Wall Street and Commercial Real Estate

Everett Allen Greer, Director of Research

May 13 and 15, 2008



Goals of Presentation

- Sub-Prime News
- CMBS / CDO / REIT Industries
- Size / Impact of Capital Markets
- Deal Structure CMBS Example
- Capital Market Yields
- Rating Agencies / Risk Rating Trends
- Real Estate Trends
- Capitalization Rate Interest Rate Lag
- What's New? What's Next?

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 (tranches, strips, slices), each with differing priorities. Proceeds are distributed to investors based on the priority of their tranche.
- During the last few years, has accounted for slightly less than 40% of all commercial real estate lending.



What is a CDO?

Collateralized Debt Obligation

- Type of pass-through security
- CDOs are securitized debt pools, similar to CMBS, but debts can be CMBS/CDO paper, car/boat/plane loans, credit cards, or virtually any type of debt obligation. Rights to the revenue from the obligations are divided into many smaller pieces (tranches, strips, slices), each with differing priorities. Proceeds are distributed to investors based on the priority of their tranche.
- Tough to gauge accurately, but most experts believe these have accounted for 5-10% of all commercial real estate lending the past few years.

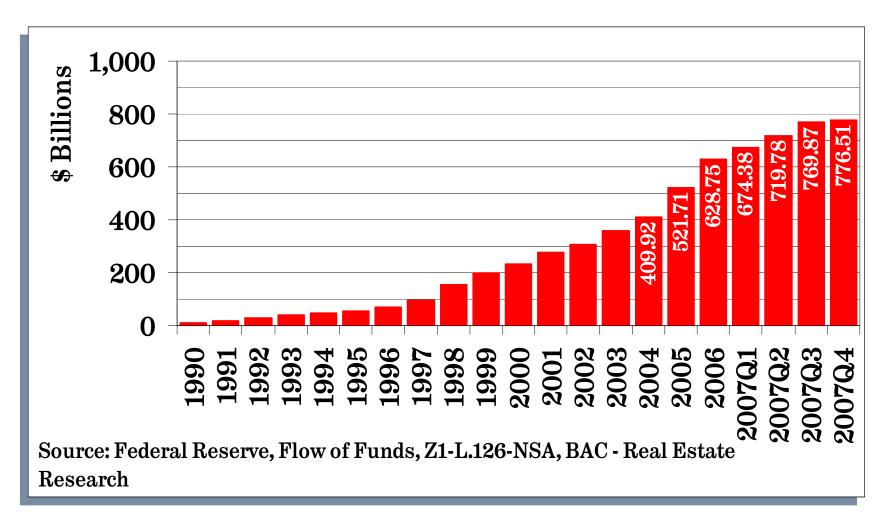
What is REIT?

Real Estate Investment Trust

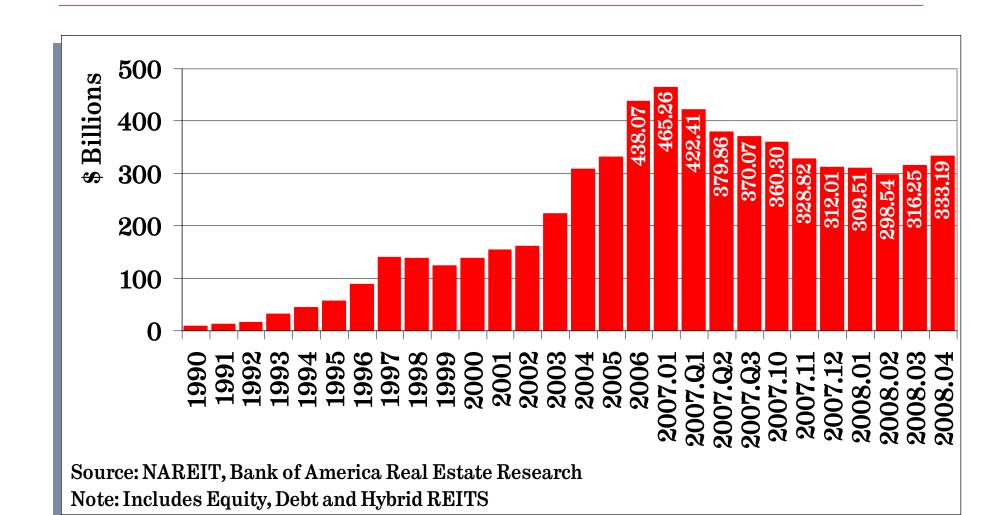
- Type of Pass-through Security
- Effectively a corporation
- 95% of income passed through to shareholders. No "corporate" tax. All earnings single-taxed at shareholder level.
- Current "Industry" Issues: Definition of Assets, Max Debt Load, Yield



CMBS Outstandings in U.S.



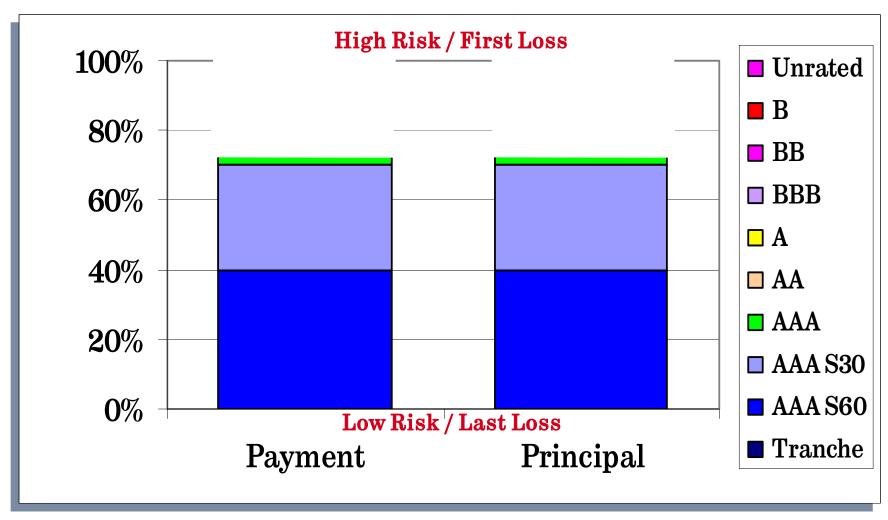
REIT Market Capitalization



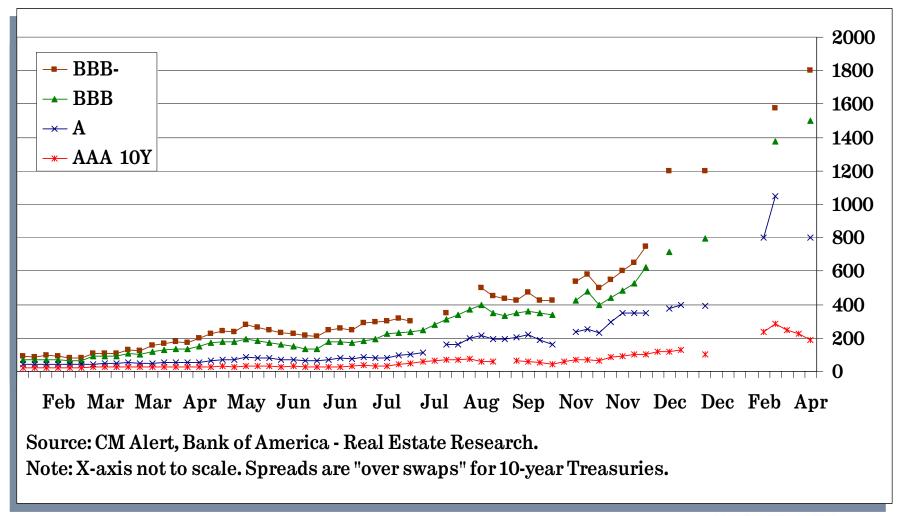
Example of a "Typical" CMBS

| | | 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% | 1.750% | |
| | | Avg Yield | 6.750% | | |
| 2007.01 | 2008.01 | Tranche | Approximate | 2007.01 | 2008.01 |
| 0.0020 | 0.0200 | AAA S60 | 60.0% | 5.200% | 7.000% |
| 0.0025 | 0.0210 | AAA S30 | 30.0% | 5.250% | 7.100% |
| 0.0030 | 0.0220 | AAA | 12.5% | 5.300% | 7.200% |
| 0.0040 | 0.0450 | AA | 9.0% | 5.400 % | 9.500% |
| 0.0100 | 0.0700 | A | 8.0% | 6.000% | 12.000% |
| 0.0175 | 0.1315 | BBB | 5.0% | $\boldsymbol{6.750\%}$ | 18.150% |
| 0.0250 | 0.1450 | BB | 4.0% | 7.500% | 19.500% |
| 0.0400 | 0.1600 | В | 2.5% | 9.000% | 21.000% |
| 0.0500 | 0.2000 | Unrated | 0 to <2.5% | 10.000% | 25.000% |
| | | | Weighted Average Yield | 5.494 % | 8.322% |
| | | Implied Annual Ex | cess Return | 0.256% | -2.572% |
| Note: Assum | ies 1% swap, a | \$6,400,000 | -\$64,300,000 | | |

Subordination Graph



CMBS Yield Spreads (Spread to Swap)



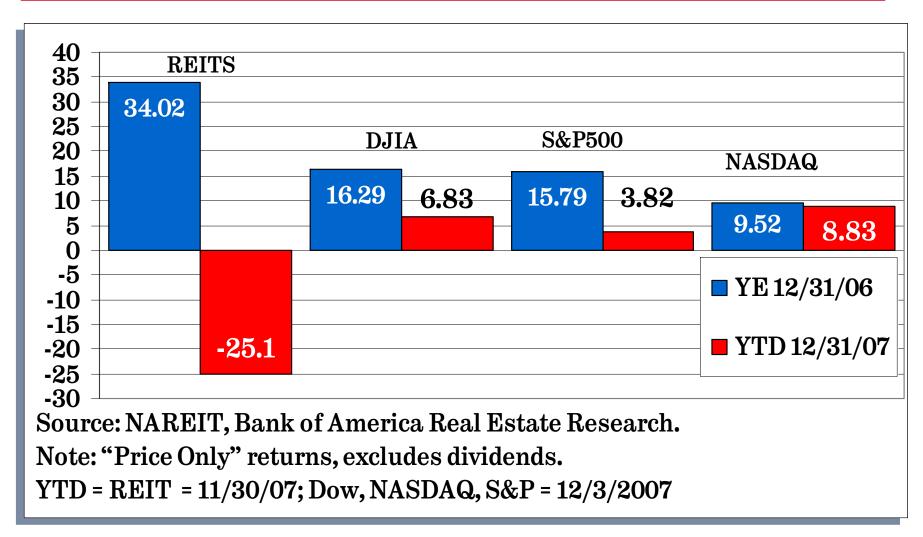
CMBS Spreads — Yield Rate Implications

| Tranche | Risein | Weight | Debt v | Total | Impact |
|------------------|--------------|--------|-------------|--------|--------|
| | Yield | | Equity | Weight | |
| AAA | 180 | 90% | 75 % | 67.50% | 121.50 |
| A | 600 | 4% | 75 % | 3.00% | 18.00 |
| BBB | 1200 | 3% | 75 % | 2.25% | 27.00 |
| BBB- | 1400 | 2% | 75 % | 1.50% | 21.00 |
| Unrated | 1750 | 1% | 75 % | 0.75% | 13.13 |
| | | | | | |
| Class A Prop. | 1750 | 100% | 25 % | 25.00% | 437.50 |
| Note: Class A as | sumed to hav | Total | 646.00 | | |
| | | | | | |
| Class B- Prop. | 2250 | 100% | 25% | 25.00% | 562.50 |
| Note: Class B- | assumed 25 | Total | 763.13 | | |

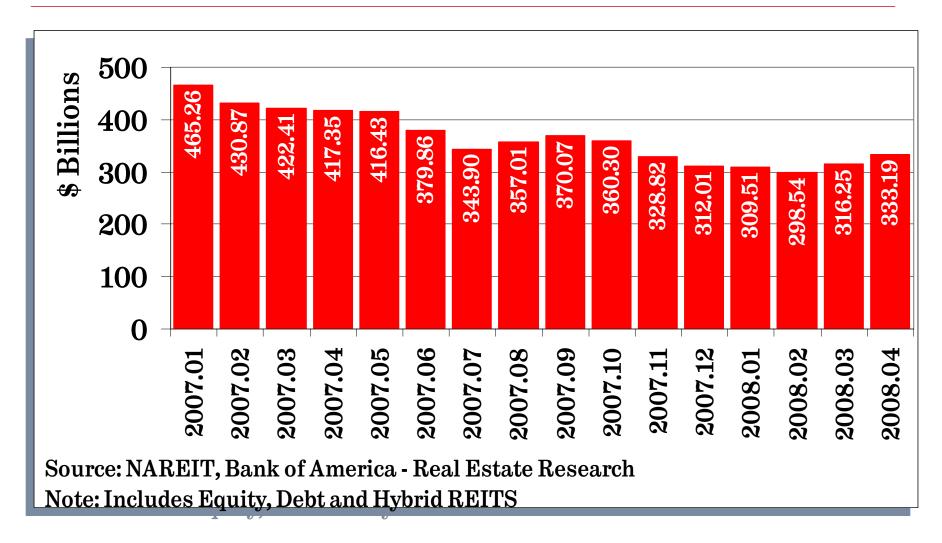
Note: Market for < BBB paper is gone! Pricing is uncertain! Higher subordination = even greater impact.



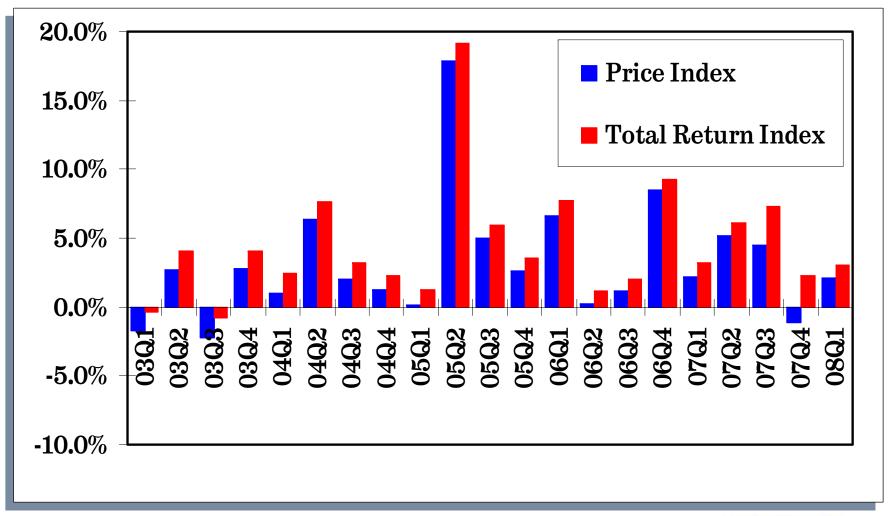
Benchmark Returns — Changes so Fast!



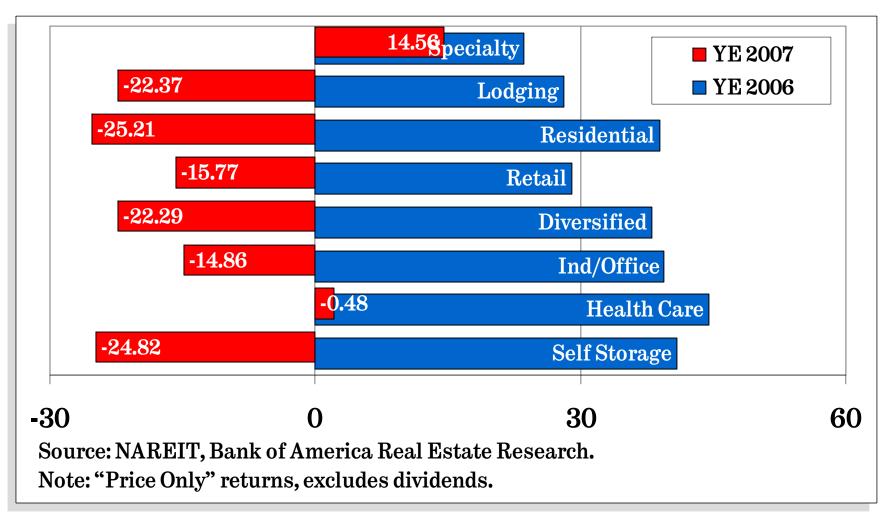
REITs Lose \$132 Billion or 29% of value



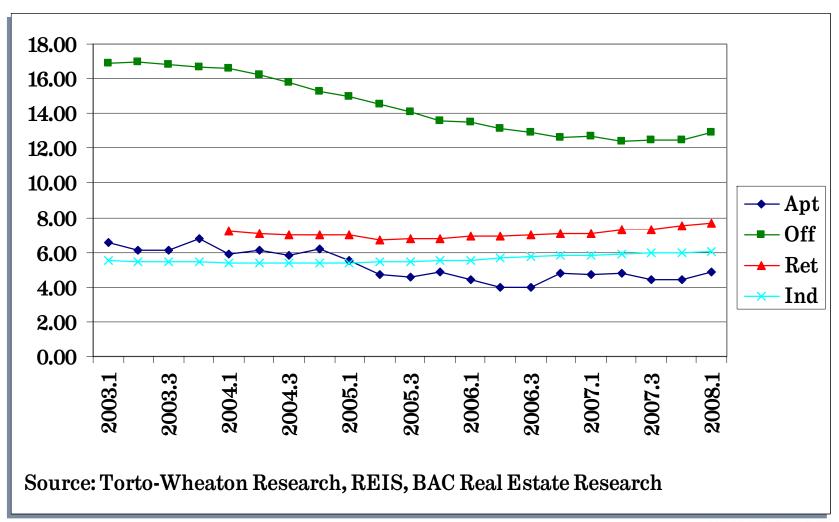
NCREIF 08.Q1 Price Up/Total Up



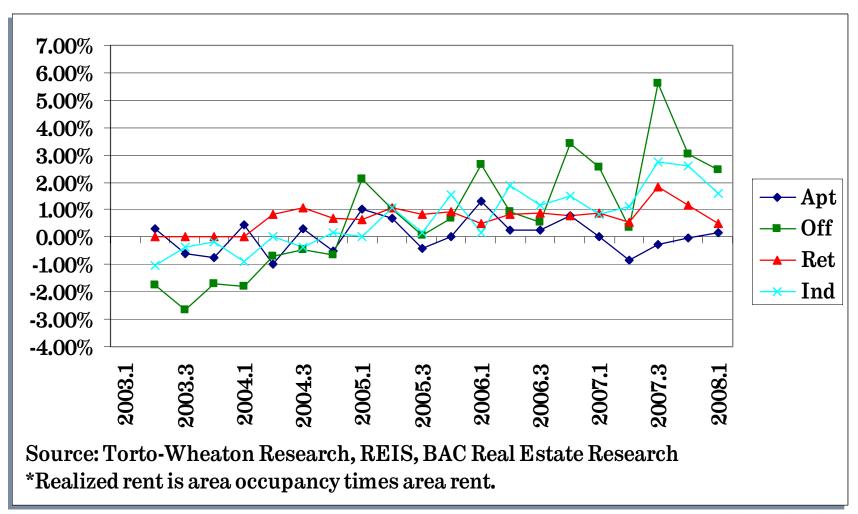
REIT Property Type Returns — Old vs. New



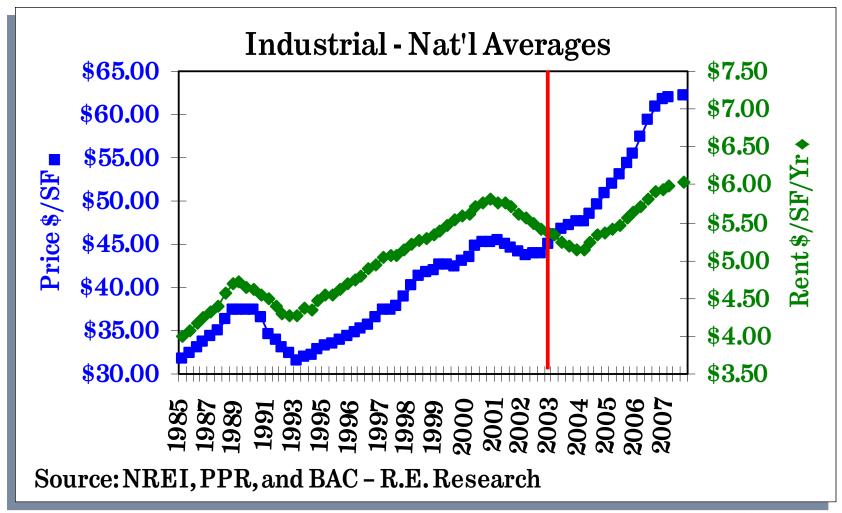
National Trend — Vacancy



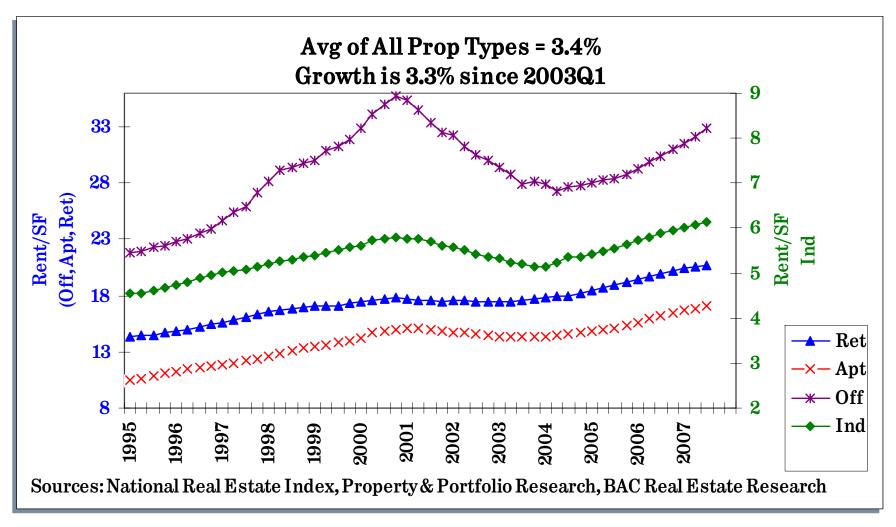
Realized Rent Growth



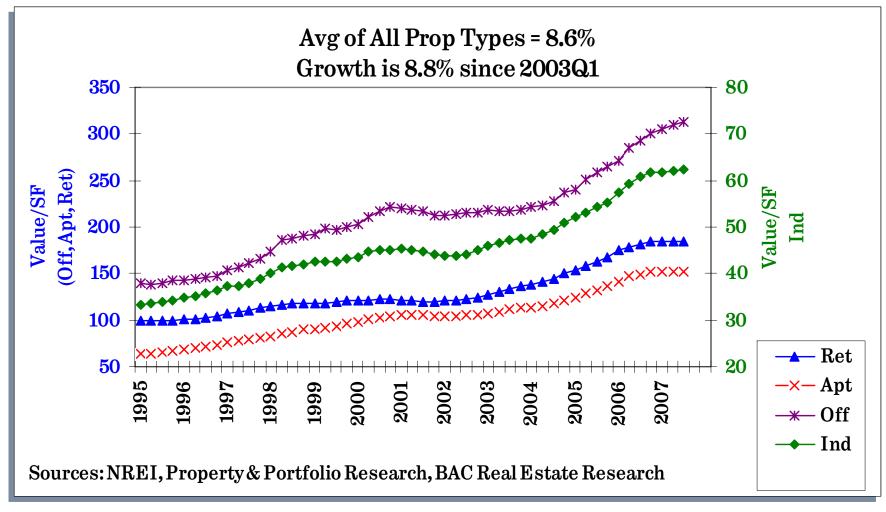
The Relationship Breaks in 2003



Market Trends — National Rents



Market Trends — National Values



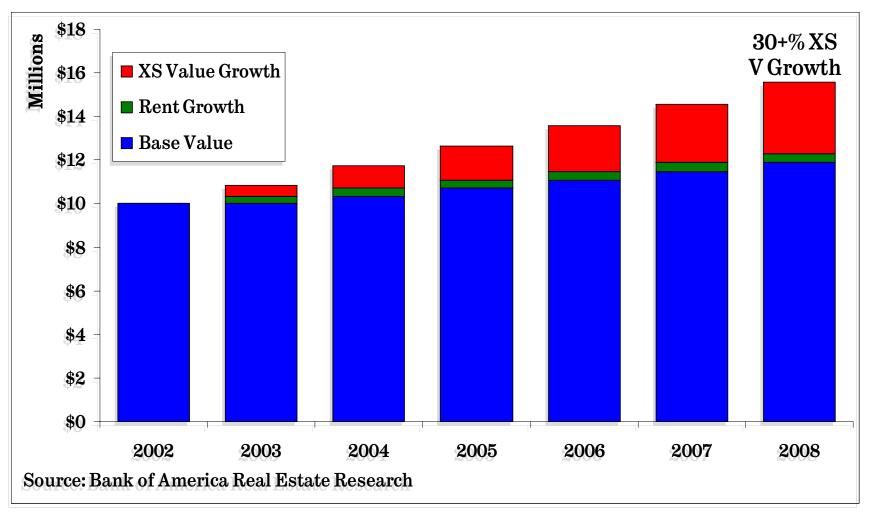
Growth Example — Value vs. Income

| Year | Rent | RentG | Ind Cap | Value |
|------|---------|---------------|---------------|--------------|
| 2002 | 750,000 | 3.30 % | 7.50 % | \$10,000,000 |
| 2003 | 774,750 | 3.30 % | 7.12 % | \$10,880,000 |
| 2004 | 800,317 | 3.30 % | 6.76 % | \$11,837,440 |
| 2005 | 826,727 | 3.30 % | 6.42% | \$12,879,135 |
| 2006 | 854,009 | 3.30 % | 6.09% | \$14,012,499 |
| 2007 | 854,009 | | 5.60 % | \$15,245,598 |
| | average | 3.30% | | 8.80% |

• Increase in value was only "interest rates" first 2 years. Momentum effect carried it further. What happens when it stops?



Rent versus Value Growth



Vacancy - Top / Bottom Markets - '08Q1....

| U.S. | | Off - 12.9% | | Ind - 9.8% | | Apt - 4.9% | | Ret - 7.7 % | |
|--------|---|---------------|------|---------------|------|----------------|-----|--------------------|------|
| | 1 | New York | 6.0 | Los Angeles | 4.9 | Newark | 1.7 | Orange County | 2.9 |
| | 2 | San Francisco | 8.6 | Tucson | 5.2 | San Jose | 1.7 | Suburban Virginia | 3.0 |
| Top | 3 | Honolulu | 9.6 | San Francisco | 5.9 | Miami | 2.0 | Los Angeles | 3.1 |
| | 4 | Long Island | 9.7 | Seattle | 6.2 | Salt Lake City | 2.1 | San Jose | 3.2 |
| | 5 | Seattle | 9.8 | Long Island | 6.4 | Edison | 3.3 | Seattle | 3.3 |
| | 5 | Phoenix | 18.1 | Pittsburgh | 14.1 | Cleveland | 6.9 | Syracuse | 13.8 |
| lm(| 4 | Wilmington | 18.2 | Boston | 14.7 | St. Louis | 7.1 | Birmingham | 13.9 |
| Bottom | 3 | Edison | 19.9 | Detoit | 17.3 | Memphis | 7.3 | Cincinnati | 14.1 |
| Bo | 2 | Dallas | 21.6 | Memphis | 19.0 | Dayton | 9.7 | Dayton | 14.6 |
| | 1 | Detroit | 21.6 | Ann Arbor | 21.0 | Jacksonville | 9.9 | Columbus | 14.6 |
| Spread | | | 15.6 | | 16.1 | | 8.2 | | 11.7 |

Source: Torto Wheaton Research (Off, Ind, Apt), REIS (Ret) BAC-Real Estate Research



Vacancy Performance - 08Q1

| | 08Q1 | 08Q1 | LA |
|------------|----------|-------------|-------|
| Prop Type | National | Los Angeles | Rank |
| Office | 12.9% | 10.6% | 8:58 |
| Industrial | 9.8% | 4.9% | 1:59 |
| Retail | 7.7% | 3.1% | 3:82 |
| Apartment | 4.9% | 3.9% | 11:60 |
| Hotel | 63.6% | 72.5% | 9:53 |

Source: Torto Wheaton Research, REIS, BAC-Real Estate Research

News

- Sub Prime Losses May Reach \$400 Billion (Bloomberg)
- CDO Losses May Reach \$260 Billion (Bloomberg)
- Citi, Deutsche, JP Morgan, Merrill, UBS, Wachovia, Wells, HSBC, SunTrust, Bear Stearns, Bank of America and more
- Moody's Announces layoffs
- Credit Suisse Pulls Plug on Canadian Operation
- Moody's Reports Decline in US Property Values
- Artesia Mortgage Closes Atlanta & New Orleans
- Goldman Sachs Consolidates (5 regions to 3)

Source: CM Alert, Bloomberg.com, Various Papers.



Quote of the Day

"...prediction is very difficult, especially when it's about the future...

Niels Bohr, Nobel Laureate



Conclusions

- CMBS Market New Market Pricing
- REIT Industry Down 25+ Percent
- NACREIF Mixed Signals
- Many Lenders are Closing or Reducing Volume
- Financing Costs Have Risen; Capitalization / Yield Rates
- CASH IS KING
- Spread Between Rent vs Value Growth
- Rents/Vacancies Should continue to Perform OK.
- Value(s) Will Undergo Correction
 see next slide!



Greer - 3 Year Forecast as of 5/2008

- Borrowing Rates for Commercial Real Estate will Rise
- Margins (to Treasury) will rise up to 200 bps 2008-09, and settle around 300 bps over 10 year
- Rent Growth will equal CPI, around 3% per year
- Value Growth will lag Rent Growth 30% over 2-3 years
- Values (National Average) will Fall 5-15% per year for next 2-3 years. Individual market performance will vary widely, with "extreme" markets performing several times better (or worse) compared to the National Average.
- Capitalization Rates will Rise 2.0-2.5% over next 3 years (eg
 6.0% become 8.25% = 30%+/- decline in value)
- Retail will get hurt most. Office and Apartment Least.



Bank of America (**)