

Wall Street and Real Estate

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?

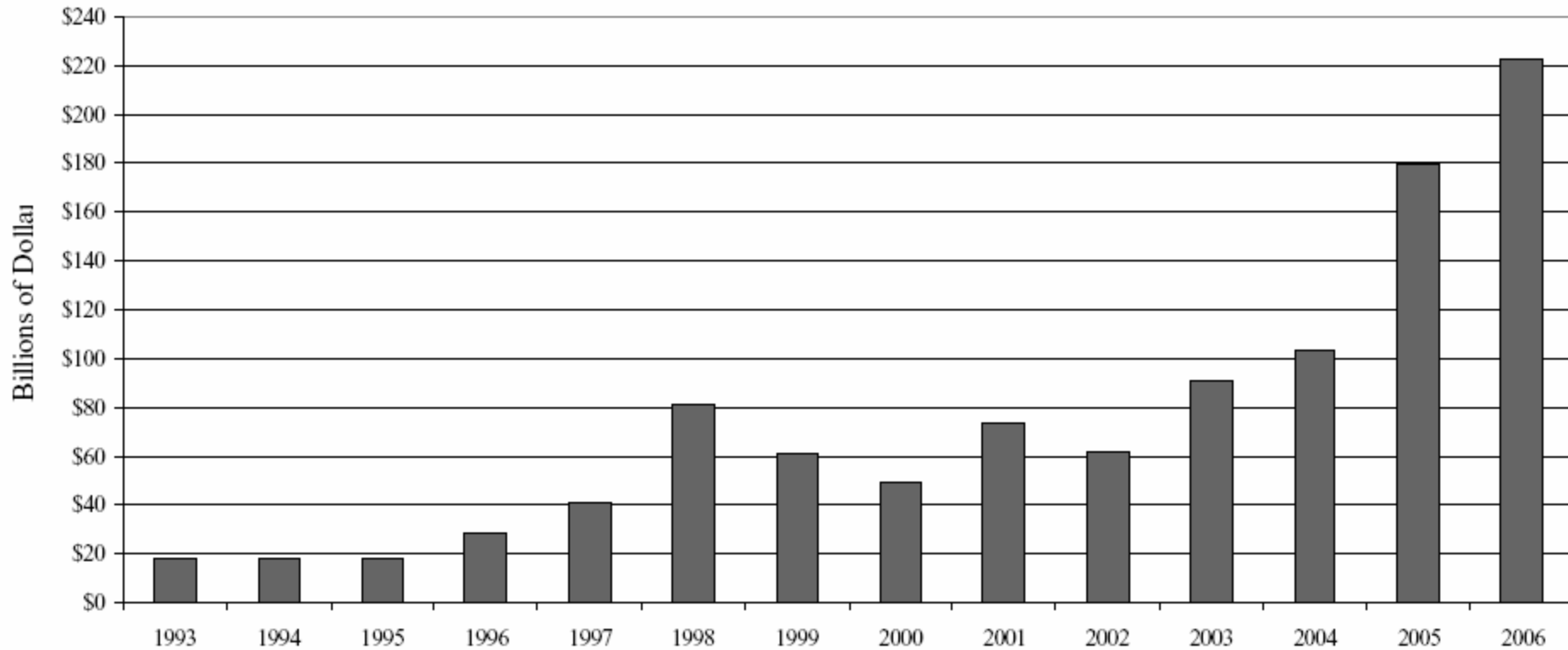
Commercial Mortgage Backed Security

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 – Issuance

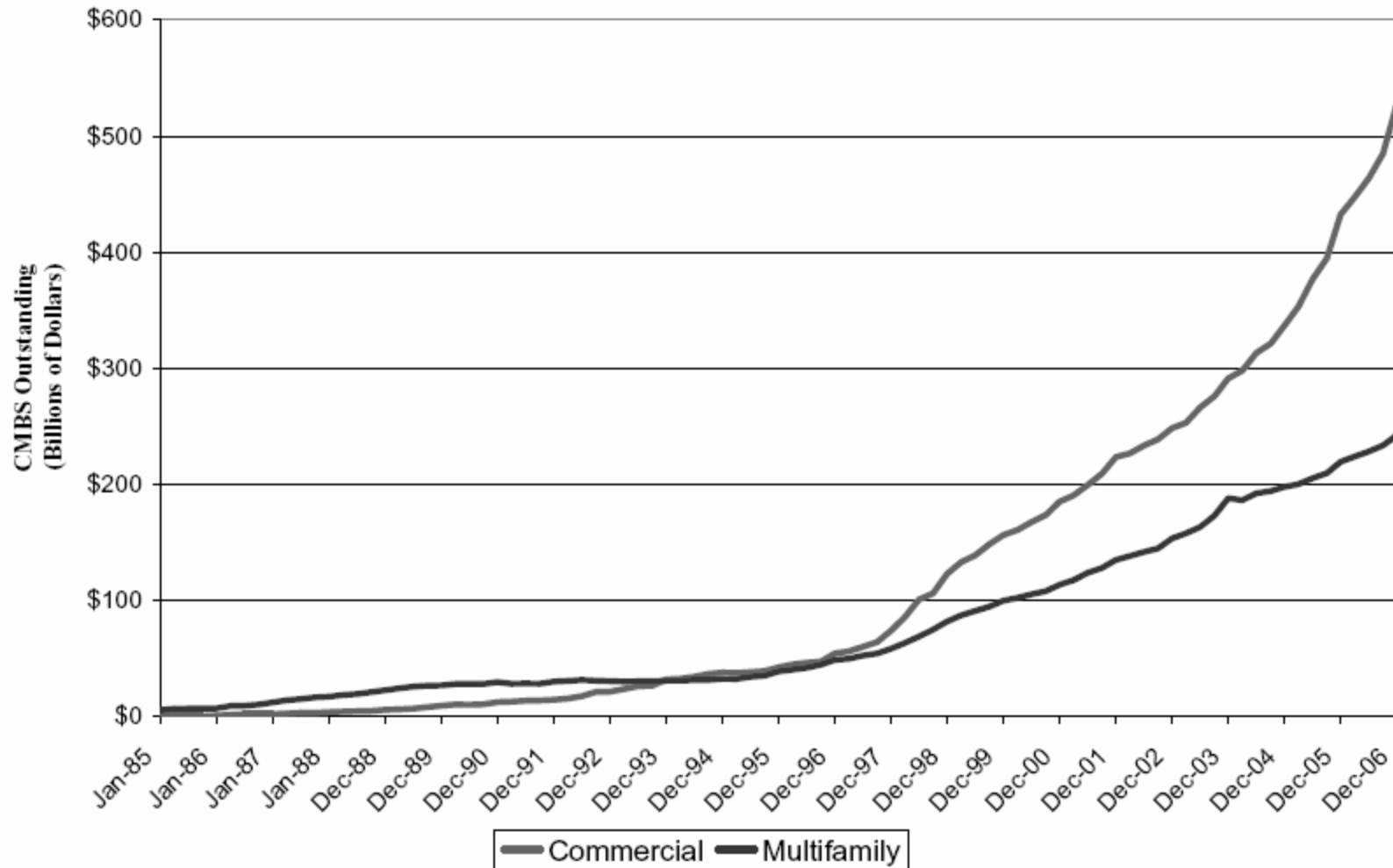
CMBS – Issuance by Year



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

CMBS - Size of Market

Outstanding CMBS

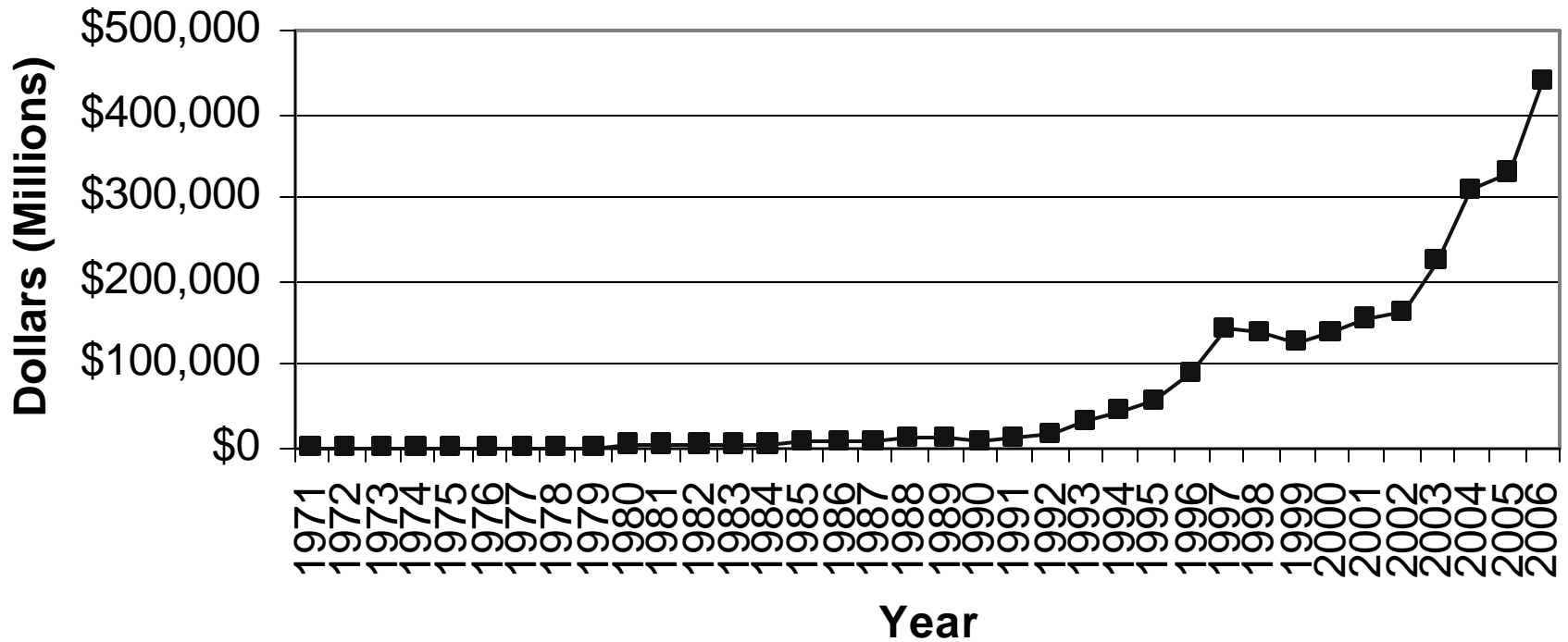


Source: Bank of America Securities, LLC, Federal Reserve

REIT - Size of Market - EOY

EOY 2006 = \$438 Billion

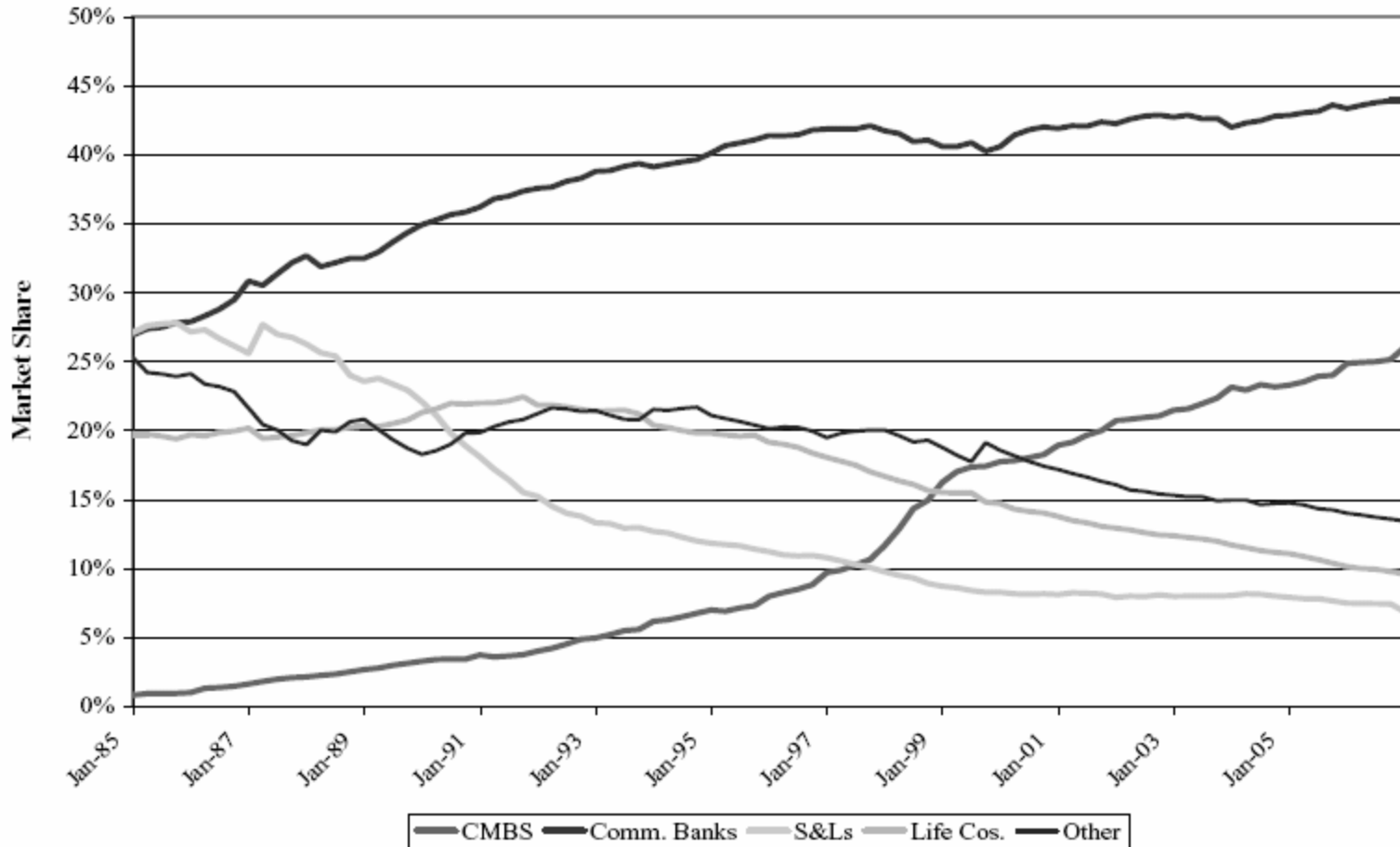
REIT Market Capitalization



Source: NAREIT, Bank of America – Real Estate Research

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

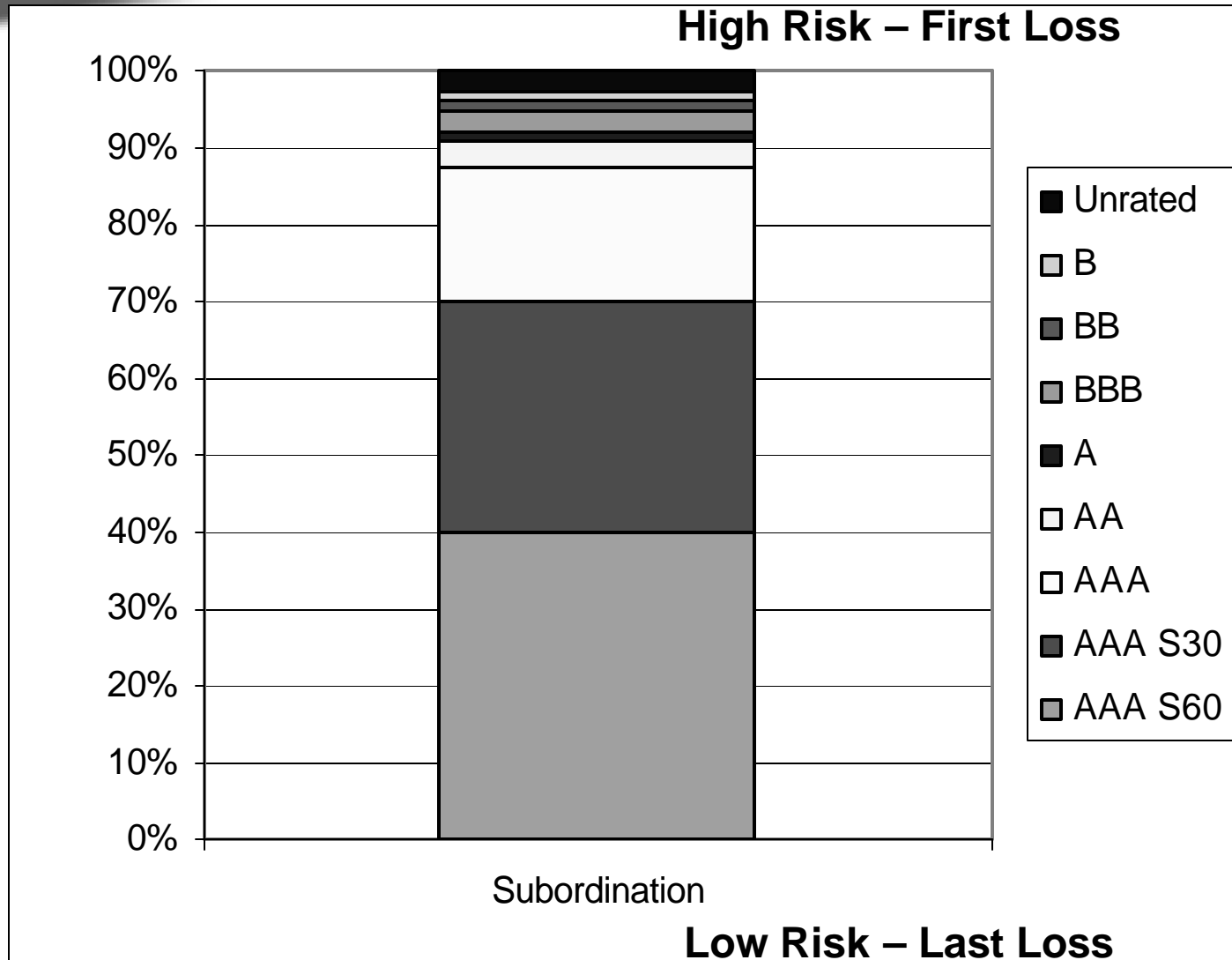
Example of a CMBS

| | | | | |
|-----------------------|--|----------------------------------|----------------------|------------------------|
| | 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 | | | |

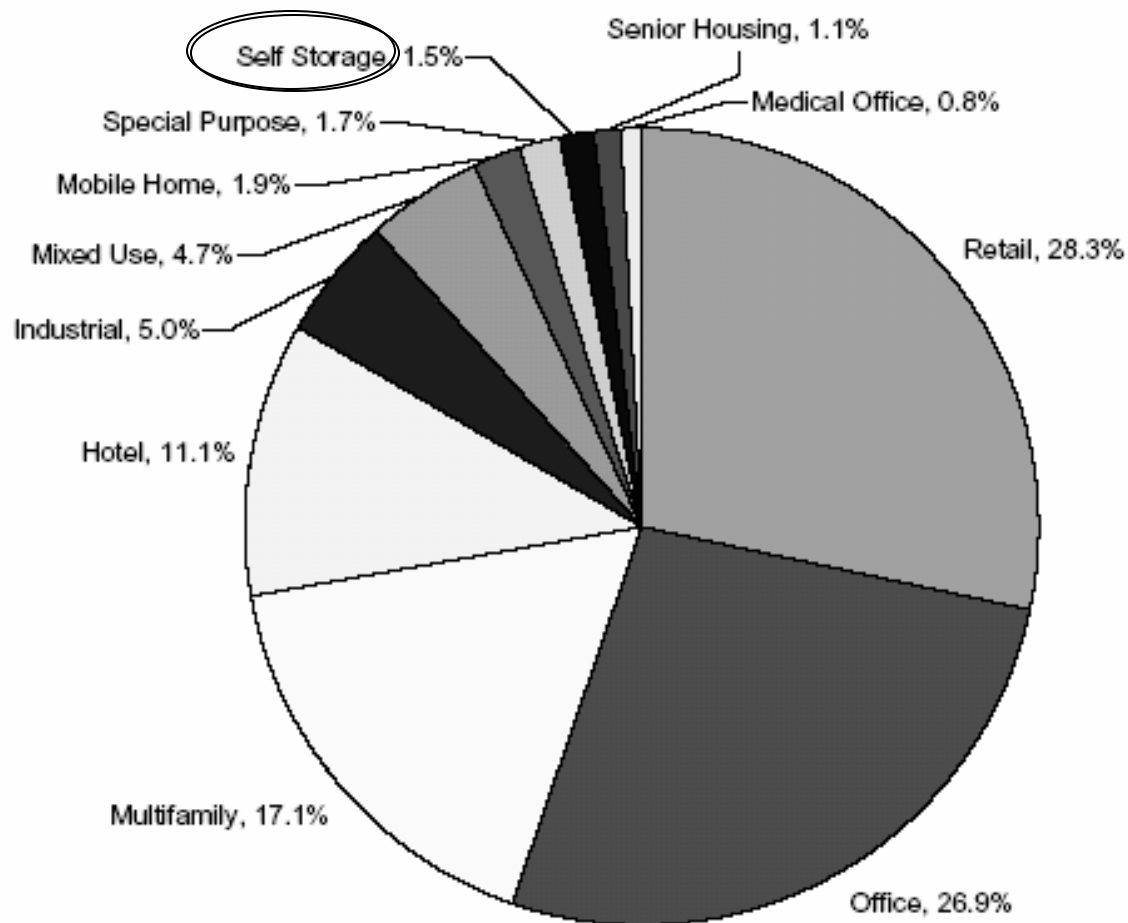
Example of Defeasance

| | |
|--------------------------------|------------------------|
| Loan Amount | \$15,000,000 |
| Remaining Loan Term | 7.00 |
| Index - 10 yr Treas. | 4.90% |
| Margin | 1.50% |
| Interest Rate | 6.40% |
| Annual Interest Payment | \$960,000 |
| | |
| Required Amount of TS | \$19,591,836.73 |
| | |
| Implied Additional Cost | \$4,591,836.73 |
| | 30.6% |

Example of Subordination

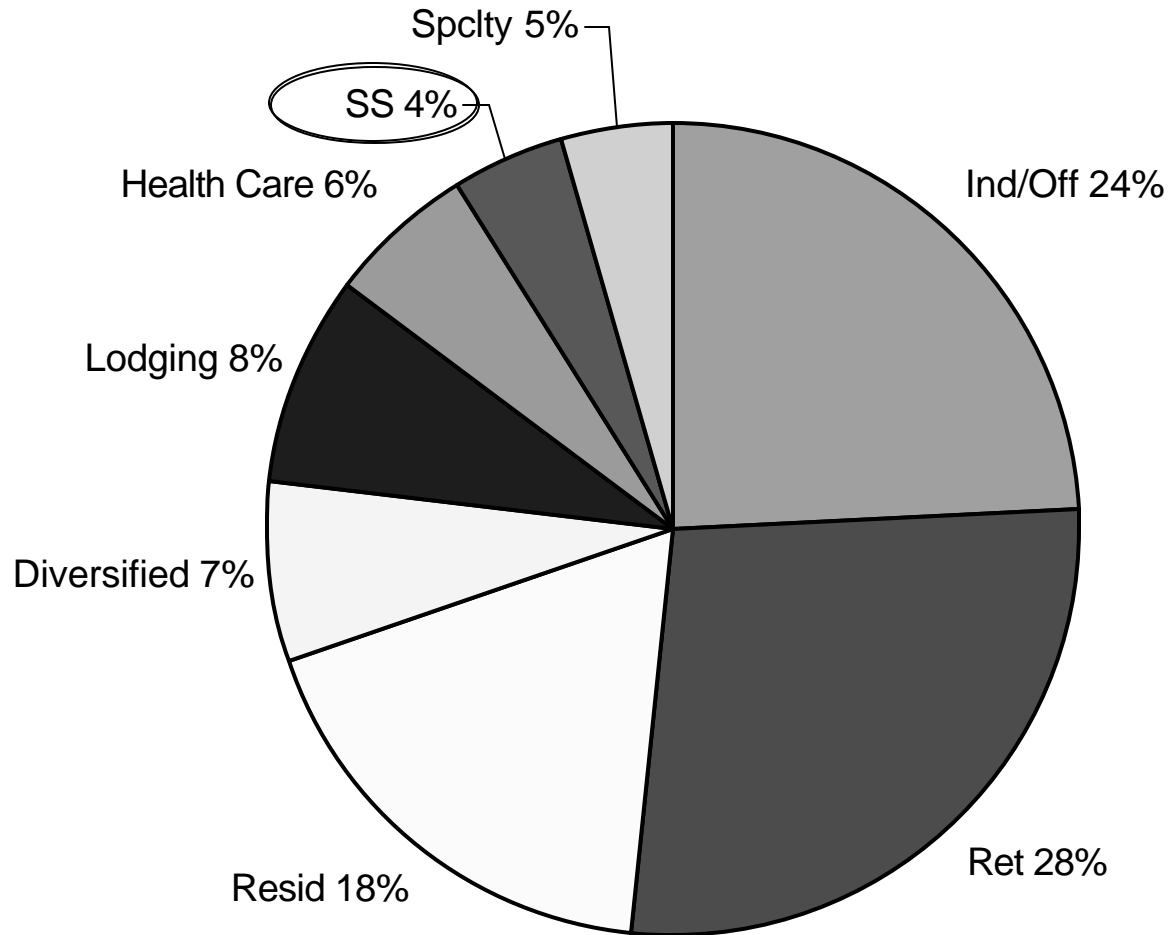


CMBS – Property Distribution



Source: Bank of America Securities, LLC, Intex

REIT - Property Distribution - 6/07



Source: NAREIT, Bank of America – Real Estate Research

CMBS - Default Performance

- by Property Type, as of June 2007

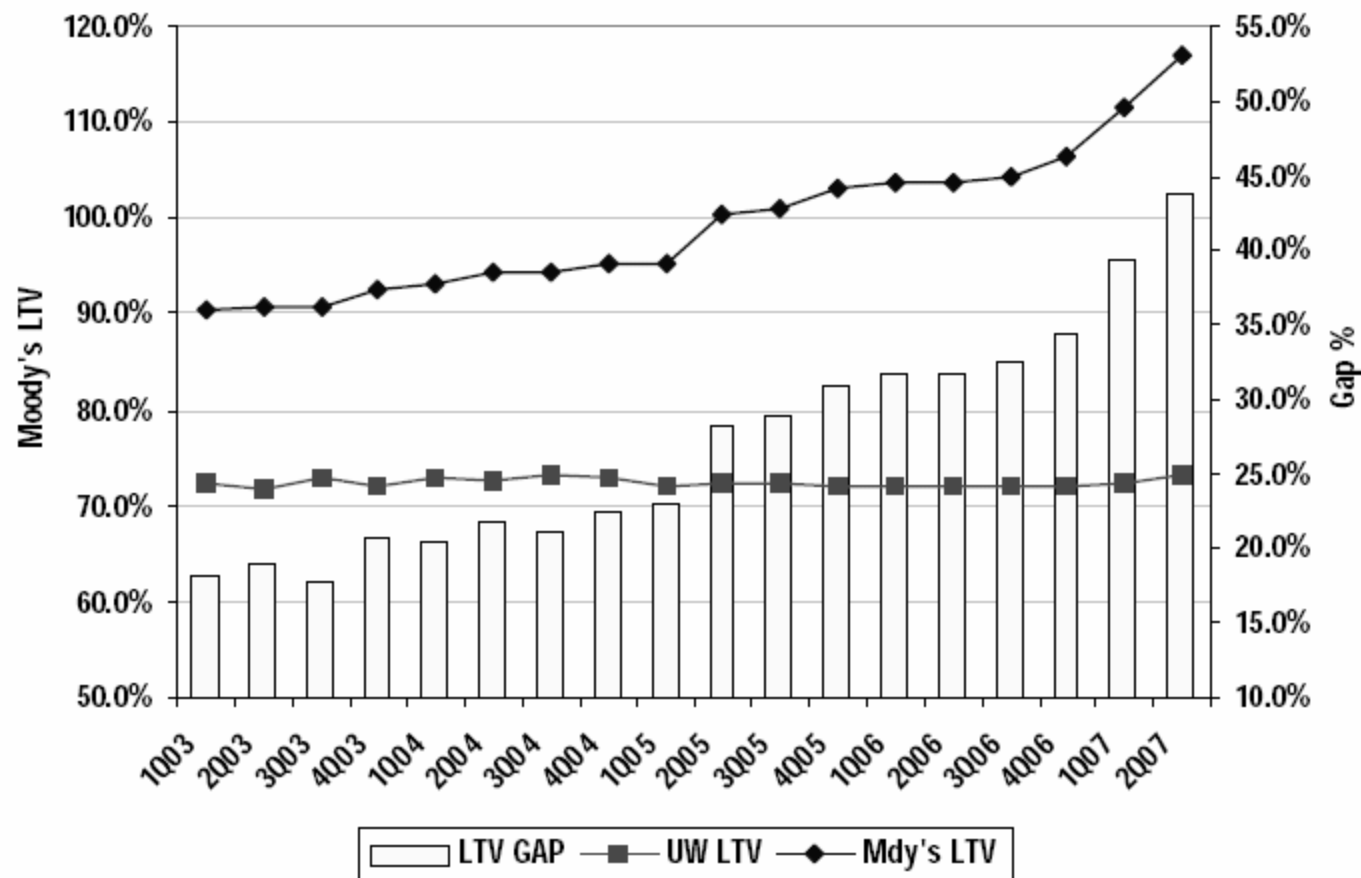
| Projected Total Losses by Property Type, June 2007 (Published Quarterly) | | | | | | | | | | | All Deals |
|--|------|------|------|------|------|------|------|------|------|------|-----------|
| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | |
| Retail | 0.02 | 0.02 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Office | 2.16 | 2.35 | 2.69 | 2.59 | 2.64 | 2.41 | 2.37 | 2.32 | 2.39 | 2.49 | 2.52 |
| Multifamily | 2.57 | 2.20 | 2.46 | 2.74 | 2.59 | 2.89 | 2.73 | 2.80 | 2.66 | 2.56 | 2.50 |
| Hotel | 2.99 | 2.52 | 2.15 | 2.67 | 3.46 | 2.28 | 2.41 | 2.29 | 2.56 | 2.47 | 2.50 |
| Industrial | 2.43 | 2.68 | 2.21 | 2.60 | 2.30 | 2.32 | 2.41 | 2.44 | 2.45 | 2.48 | 2.50 |
| Self Storage | 1.95 | 2.06 | 2.28 | 2.36 | 2.26 | 2.31 | 2.45 | 2.38 | 2.48 | 2.48 | 2.50 |
| Manufactured Housi | 1.92 | 2.49 | 2.46 | 2.36 | 2.51 | 2.36 | 2.37 | 2.44 | 2.48 | 2.49 | 2.50 |
| Senior Housing | 2.40 | 2.27 | 2.40 | 2.23 | 2.29 | 2.30 | 2.35 | 2.49 | 2.43 | 2.49 | 2.50 |
| | | | | | | | | | | | |

Note: Projected total losses include losses to date and forecasted losses. Forecasted additional losses equal 50% of projected liquidations as a percentage of original balance, which is calculated by applying a likelihood of REO to each delinquency category as follows: <= 1mo. (5%), 30 days (20%), 60 day (40%), 90 (60%), in foreclosure (80%) and REO (100%). Forecasted additional losses equal 50% of projected liquidations as a percentage of original balance.

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

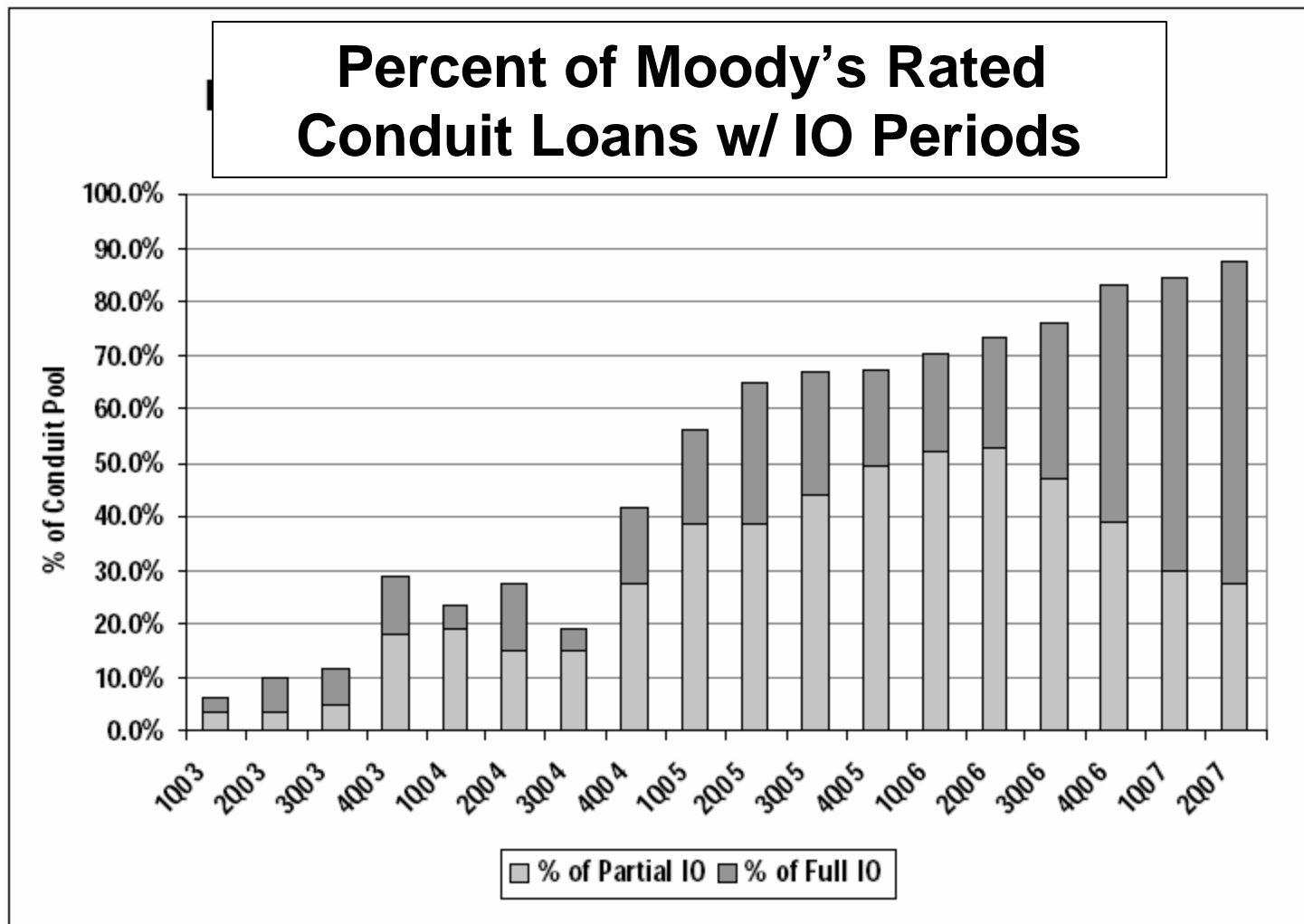
Summary of Rating Actions Taken by SRAs

| | | | | |
|-----------------|-----------------|-----|-----|-----|
| 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.

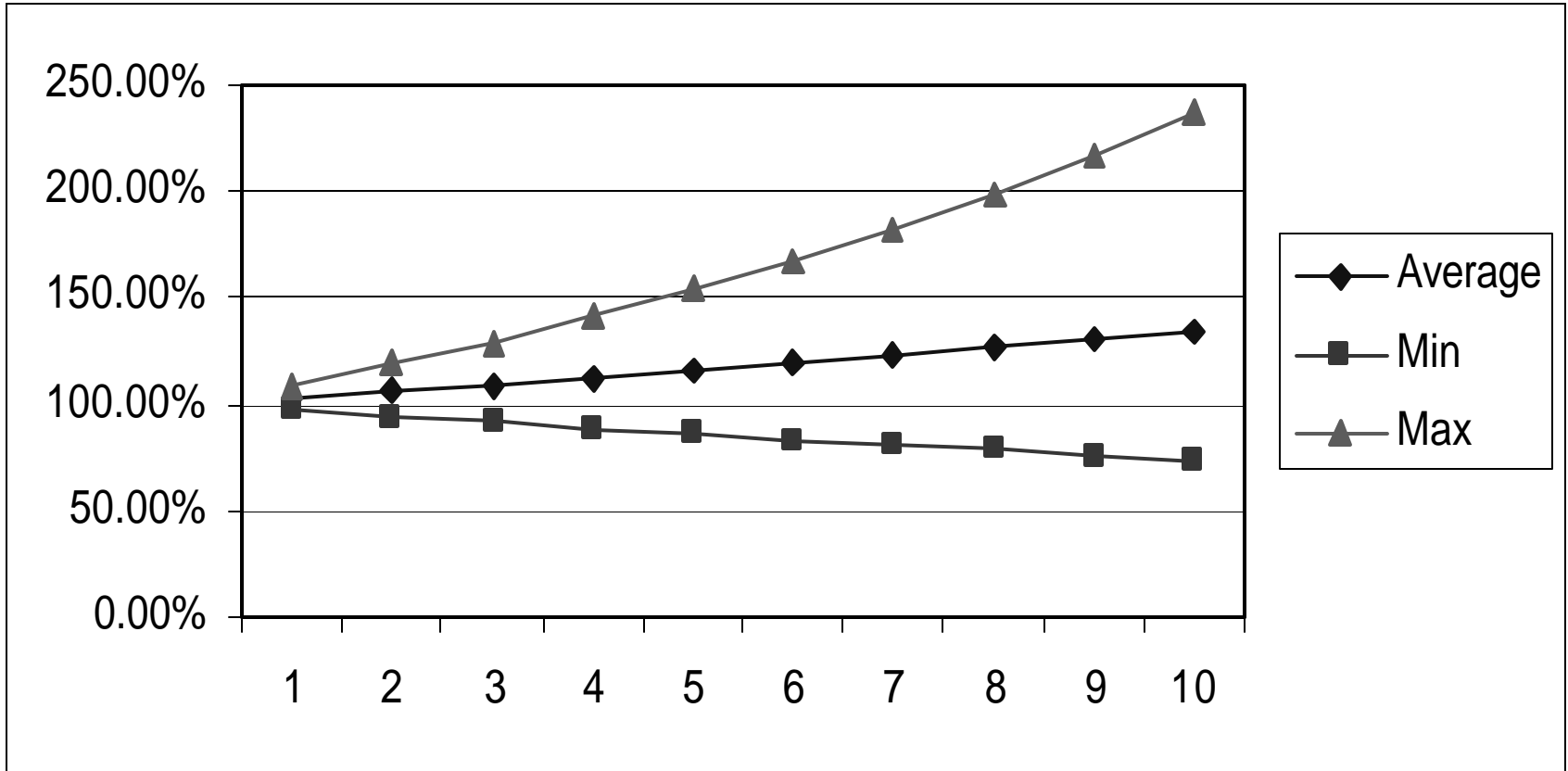
Studies show that "Loss Given Default" is correlated with LTV. Loss increases as the LTV increases.

Types of Risks Impacting Loan Loss

- **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**

Example of Cone Analysis

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



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

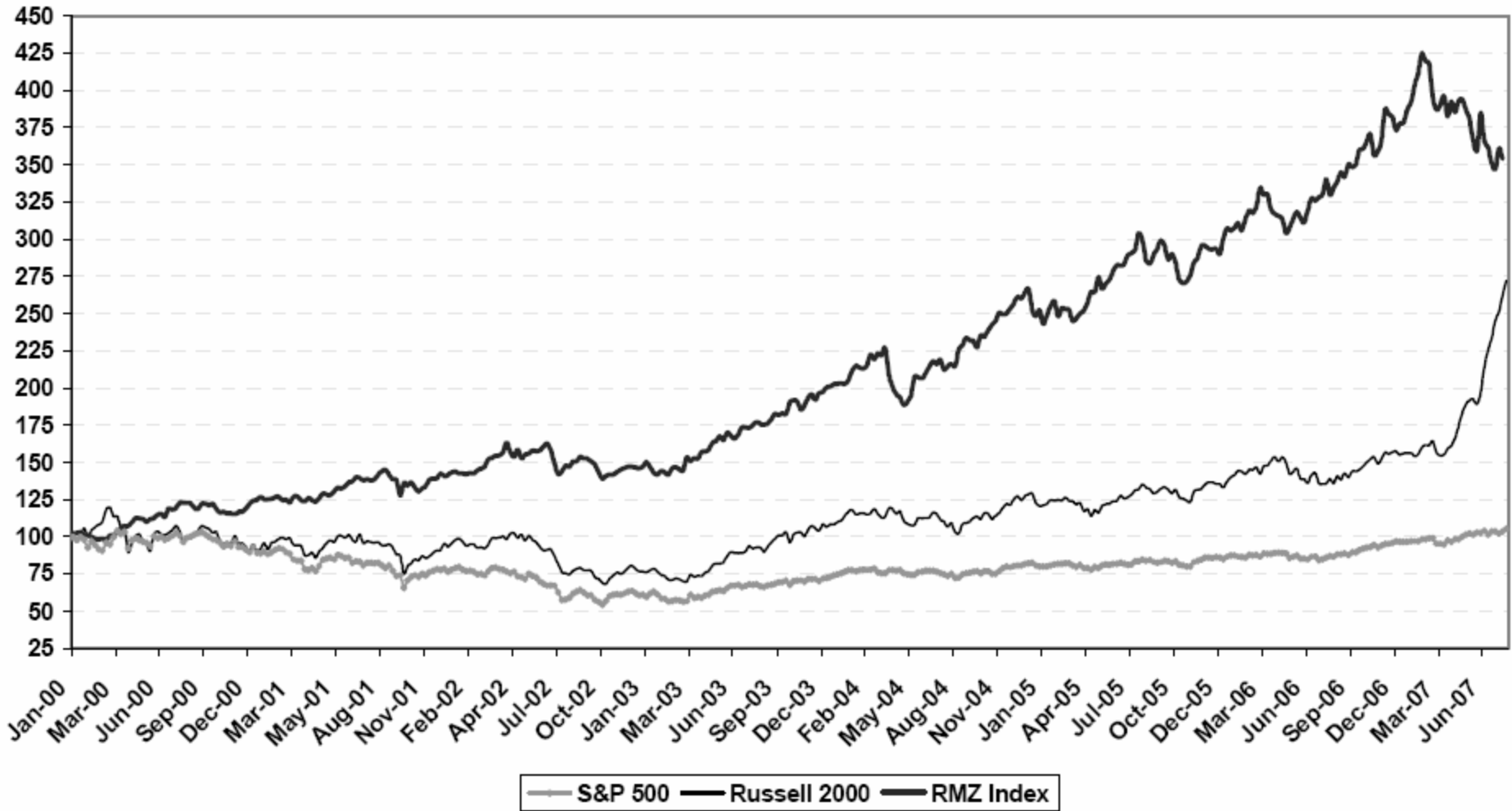
**Great Site to see Investor Presentations for IPO:
<http://www.retailroadshow.com>**

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

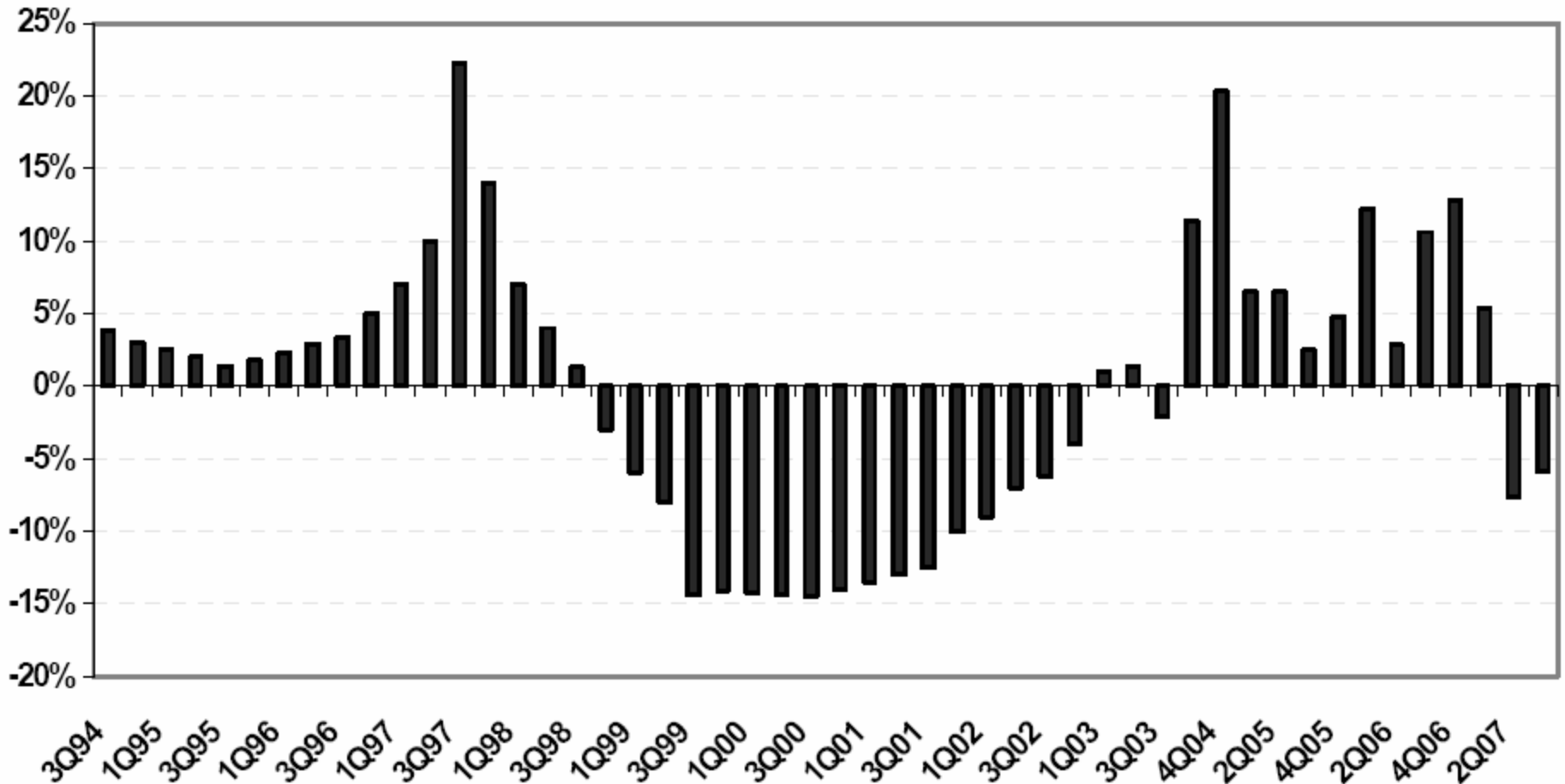


Source: Bank of America Securities, LLC, FactSet, SNL Financial, Reuters

Real Estate Investment Trust (REIT)

- Price versus NAV

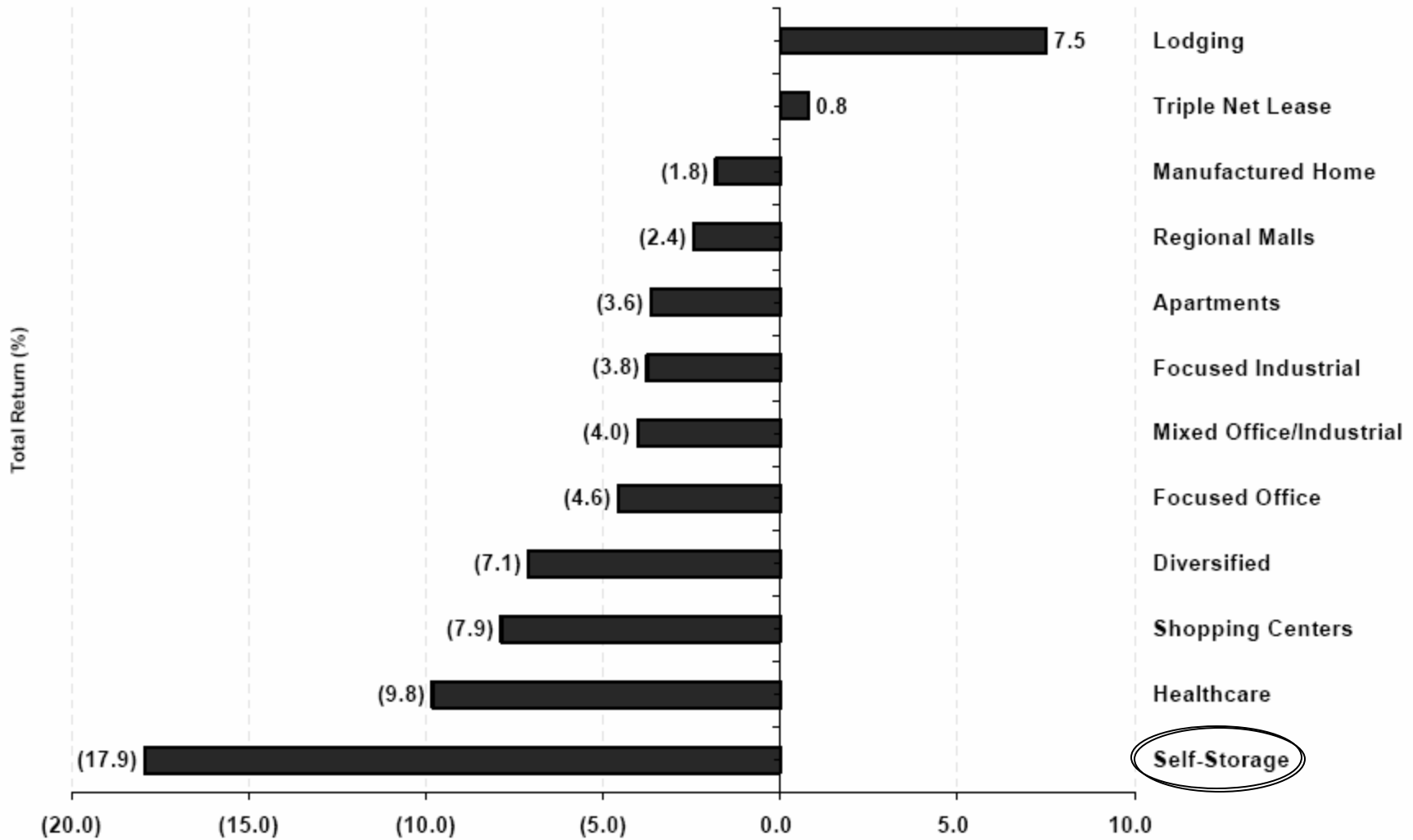
REITS Trading @ 6% Discount to current NAV, 10% Discount to Forward NAV



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

Real Estate Investment Trust (REIT)

- YTD REIT Sector Performance as of July 2007



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

Hot Issue in Commercial Real Estate

- Cap Rate

$$R_0 = Y_0 - ?$$

Cap Rate = Yield Rate minus Growth

Growth – what are drivers?

No rental Growth

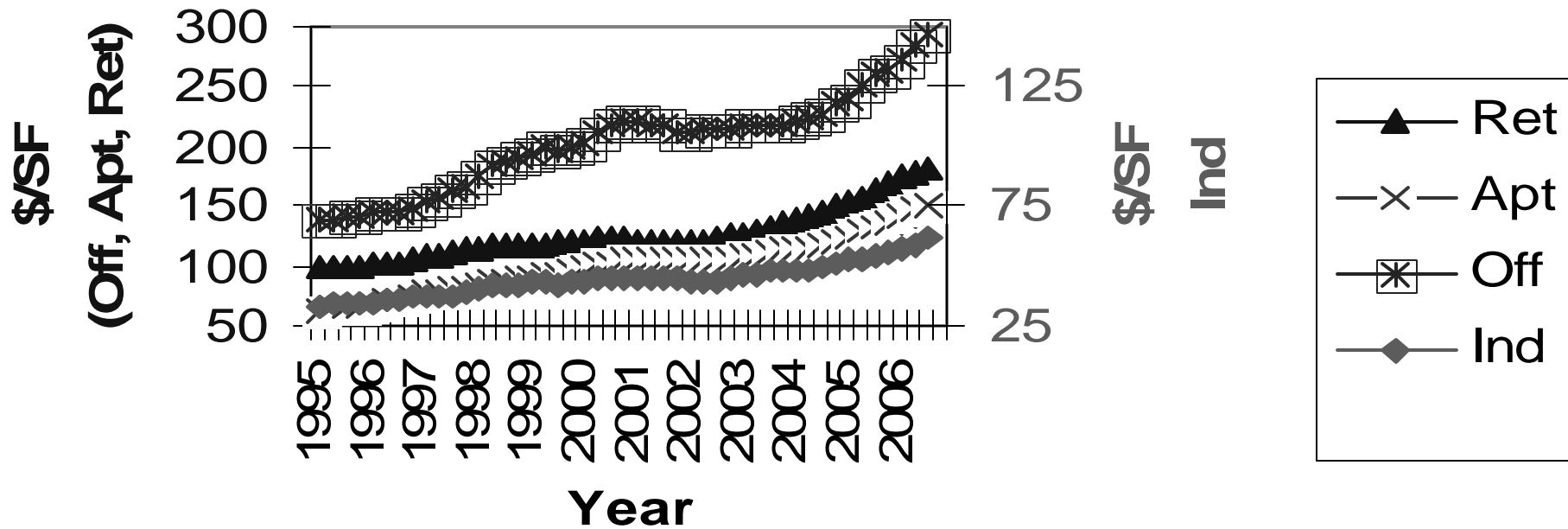
Only interest rate change

Lag Effect

What happens when rates stop declining?

Market Trends - National - Value by Property Type

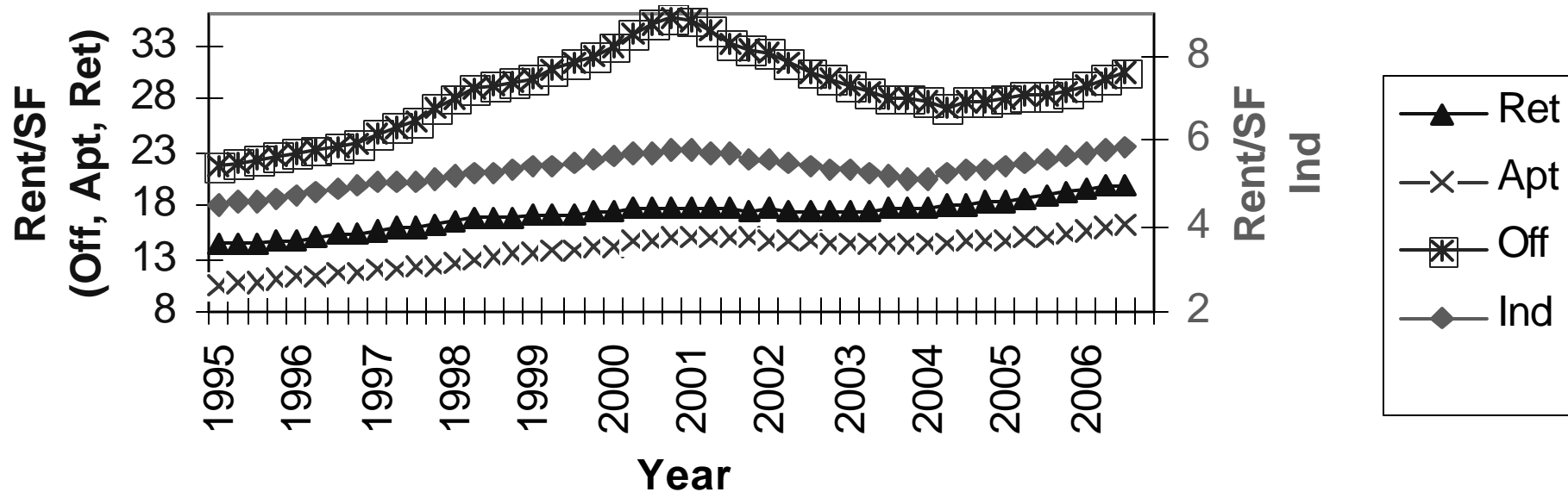
Market Trends - Value/SF National Averages



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

Market Trends - National - Rent by Property Type

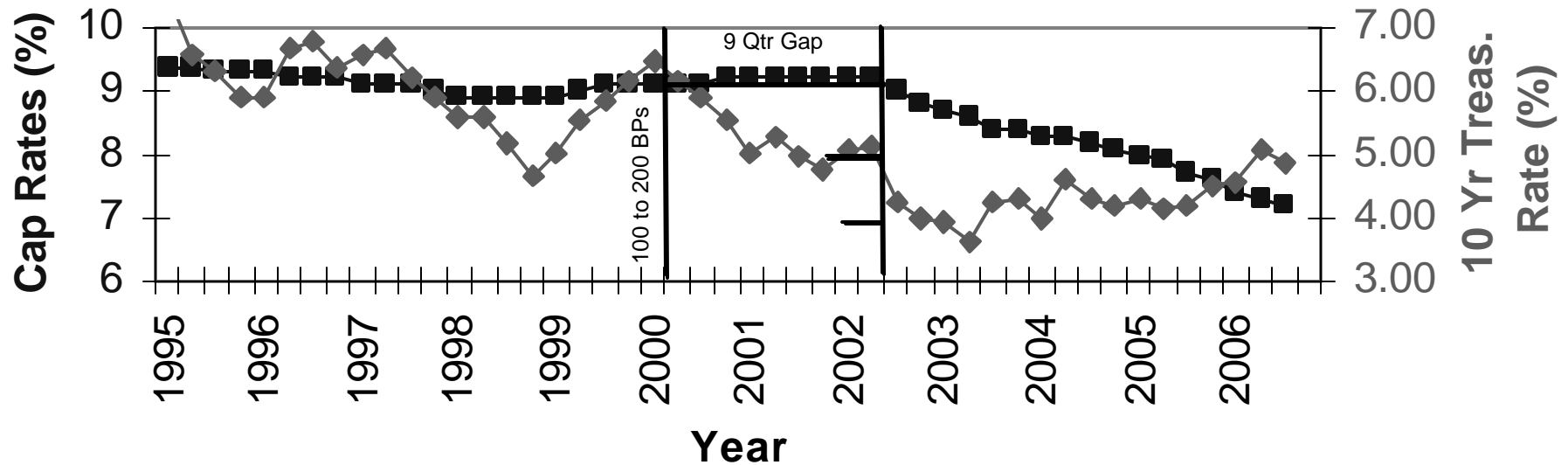
Market Trends - Rent/SF National Averages



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

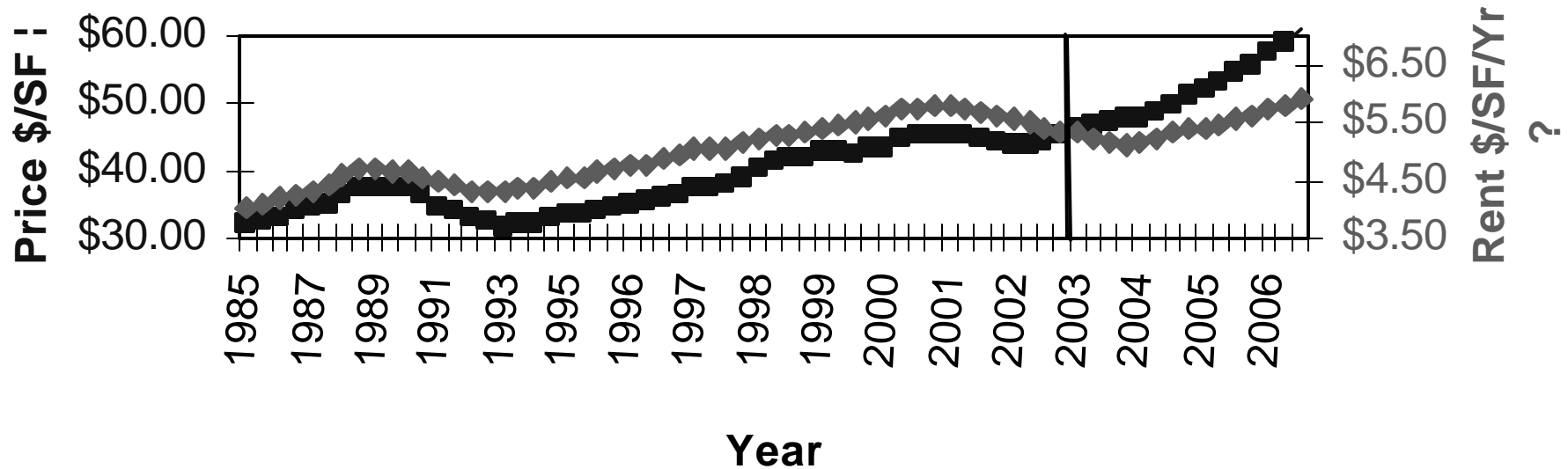
Interest Rate & Investor Trends - National Industrial Market

Interest Rates vs. Industrial Cap Rates National Average



Trends in Industrial Real Estate - National

Industrial Performance National Averages



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

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**