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# Wall Street and Commercial Real Estate

Everett Allen Greer  
Director of Research

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# Goals of Presentation

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- Two Fundamentals of Real Estate
- CMBS / CDO / REIT Industries
- Size / Impact of Capital Markets
- Deal Structure – CMBS Example
- Capital Market Yields
- Real Estate Trends
- Capitalization Rates — Lags
- What's New? What's Next?
- Conclusions

# Fundamentals

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## Supply / Demand

- Supply Growth – Development has Stopped
- “Big Picture” ties to Gross Domestic Product
  - Office – FIRE Employment, Portion of Service Employment
  - Retail – Household Formations, Income Growth
  - Industrial – Manufacturing vs Distribution
  - Multifamily – Households
  - Hotel – Corporate Travel – Office Employment
  - During the last few years, has accounted for slightly less than 40% of all commercial real estate lending.
- Jobs & Retail Sales Drive Supply & Demand!!!

## Financing – Currently Most Important Fundamental

# Financing Fundamentals

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Capital Markets Drive Financing

Capital Markets Have Dried Up

Banks in Middle of Credit Crunch

Few Banks are “In the Game”

Rates Across the Spectrum Have Risen

Equity

Mezzanine

Debt

# What is a CMBS?

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## 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?

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## 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?

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## 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

# What is CDS?

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## Credit Default Swap

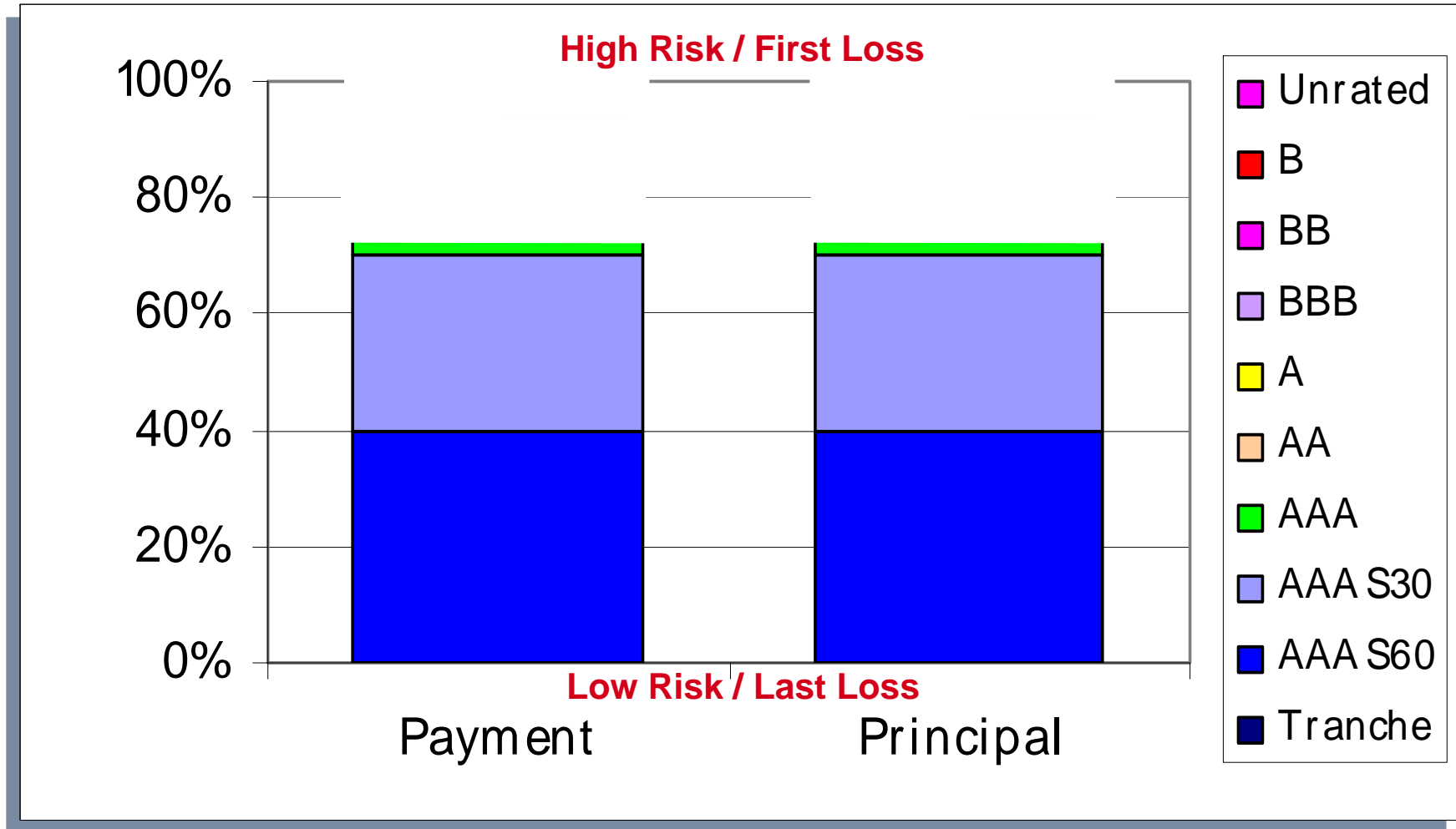
- A bilateral contract where two parties agree to trade the credit risk of a third-party. A protection buyer pays a periodic fee to a protection seller in exchange for a contingent payment by the seller upon a default or failure to pay. Once triggered, the seller either takes delivery of the collateral (eg bond, note) or pays the buyer the difference between the par value and recovery value of the bond (cash settlement).
- They resemble an insurance policy, as they can be used by debt owners to hedge against credit events.



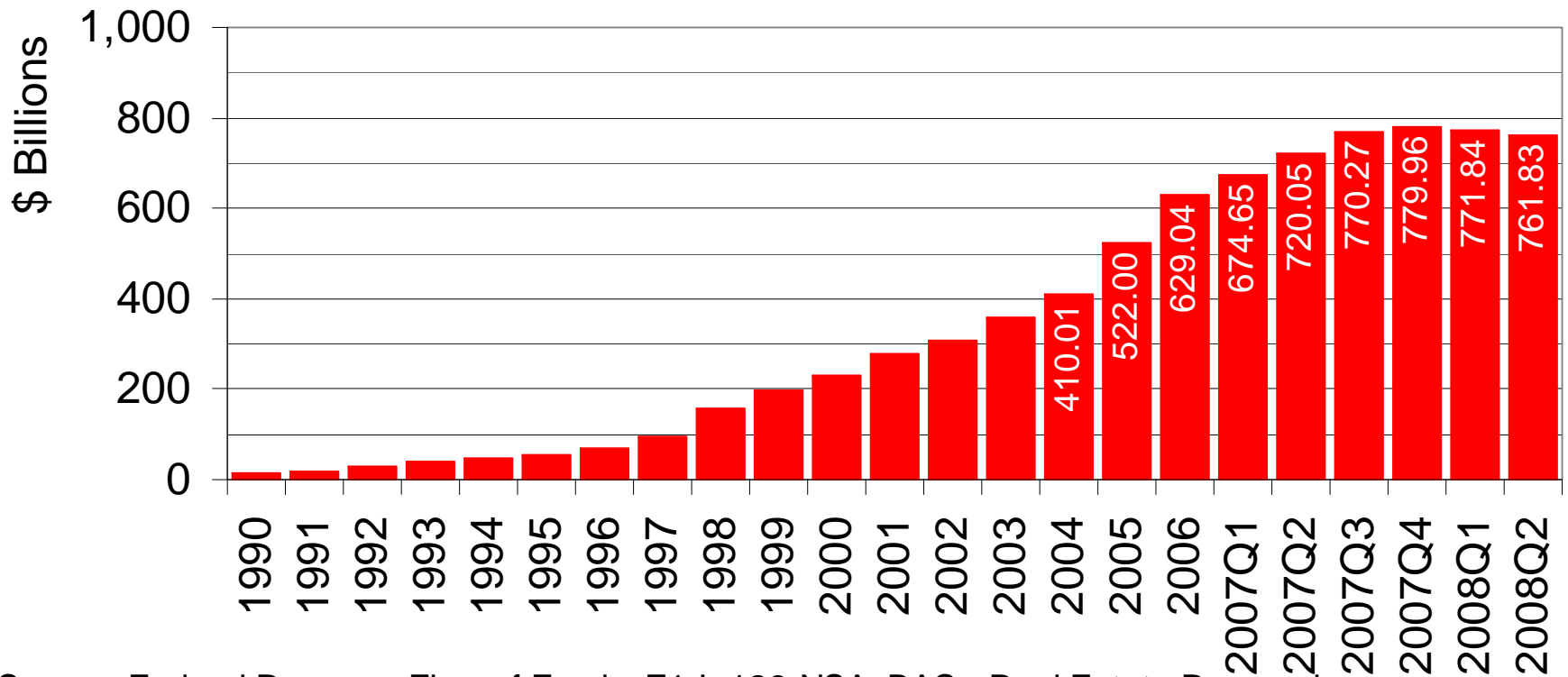
# Example of a “Typical” CMBS

		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%		
		Avg Yield	6.750%		
2007.01	2008.1	Tranche	Approximate	2007.01	2008.1
0.0020	0.0200	AAA S60	60.0%	5.200%	7.000%
0.0025	0.0225	AAA S30	30.0%	5.250%	7.250%
0.0030	0.0245	AAA	12.5%	5.300%	7.450%
0.0040	0.0940	AA	9.0%	5.400%	14.400%
0.0100	0.1345	A	8.0%	6.000%	18.450%
0.0175	0.2500	BBB	5.0%	6.750%	30.000%
0.0250	0.3310	BB	4.0%	7.500%	38.100%
0.0400	0.4000	B	2.5%	9.000%	45.000%
0.0500	0.5000	Unrated	0 to <2.5%	10.000%	55.000%
			Weighted Average Yield	5.494%	10.298%
		Implied Annual Excess Return		0.256%	-4.548%
		Note: Assumes 1% swap, agency, trust, servicer and other fees.		\$6,400,000	-\$113,706,250

# Subordination Graph



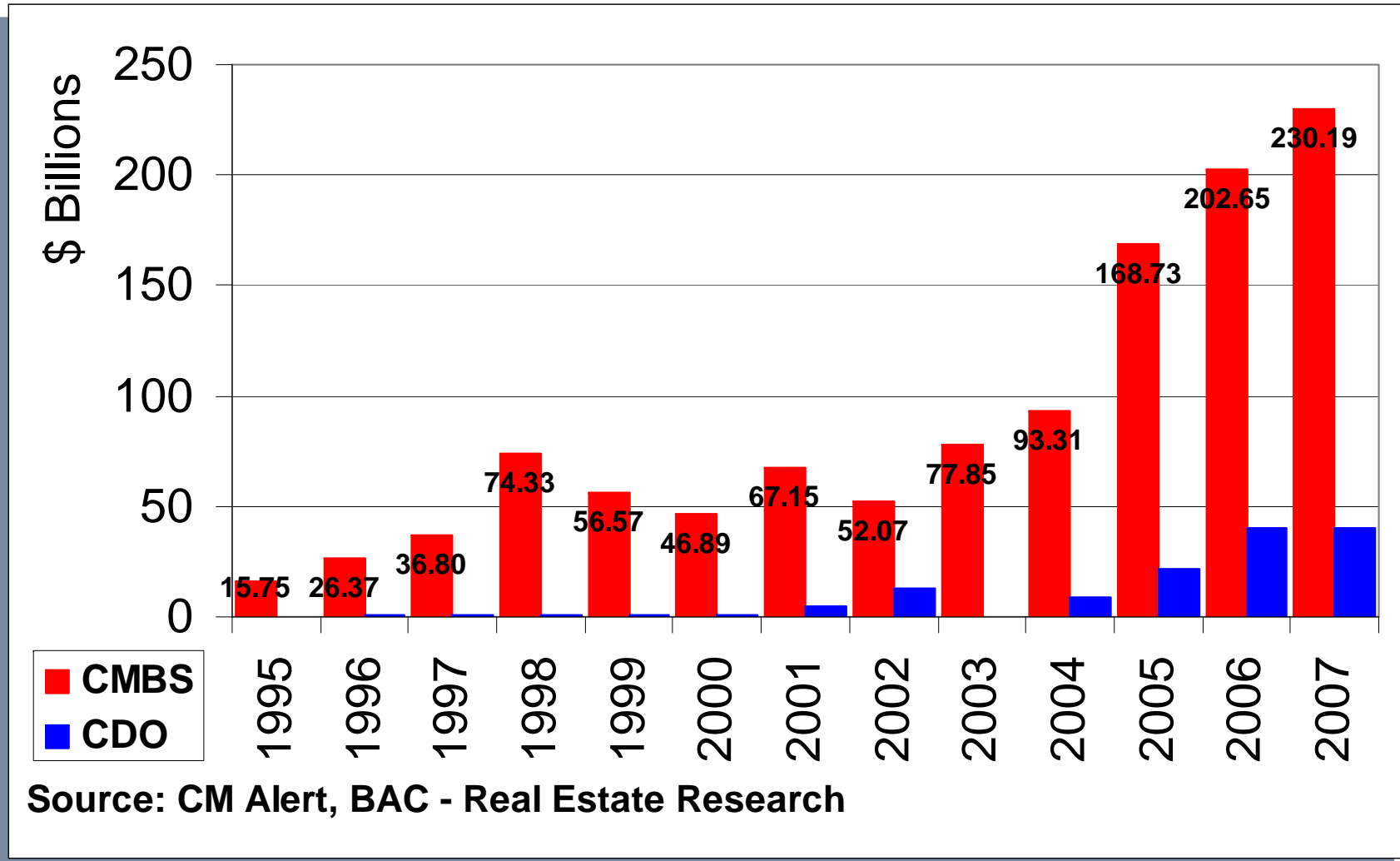
# CMBS Outstandings in U.S. - Grows



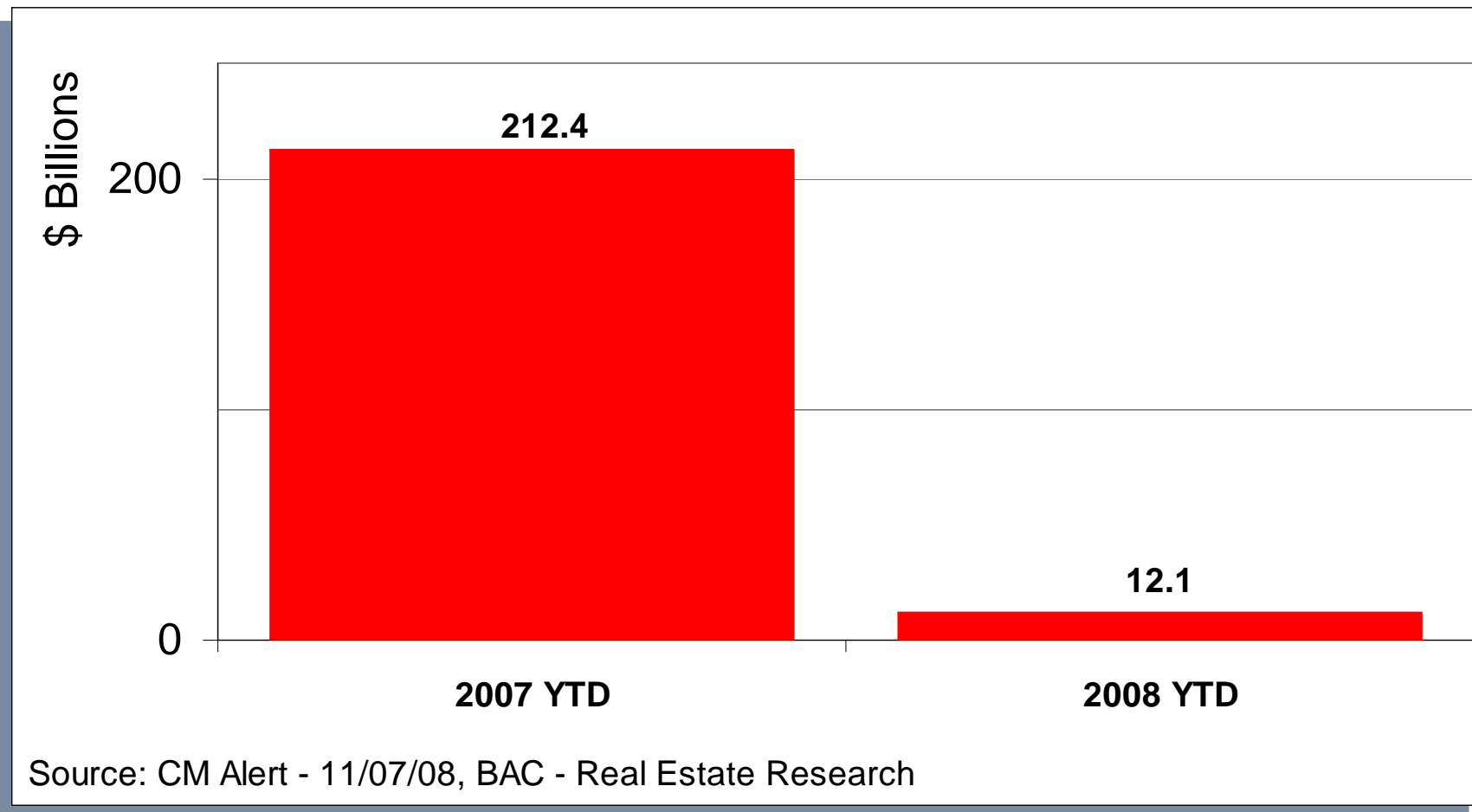
Source: Federal Reserve, Flow of Funds, Z1-L.126-NSA, BAC - Real Estate Research

Note: Total of Multi-Family and Commercial Mortgage Asset Backed Securities.

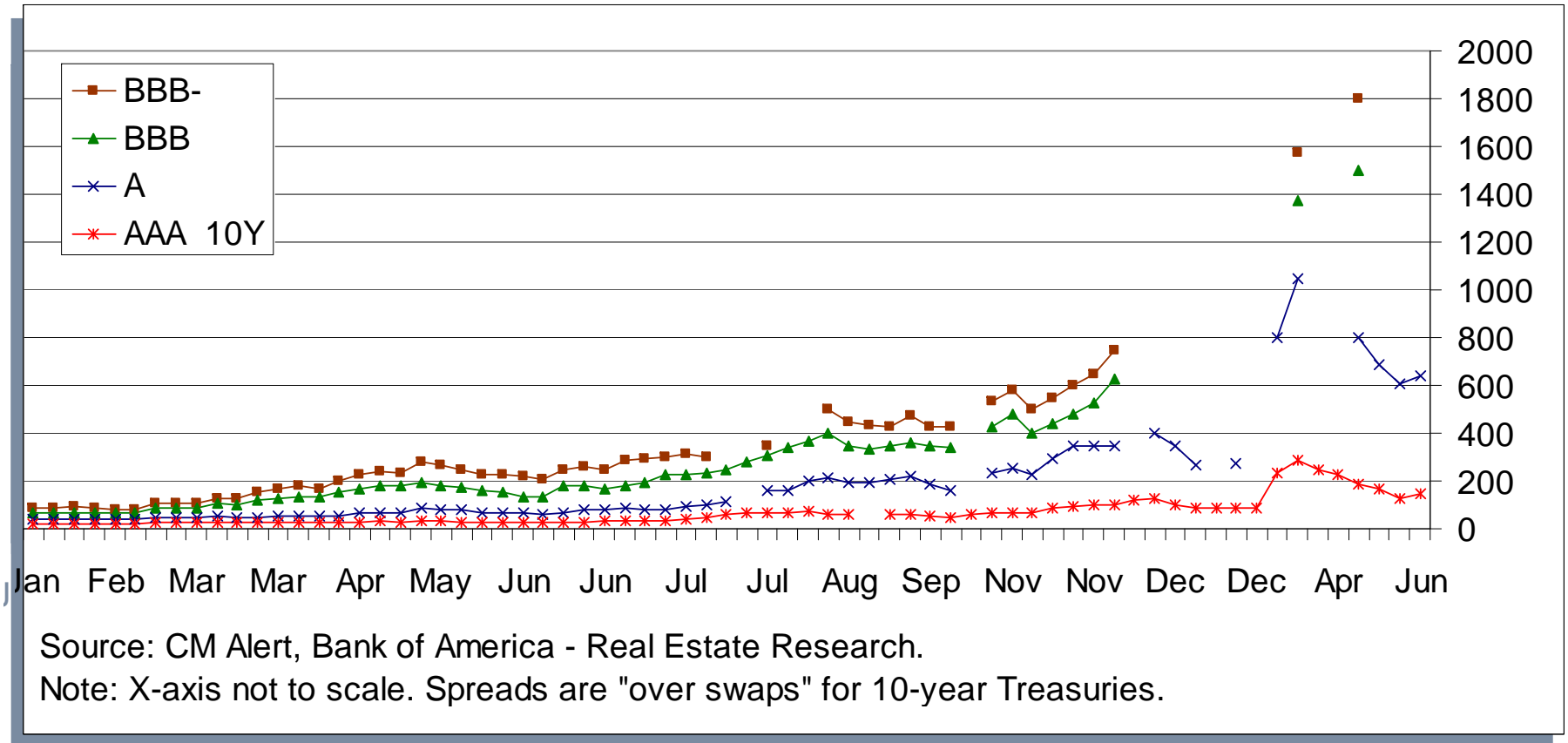
# CMBS Issuance in U.S. - Skyrockets



# CMBS Issuance in U.S. - 2008 Off 94% YTD



# CMBS Yield Spreads (Spread to Swap)



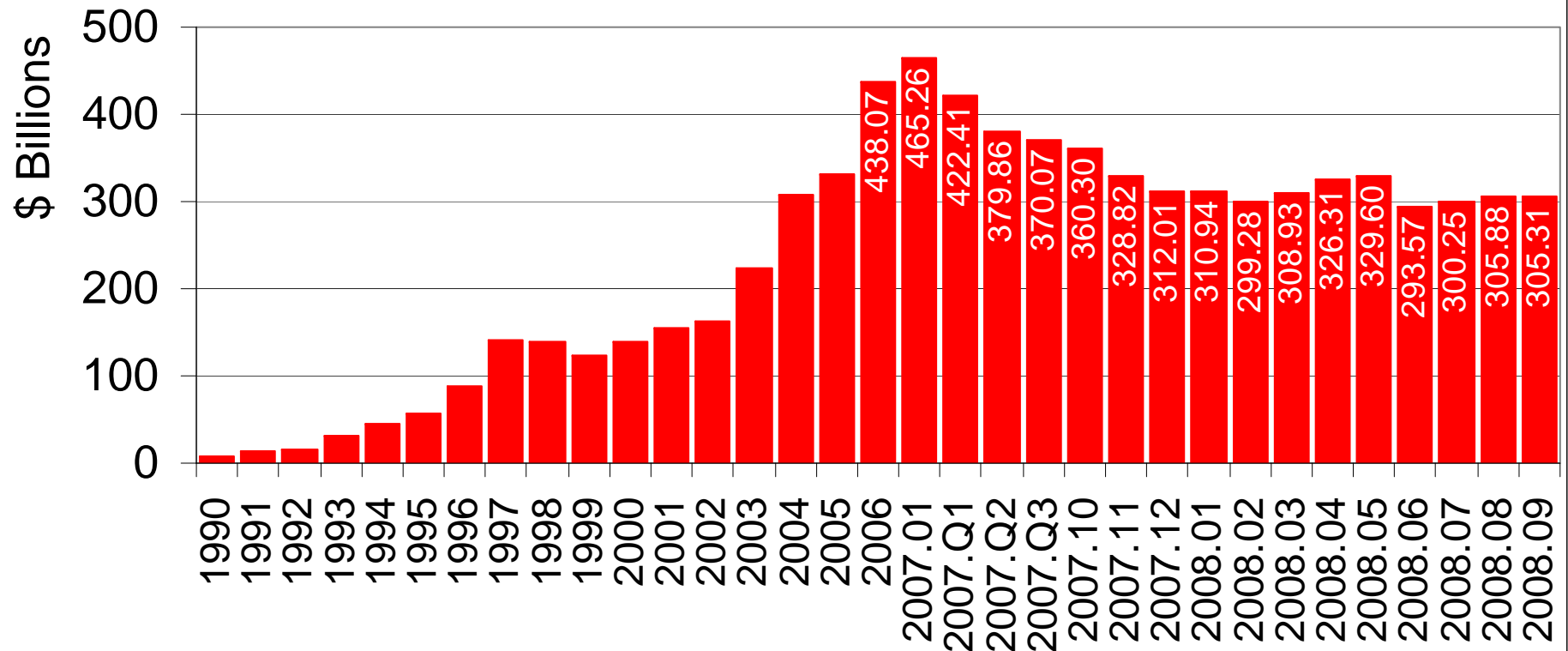
# CMBS Spreads - Yield Rise Implications

Tranche	Rise in Yield	Weight	Debt v Equity	Total Weight	Impact				
AAA	130	85%	75%	63.75%	82.88				
A	600	9%	75%	6.75%	40.50				
BBB	1550	7%	75%	5.25%	81.38				
BBB-	1700	5%	75%	3.75%	63.75				
Unrated	1900	3%	75%	2.25%	42.75				
Class A Prop.					1900	100%	25%	25.00%	475.00
Note: Class A assumed to have no "unrated" traunche				Total	807.25				
Class B- Prop.					2200	100%	25%	25.00%	550.00
Note: Class B- assumed 250 bps above "unrated"				Total	861.25				

Note: Market for < BBB paper is gone! Pricing is uncertain!

Higher subordination = even greater impact.

# REIT Market Capitalization

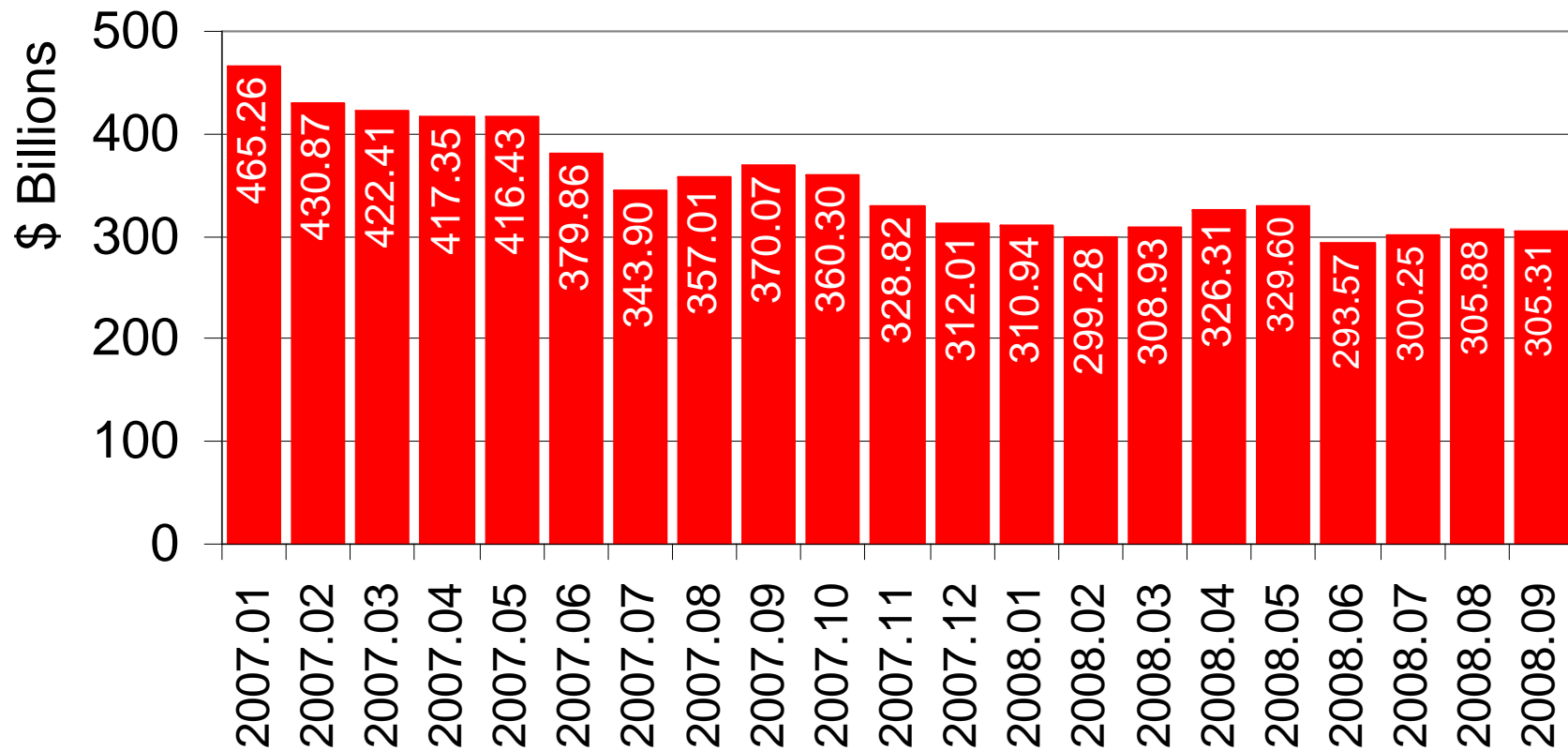


Source: NAREIT, Bank of America Real Estate Research

Note: Includes Equity, Debt and Hybrid REITS

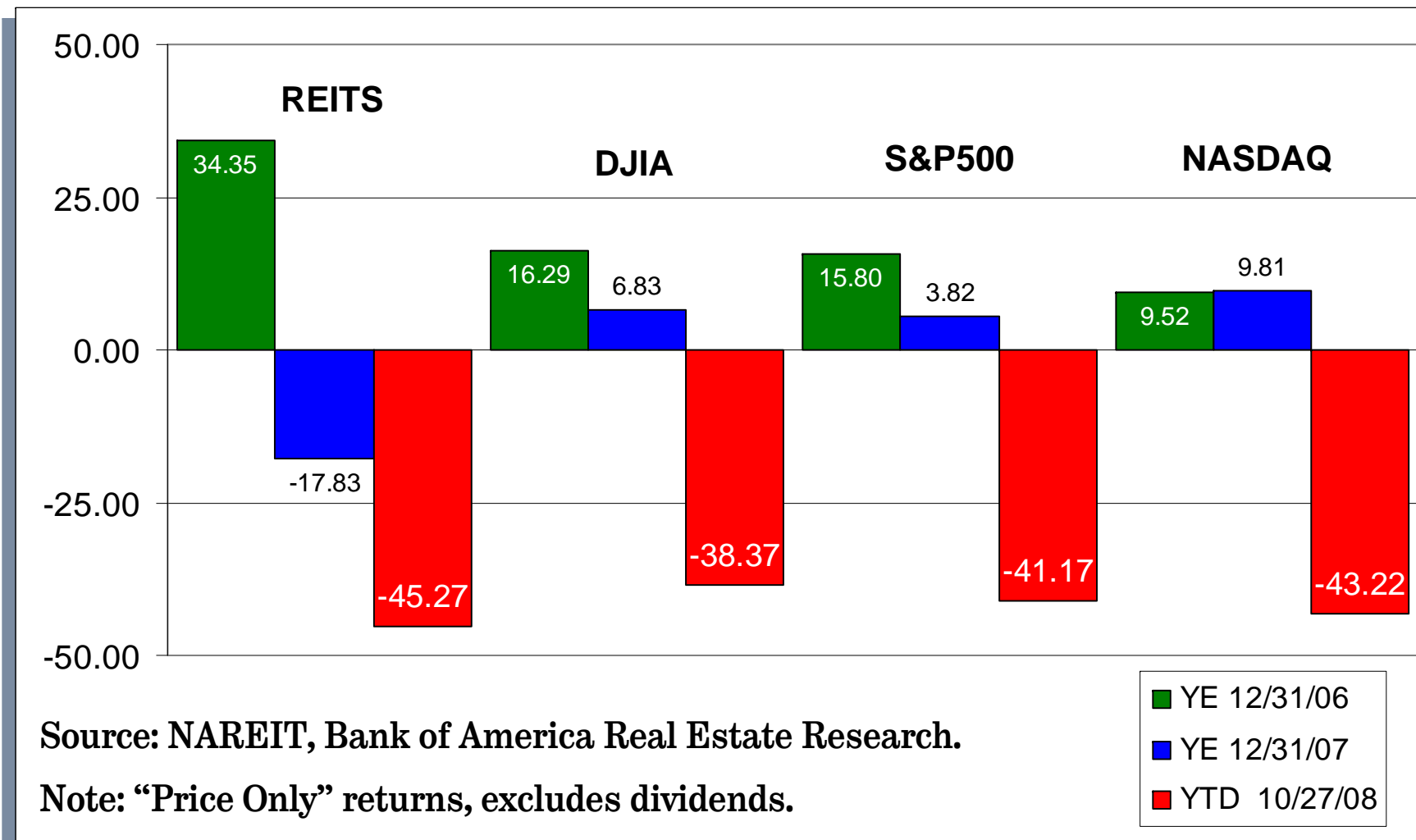


# REITs Lose \$160 Billion or 34% of value

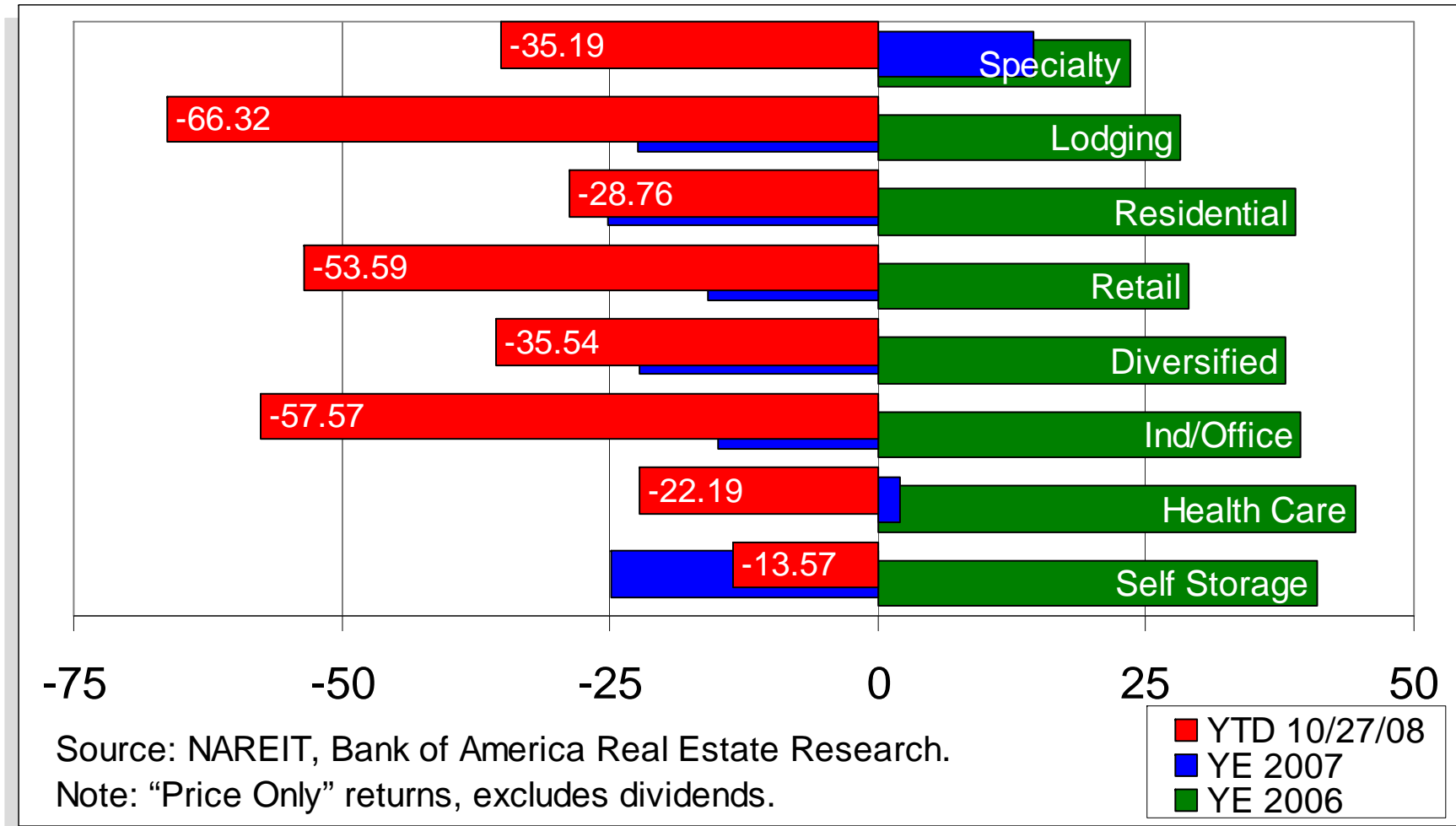


Source: NAREIT, Bank of America - Real Estate Research  
Note: Includes Equity, Debt and Hybrid REITs

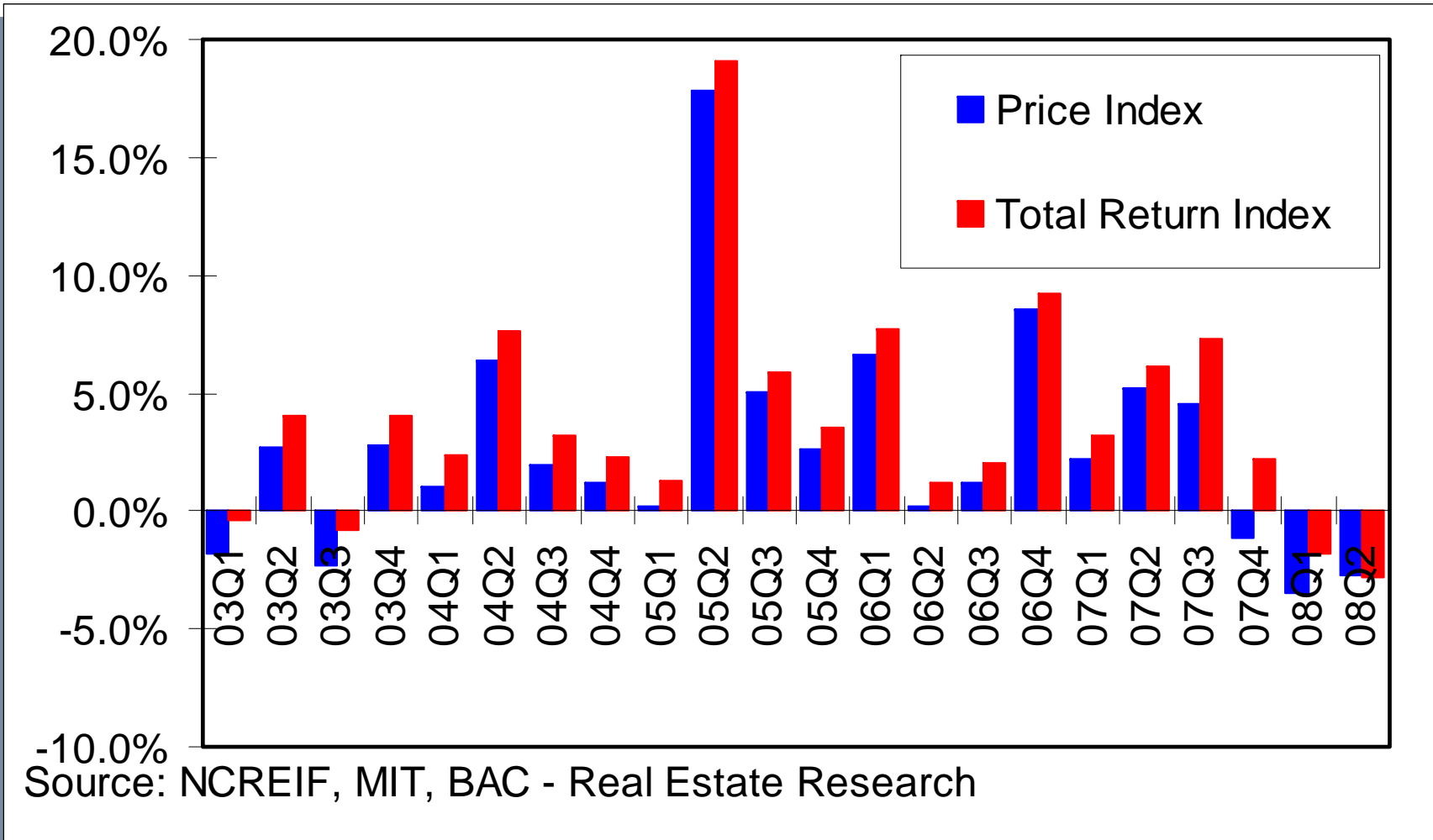
# Benchmark Returns — Changes so Fast!



# REIT Property Type Returns — Old vs. New



# NCREIF 08.Q2 Price Down/ Total Down



# Value Fundamentals

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CMBS Market is Effectively Broken = Opportunities

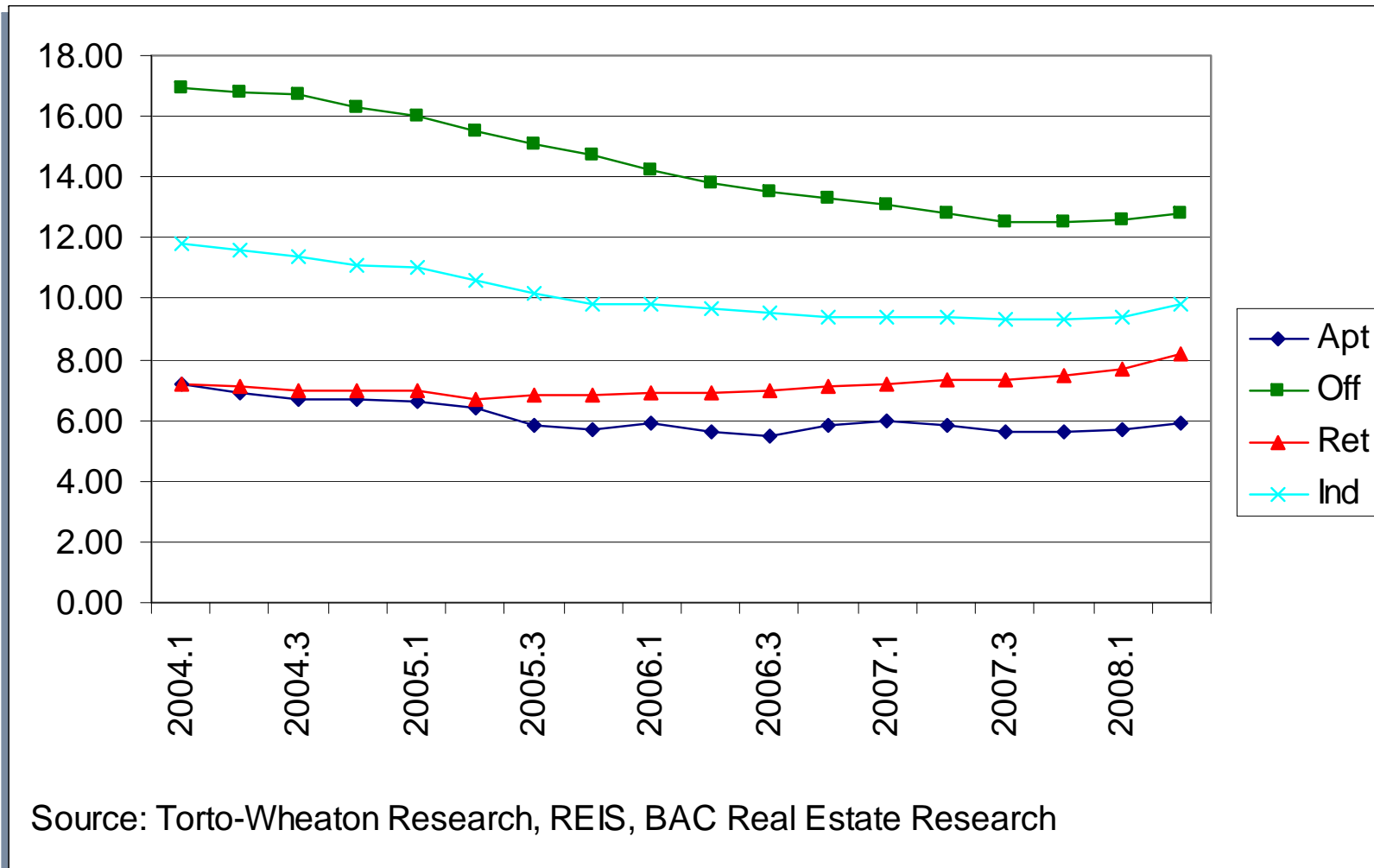
CMBS Indicates Nearly 60% Decline in Value  
(8.0% rise in capitalization rates = 62% decline)

REITS are “Off” more than 30% = Opportunities

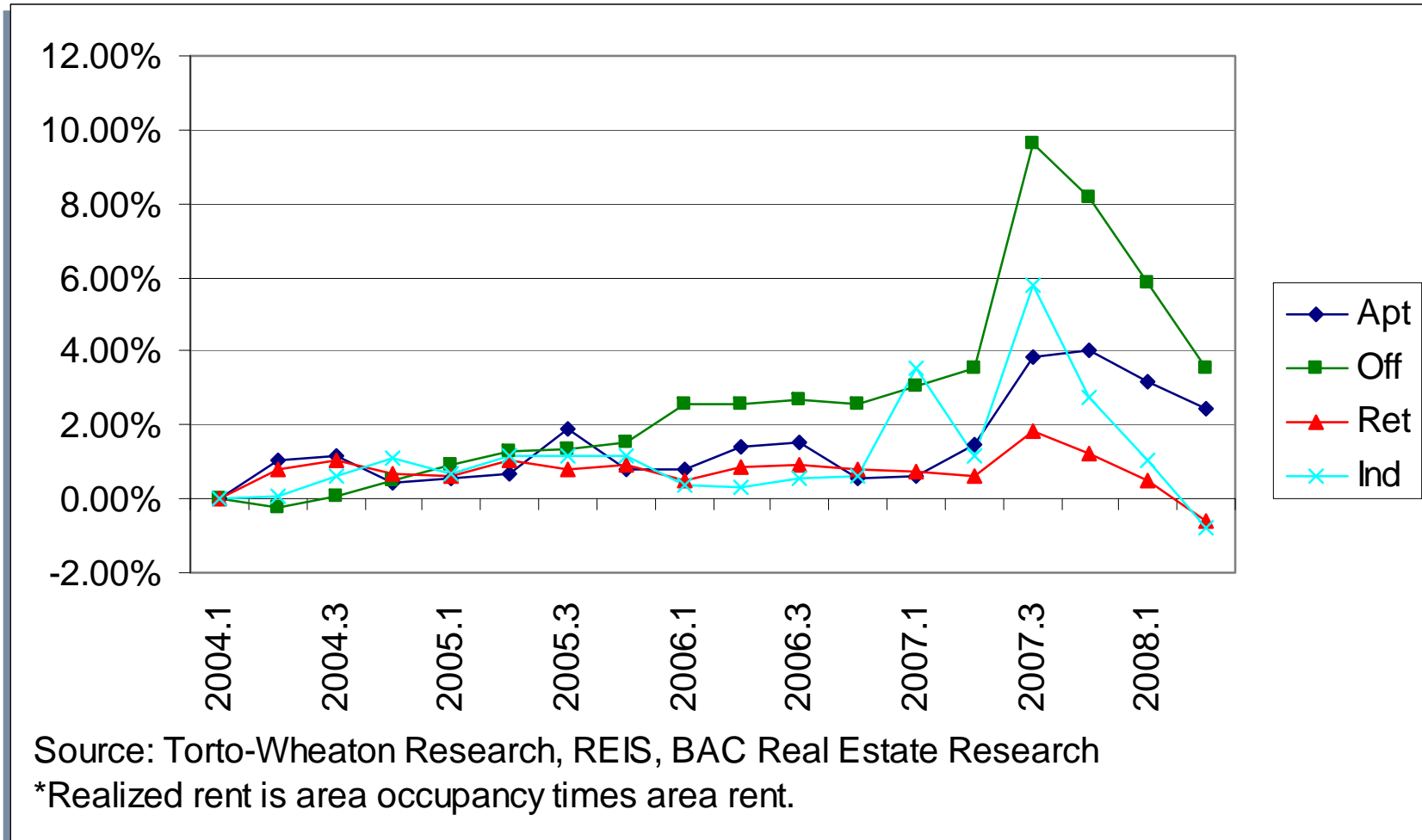
NCREIF is nearly Flat (down -2.7% and -2.8%)

Market Change brings Opportunities!

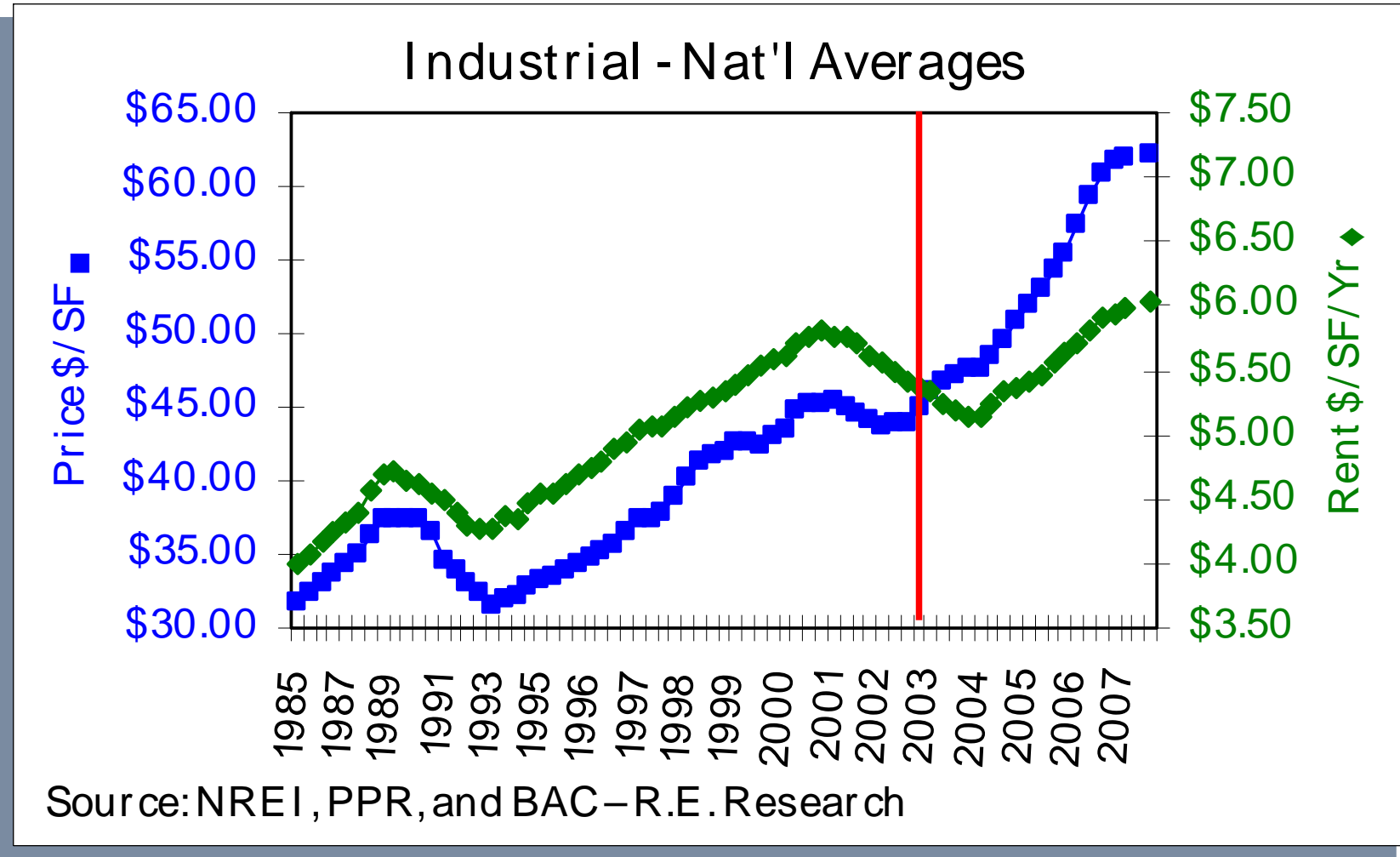
# National Trend — Vacancy



# Realized Rents

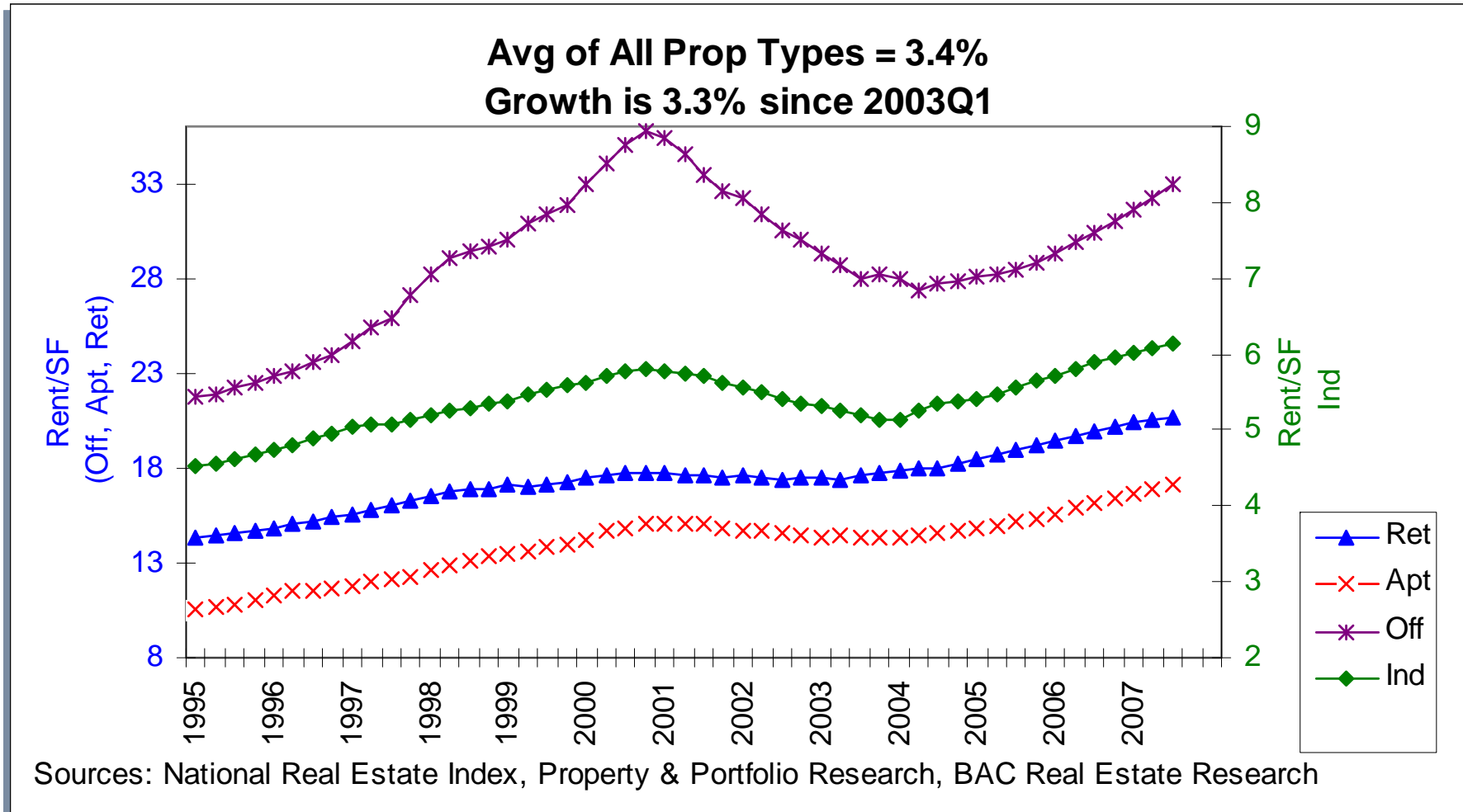


# The Relationship Breaks in 2003

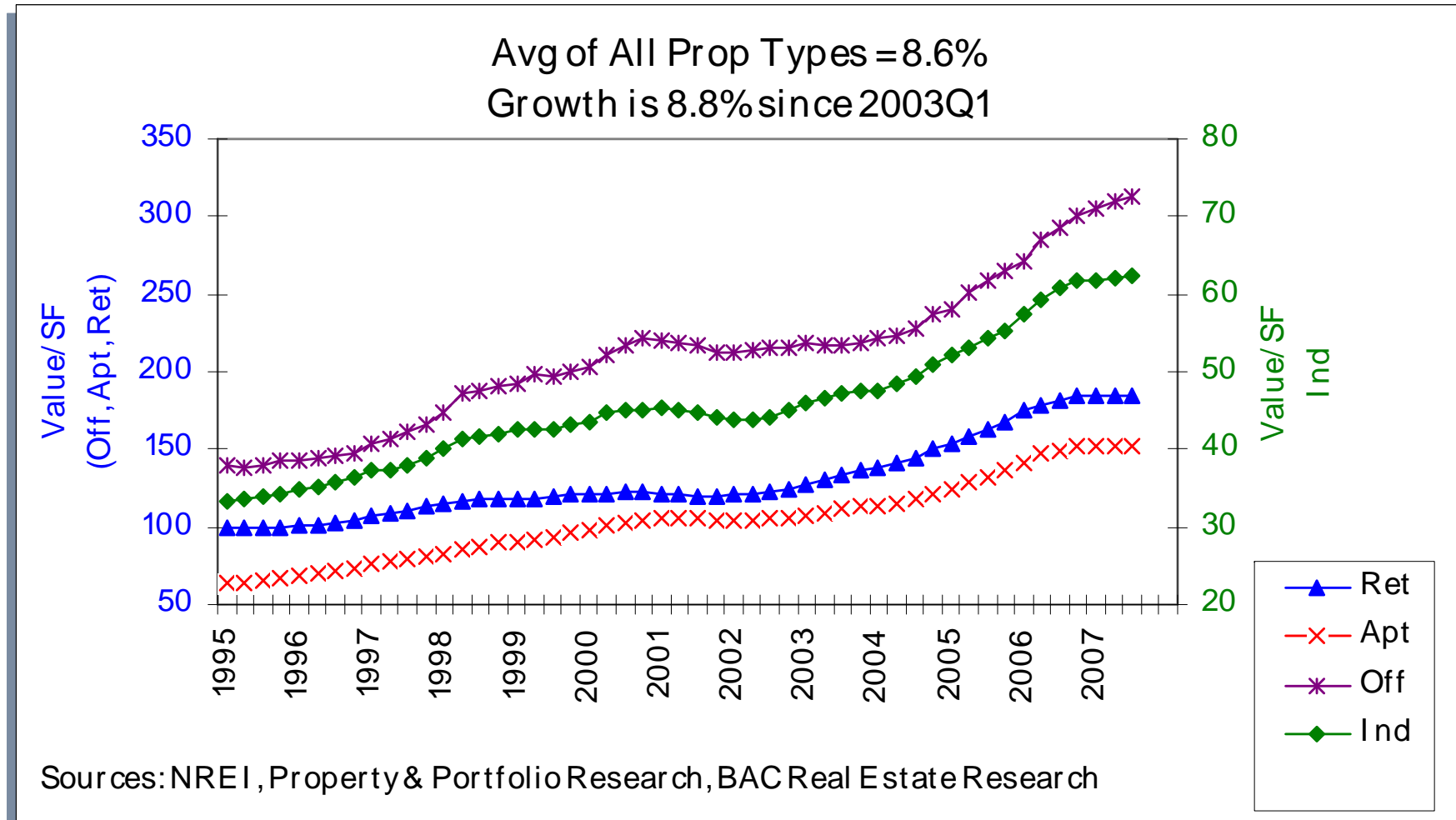




# Market Trends — National Rents



# Market Trends — National Values



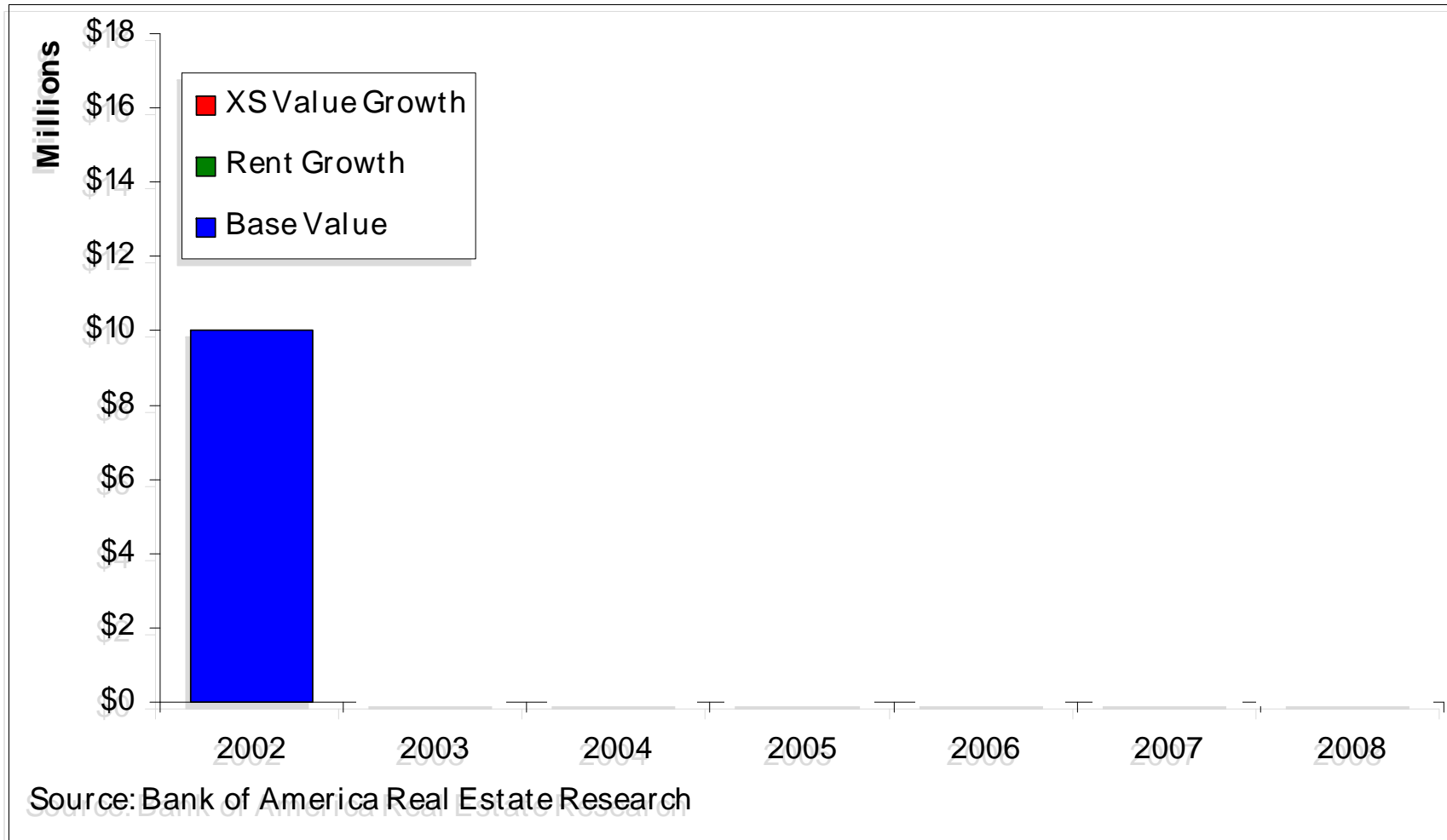
# Growth Example — Value vs. Income

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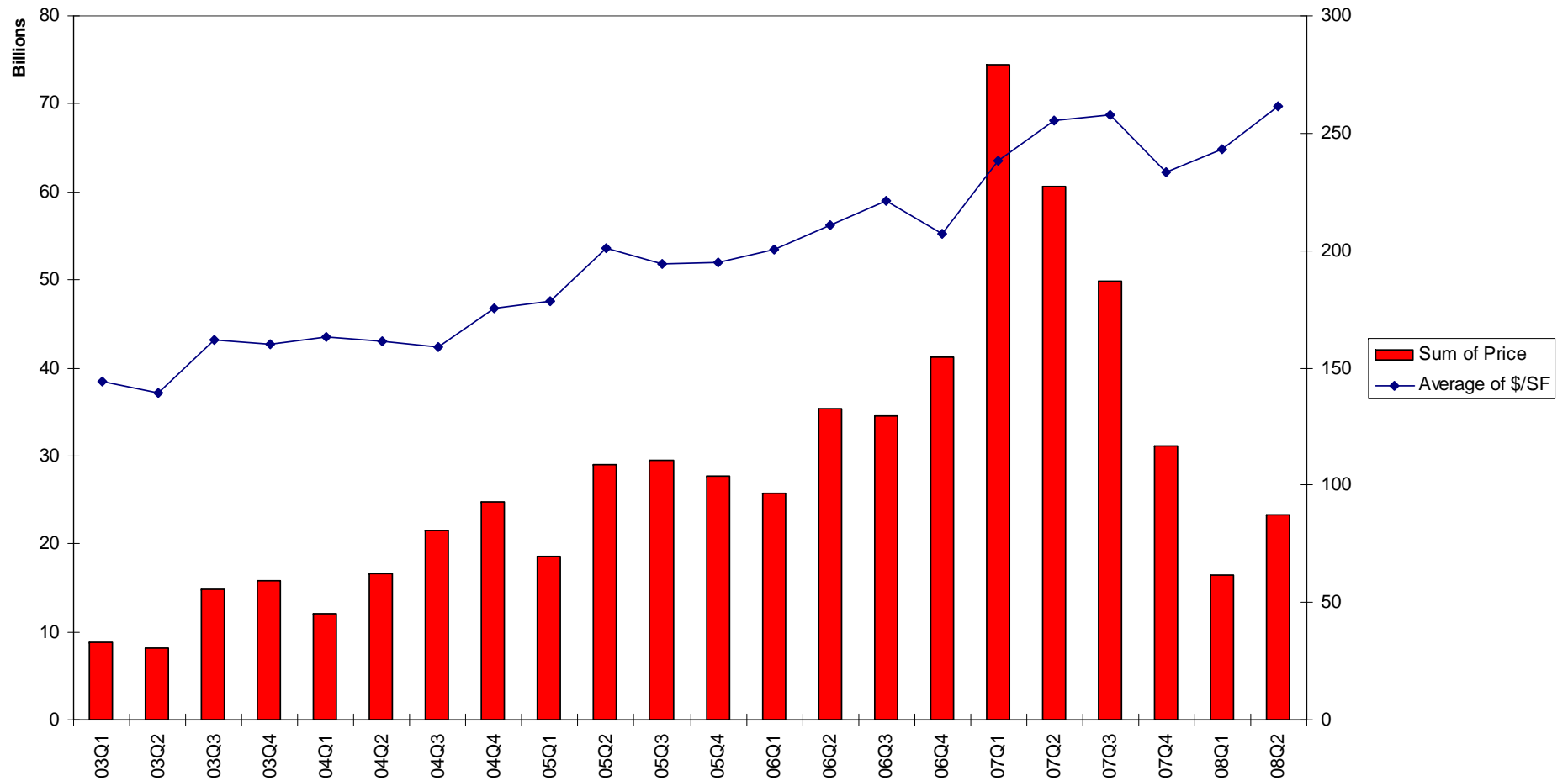
Year	Rent	RentG	Ind Cap	Value
2002	750,000	3.30%	7.50%	\$10,000,000

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

# Rent versus Value Growth

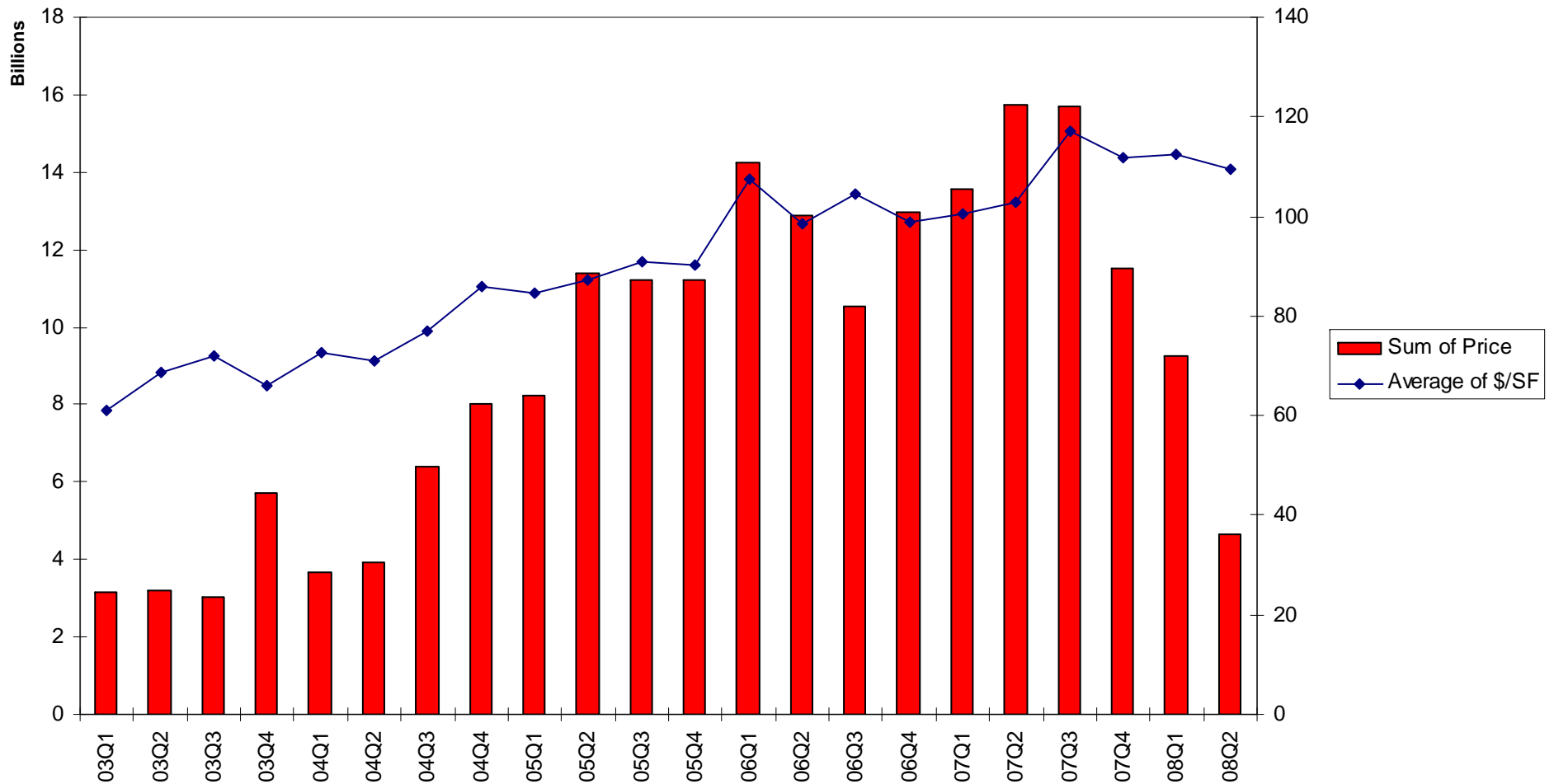


# Sales Trends - Office - 75% Q3 '08 vs. '07



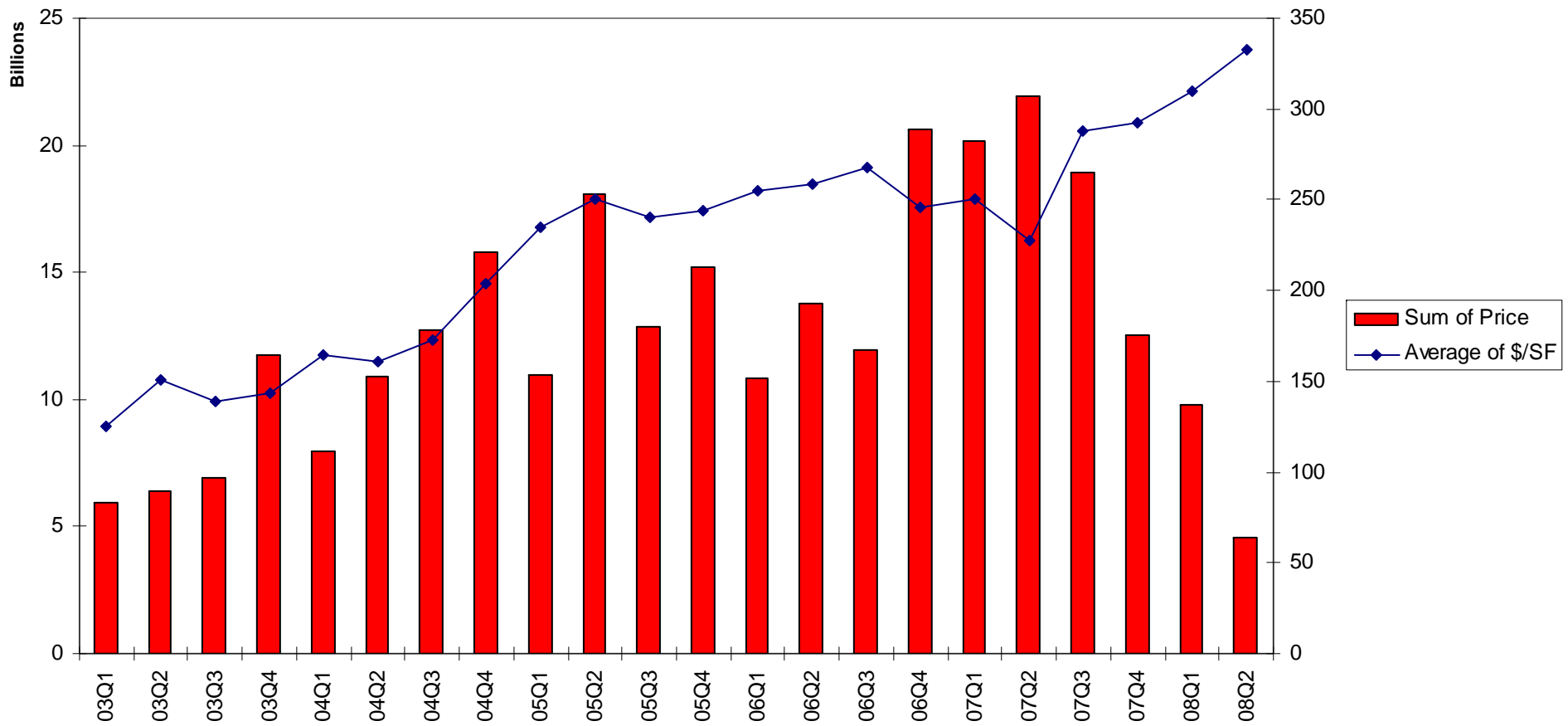
Source: Real Capital Analytics, Bank of America Real Estate Research

# Sales Trends - Ind - 54% Q3 '08 vs. '07



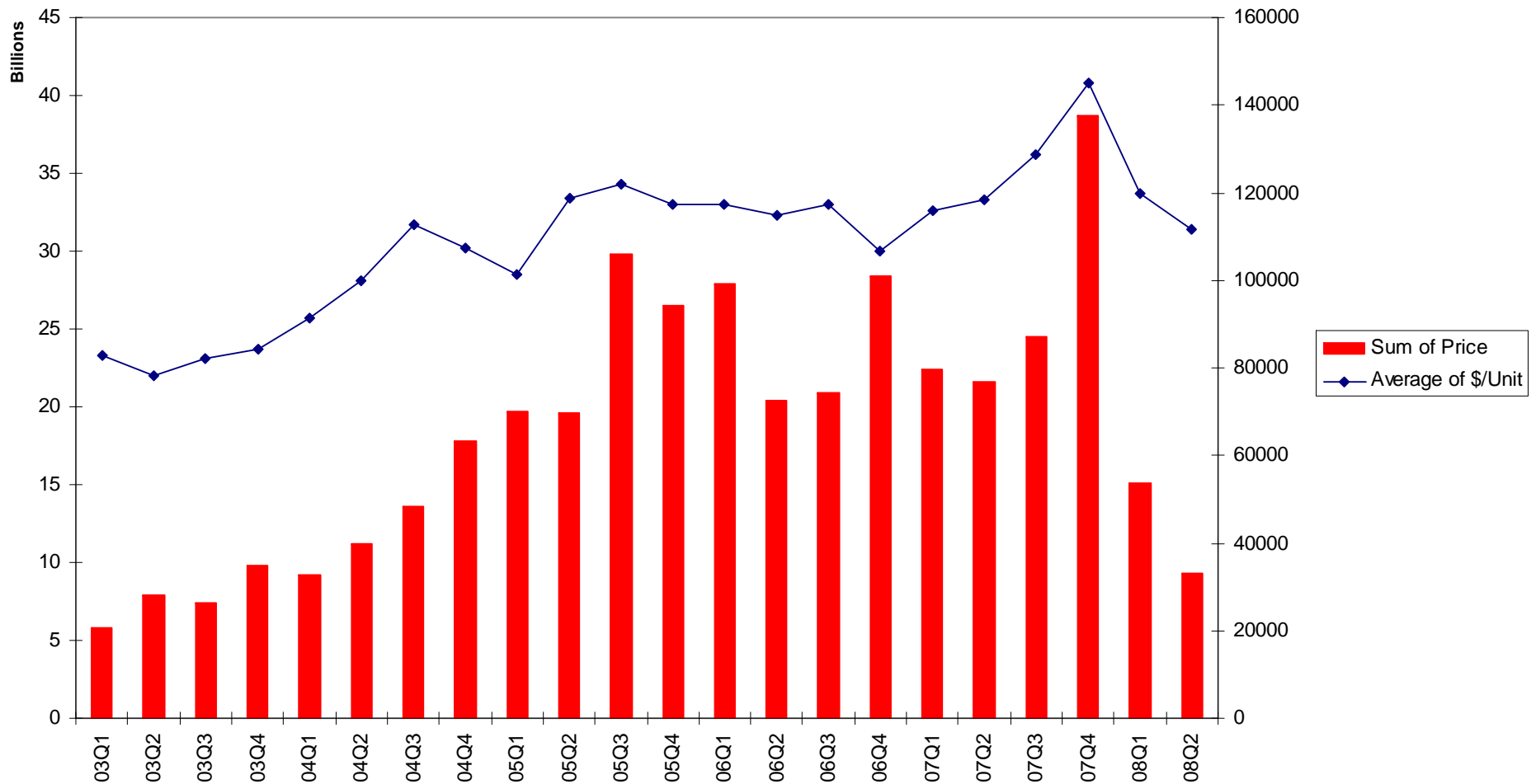
Source: Real Capital Analytics, Bank of America Real Estate Research

# Sales Trends - Retail - 71% Q3 '08 vs. '07



Source: Real Capital Analytics, Bank of America Real Estate Research

# Sales Trends - Apt - 49% Q3 '08 vs. '07



Source: Real Capital Analytics, Bank of America Real Estate Research



# Vacancy - Top / Bottom Markets - '08Q2....

U.S.		Off - 13.2%		Ind - 10.3%		Apt - 5.6%		Ret - 8.2%		Hot - 69.7%	
Top	1	New York	6.1	Los Angeles	5.4	Newark	1.8	Los Angeles	3.4	New York	84.7
	2	Honolulu	9.5	Salt Lake	5.8	Pittsburgh	2.0	Orang County	3.4	Wash, DC	78.5
	3	Seattle	9.6	Tucson	6.2	Edison	2.9	San Jose	3.6	San Francisco	78.4
	4	San Francisco	9.7	Ventura	6.5	San Jose	3.0	Fairfield	3.8	San Diego	75.6
	5	Long Island	9.9	Seattle	6.6	San Diego	3.4	N New Jersey	3.8	Los Angeles	75.1
Bottom	5	Phoenix	18.7	Stamford	15.4	W. Palm Bch	8.3	Syracuse	14.3	Detroit	61.4
	4	Tucson	19.3	Detroit	17.4	Atlanta	8.5	Tulsa	14.3	Tampa	61.1
	3	Edison	20.0	Trenton	18.0	Phoenix	9.1	Cincinnati	14.4	Phoenix	60.6
	2	Dallas	21.1	Memphis	18.2	Tucson	9.1	Birmingham	15.2	Dayton	60.4
	1	Detroit	21.7	Ann Arbor	21.2	Jacksonville	9.9	Dayton	15.5	Cleveland	59.9
Spread			15.6		15.8		8.1		12.1		24.8

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

# Quote of the Day

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

~~NY Yankee #8, Yogi Berra~~

Niels Bohr

Nobel Laureate, 1922



# Conclusions

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- CMBS Market – New Business Model will Come
- REIT Industry – Down 30+ 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 10/2008

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- Borrowing Rates for Commercial Real Estate will Rise
- Margins (to Treasury) for Commercial RE Loans will rise 200 bps 2008-09, and settle around 300± 50bps over 10 year
- Rent Growth will lag CPI slightly, grow 0-3% 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 5.0% become 7.25% = 30%+/- decline in value)
- Declines: #1 Retail, #2 Industrial & Office, then Apartment
- Change Creates OPPORTUNITIES!!!!

**Bank of America**

