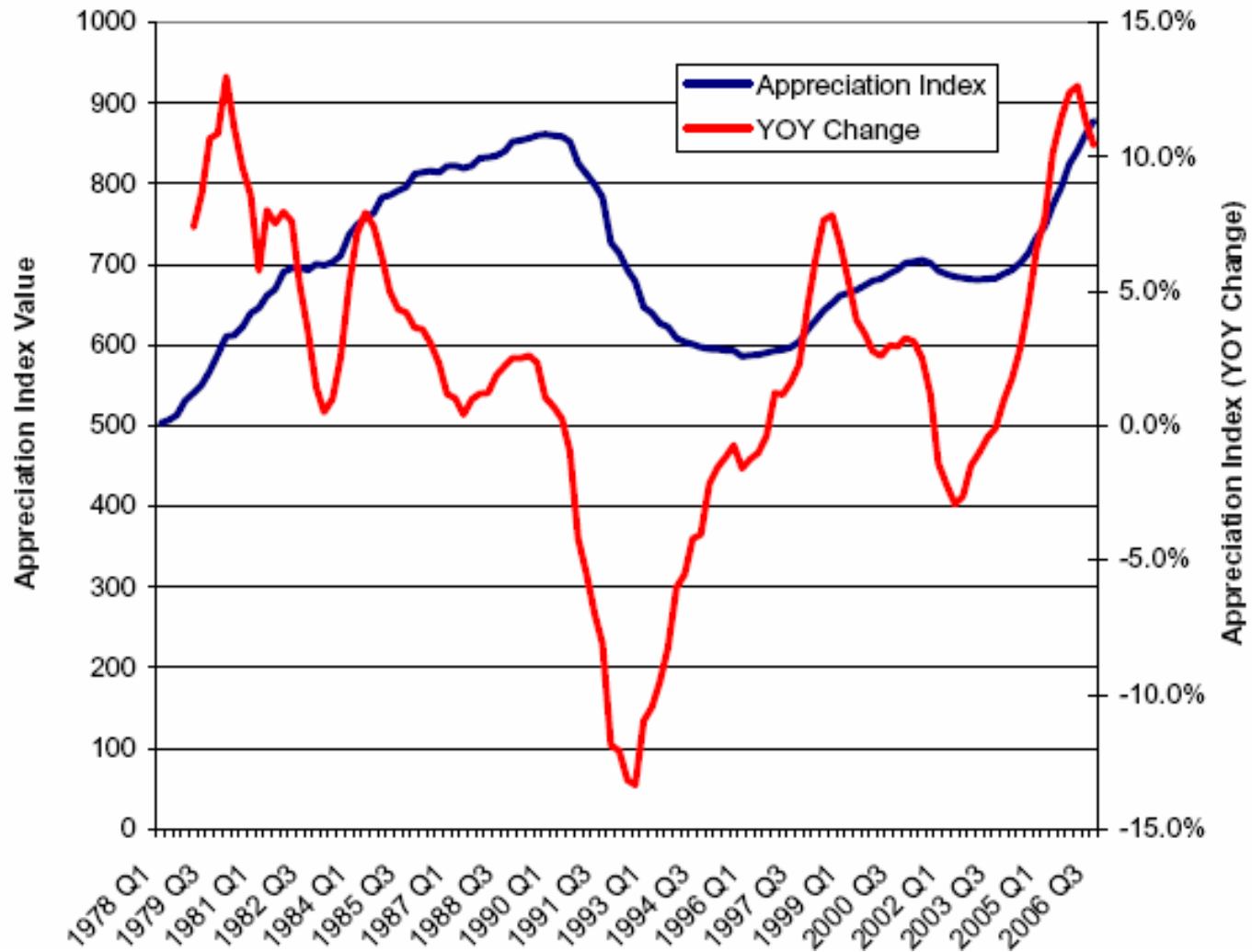
Trends in Industrial Real Estate - National



Source: National Real Estate Index, and Bank of America - Real Estate Research

NCREIF Returns

Figure 1: NCREIF Appreciation Index and Year-over-Year Changes



Economic / Demographic Data Providers

- **Appraisal Institute - Site to do Business
(applies to most data sources)**
- **BEA, BLS, Census**
- **Economy.com**
- **Claritas (acquired NDS & UDS)**
- **State / Regional Data Sources**

Rent – Vacancy Nat'l Data Sources

- **Torto-Wheaton Research**
- **REIS**
- **Property & Portfolio Research**
- **CoStar**
- **CB Commercial**
- **Grubb & Ellis**
- **Cushman Wakefield**
- **RealFacts (Apt Only)**

Top Real Estate Forecasting Companies

- **Torto Wheaton Research**
- **Property & Portfolio Research**
- **REIS SE**
- **Rosen**

Sale Comps – National Data Sources

- **Real Capital Analytics**
- **REIS SE**
- **LoopNet (recently added)**
- **CoStar Comps**
- **Your Firm's Files**
- **Call Brokers, REITS, etc.**

Expenses – National Data Sources

- **IREM (Office, Retail, Apt)**
- **ULI – Dollars & Cents (several versions)**
- **NAIOP**
- **CoStar Comps**
- **REIS**
- **RealtyRates.com (market survey)**
- **Your Firm's Files!**

Cap Rate – National Data Sources

- **Real Capital Analytics**
- **RERC Investor Survey**
- **CB National Investor Survey**
- **Cushman Wakefield**
- **Grubb & Ellis – Outlook**
- **CoStar Comps**
- **Korpacz**

Real Estate Loss - Data Sources

- **FDIC – Whole Portfolios Only**
- **Annual Reports (REIT / CMBS)**
- **SNL DataSource, from SNL Financial (REIT)**
- **Trepp – CMBS – trepp.com**
- **Conquest from S&P – cmbs.com**
- **Intex – CMBS data – intex.com**
- **SRAs – S&P, Moodys, Fitch**