
Capital Markets and their Impact on Valuation

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Greer Advisors

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Goals of Presentation

- Fundamentals
- Capital Markets (CMBS/CDO/REIT/CDS)
- Implications for Real Estate (Size/Yield/Impact)
- Real Estate Trends (Capitalization/Yield Rates)
- Conclusions
- Forecast
- Signs to Look for

Fundamentals

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
- Jobs & Retail Sales Drive Supply & Demand!!!

Financing – Currently Most Important Fundamental

Financing Fundamentals

Capital Markets Drive Financing

CMBS / REITs are Benchmarks

Capital Markets Have Dried Up or Risen Many-fold

Banks are in DEEP Credit Crunch

Few Banks are “In the Game” of Lending

Rates Across the Spectrum Have Risen

Equity, Mezzanine, Debt

Deleveraging – Lower LTV / Higher DSC

Many “former” borrowers can’t get loans today

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

What is CDS?

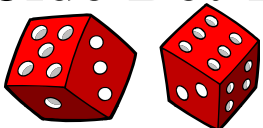
Credit Default Swap

- 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.

Players in “Simple” CDS

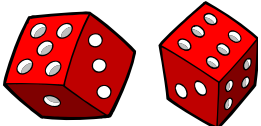
Business Issues Bonds

Side Bet 1

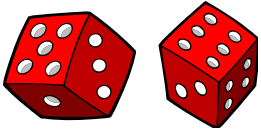


Bonds initially rated too poor for market, eg “BB”

Side Bet 2



Side Bet 3

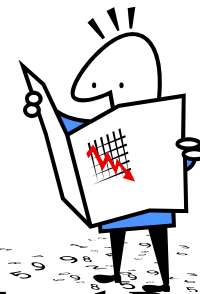


Investment Bank issues CDS (aka Credit Enhances Debt) Enough to make BB = AA, if debtor fails, IB buys bonds

Rating Agency Rates Bonds



Gives loss forecast & amount required for “AA” rating



Pension Fund Buys Bonds with CDS enhancement
Thinks it's AA investment

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Evolution of CDS

- Simple CDS = “Full Coverage”
 - Buyer is Party to Credit Instrument
 - Seller Provides “Full” Coverage
 - Seller Pays (makes up) Shortfall or
 - Seller Buys Credit Instrument from Buyer
 - Buyer is “Made Whole”
- Buyer is Not a Part to Credit Facility, merely a speculator
- Sellers Provide Partial Coverage (ceiling) or Part of Credit
- Sellers Provide Incremental Coverage
 - Goal is to provide “Partial” Credit Enhancement
 - Ratings Are Moved (eg “BB” to “A” rating)
- CDS – Complex Credit
 - CMBS (vertical [multi-tranche buyer] or horizontal)
 - Multiple facilities
 - REITs added

CDS – Credit Enhancement – Market Change

■ DEBT ISSUANCE

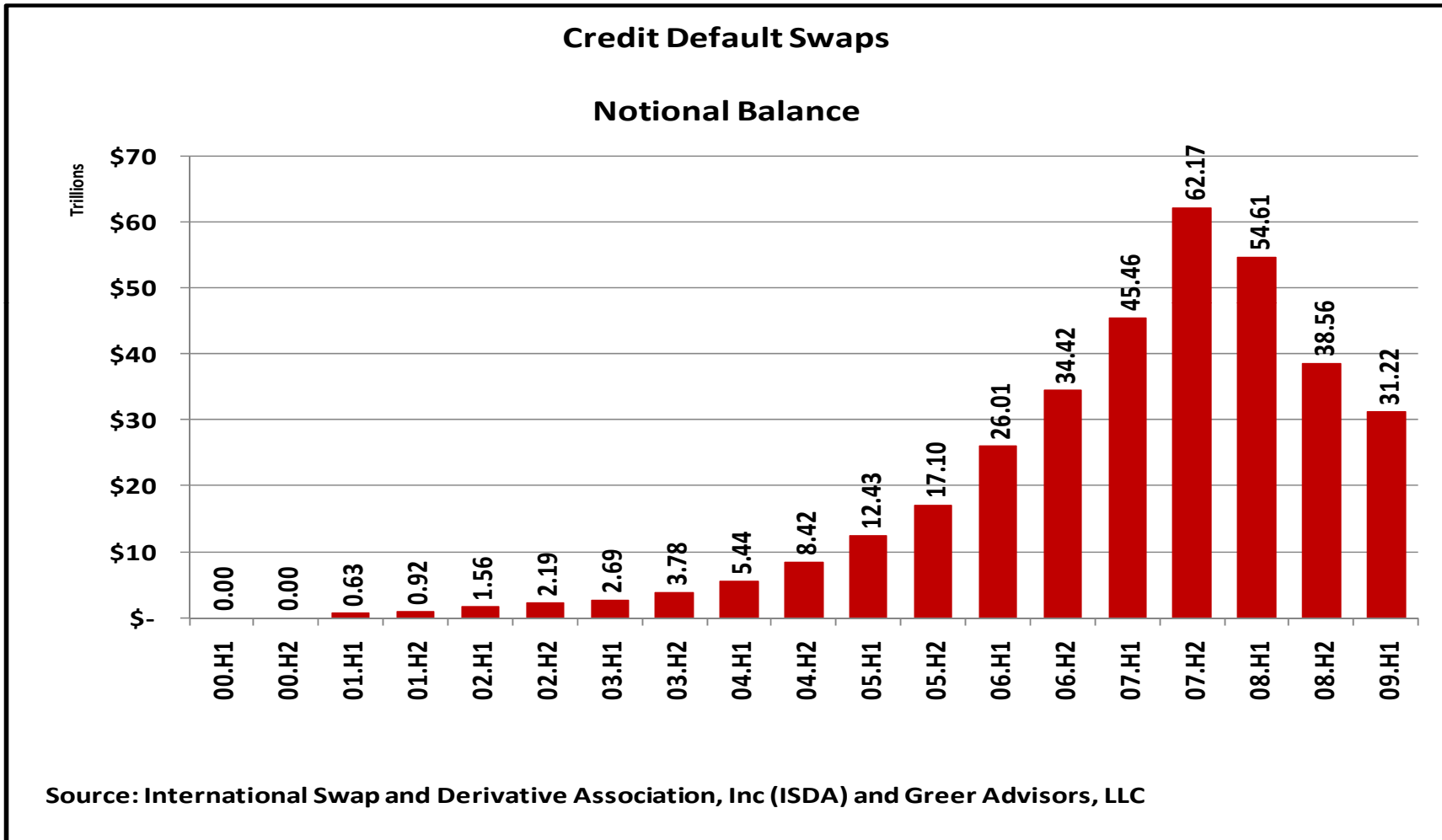
- Debt Issued \$1B
- SRA Rates Debt
- Estimated Loss = \$10MM
= “B” Rating
- SRA says \$1MM = AA
- \$9MM CDS bought
- Debt “credit enhanced”
from “B” to “AA”

■ DEBT RE-RATED

- Existing Debt 6 mo’s later
- SRA Re-Rates Debt
- Estimated Loss now \$20MM =
“unrated” security
- SRA says \$1MM = AA
- CDS provided \$9MM coverage,
now addtl \$10MM expected loss
- Credit Enhancement not enough
to yield desired rating on security

Note: Above is Hypothetical Example

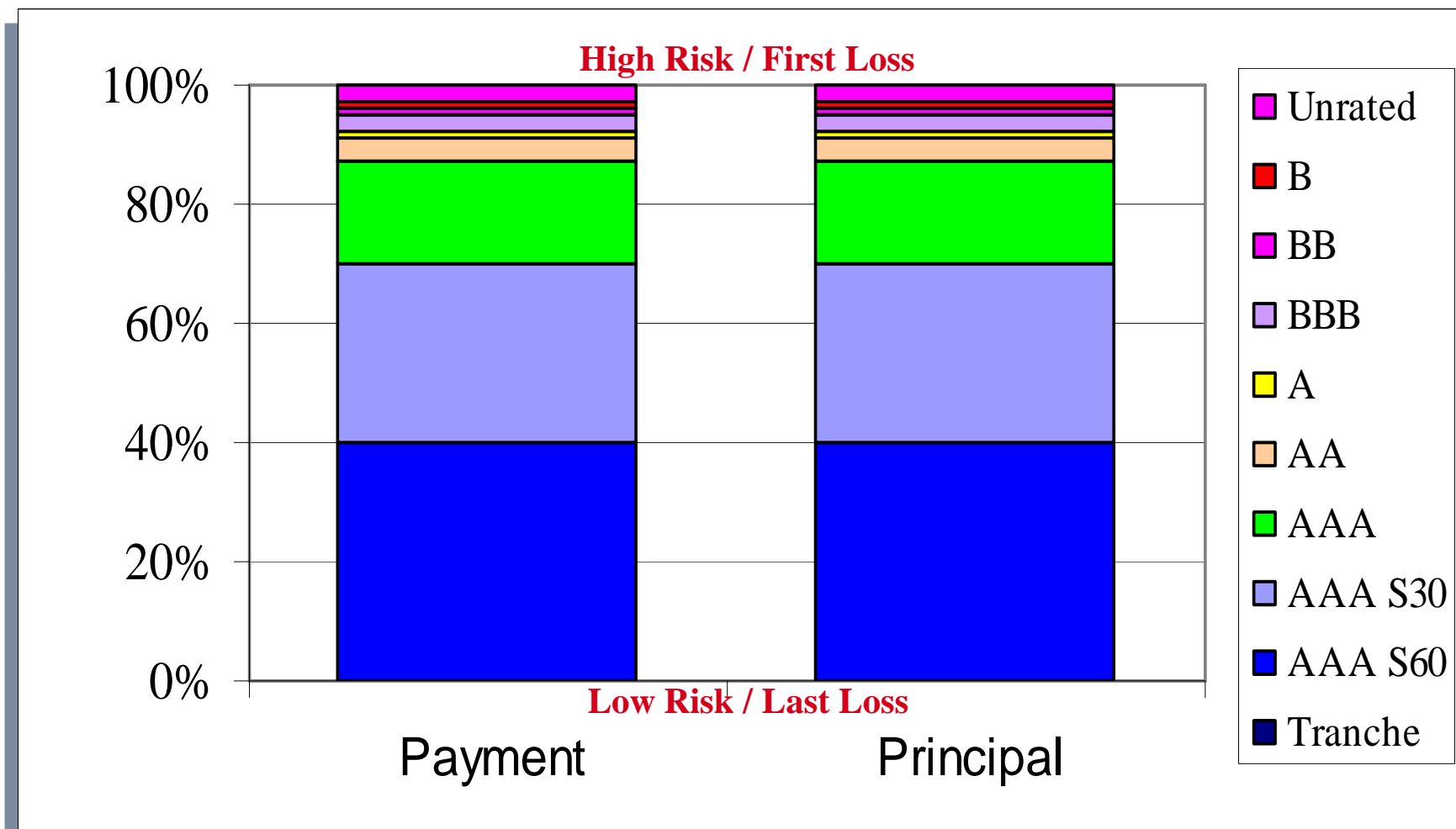
Credit Default Swaps



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	3.480%		
Avg. Margin on Loans	1.750%		
Avg Yield on Loans	5.230%		
		THEN	NOW
Tranche Rating (10Y)	Approximate Subordination	01/07	9/16/09
AAA Sr	30.0%	3.250%	4.705%
AAA Jr	12.5%	3.300%	8.202%
AA	9.0%	3.350%	15.654%
A	8.0%	3.450%	26.898%
BBB	5.0%	3.700%	44.098%
BB	4.0%	3.950%	48.652%
B	2.5%	4.450%	138.336%
Unrated	0.0%	5.450%	318.000%
	Weighted Average Yield	3.358%	17.380%
Implied Annual Excess Return		0.872%	-13.150%
Note: Markit Data and Calculations were based on close of 09/16/2009. Treasury Yield as of close of 09/16/2009 at 3.48%.			
Source: Coupon and Price data from Markit for AAA Senior through BB bonds were used to calculate Spreads.			
Source: Subordination levels were from Markit.			
Source: The Calculations to determine Spreads were from Greer Advisors.			
Notes: Interest Rate Swap (variable to fixed) fees were ignored. Spreads were assumed over 10-Year Treasury, not swap rate Profit / arbitrage opportunity for the Issuer was ignored.			
The yield spread for the "Unrated" class was based on (BBB- yield minus BB yield) times 2.00, rounded to 100 bps.			
Class-A property equity yield was assumed equal to the BBB- (last investment-grade piece) yield, rounded to 100 bps.			
Class-B property equity yield was assumed equal to the Unrated yield, rounded to 100 bps.			

Subordination Graph

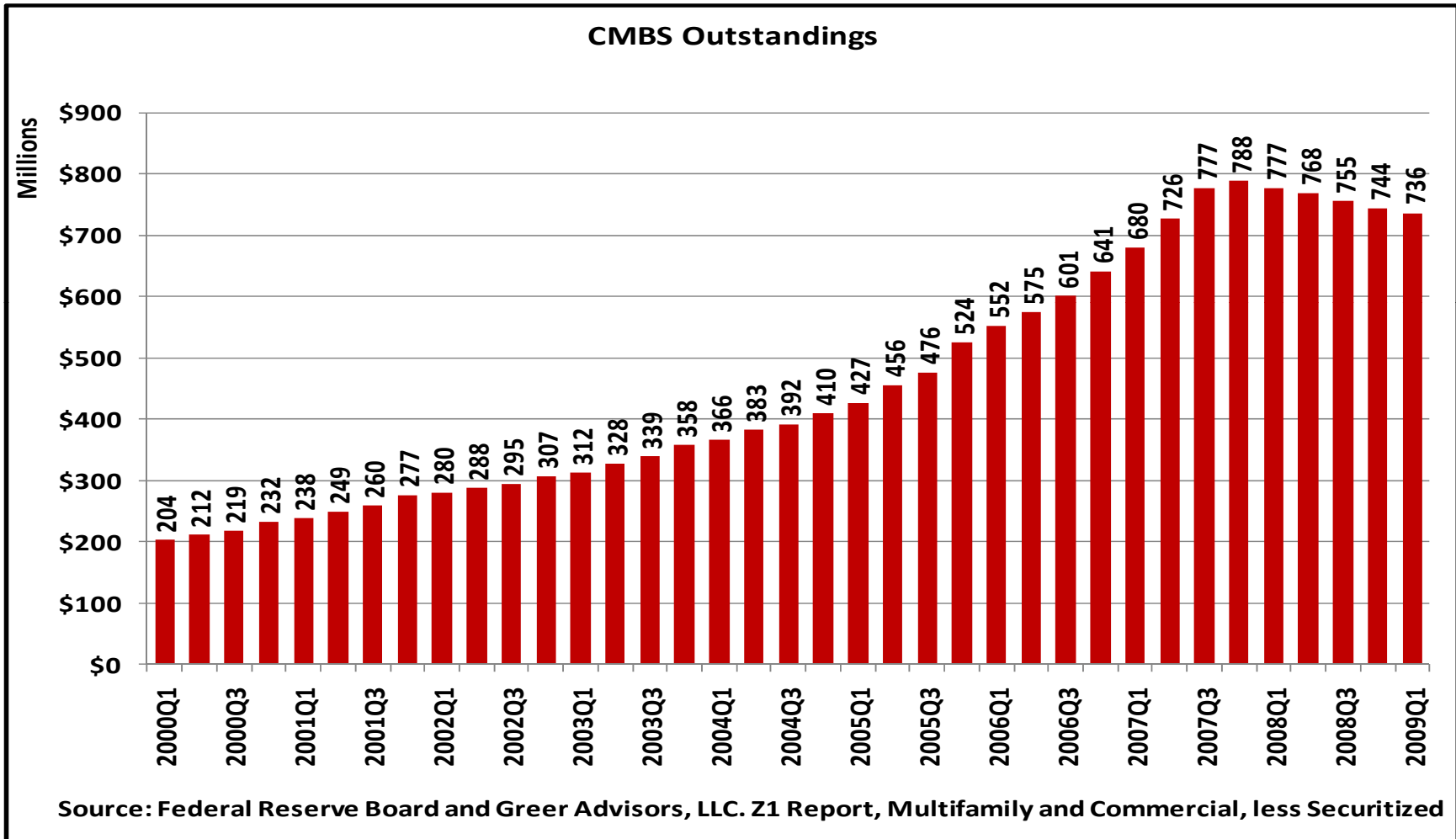


Loan Sales – How Deep is the Market

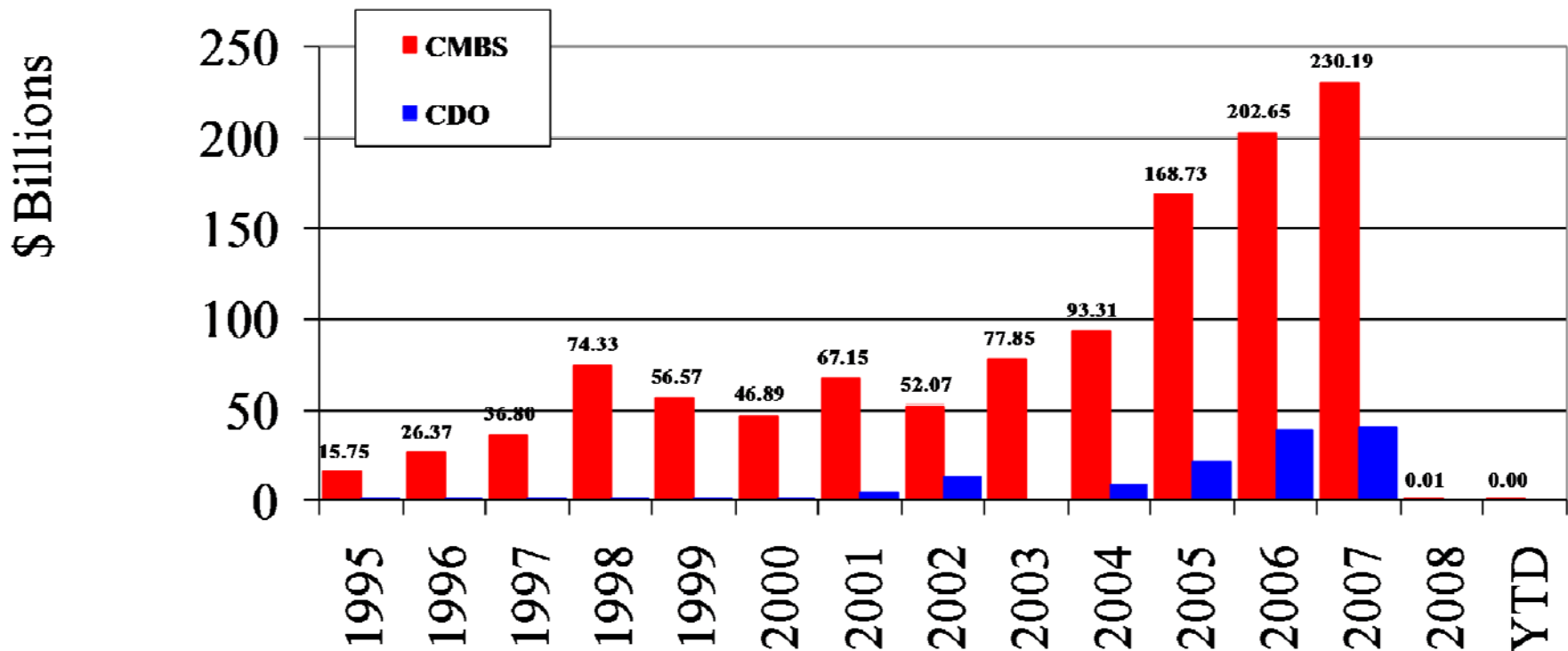


Adobe Acrobat
Document

CMBS Outstandings in U.S. - Grows

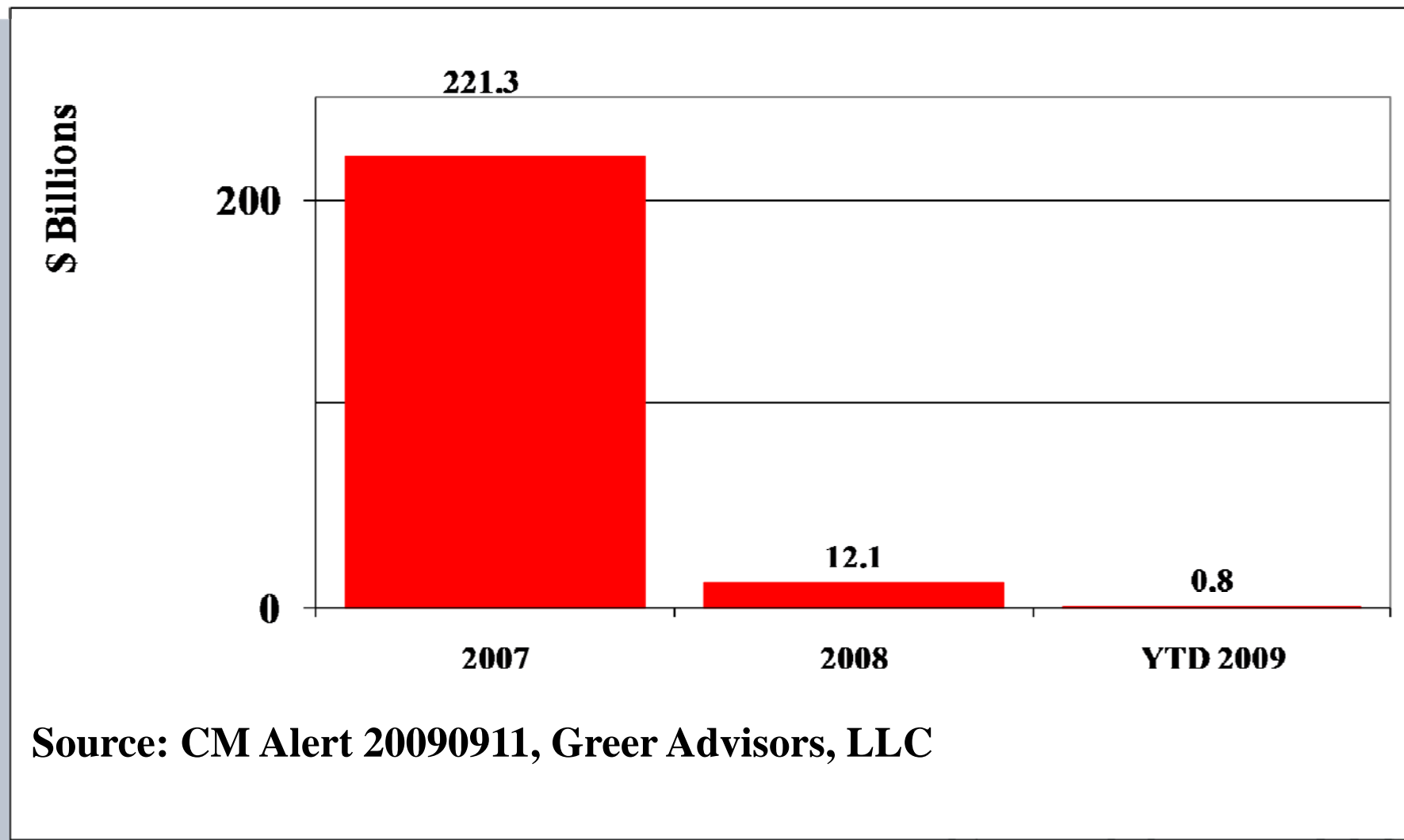


CMBS Issuance in U.S. - Skyrockets



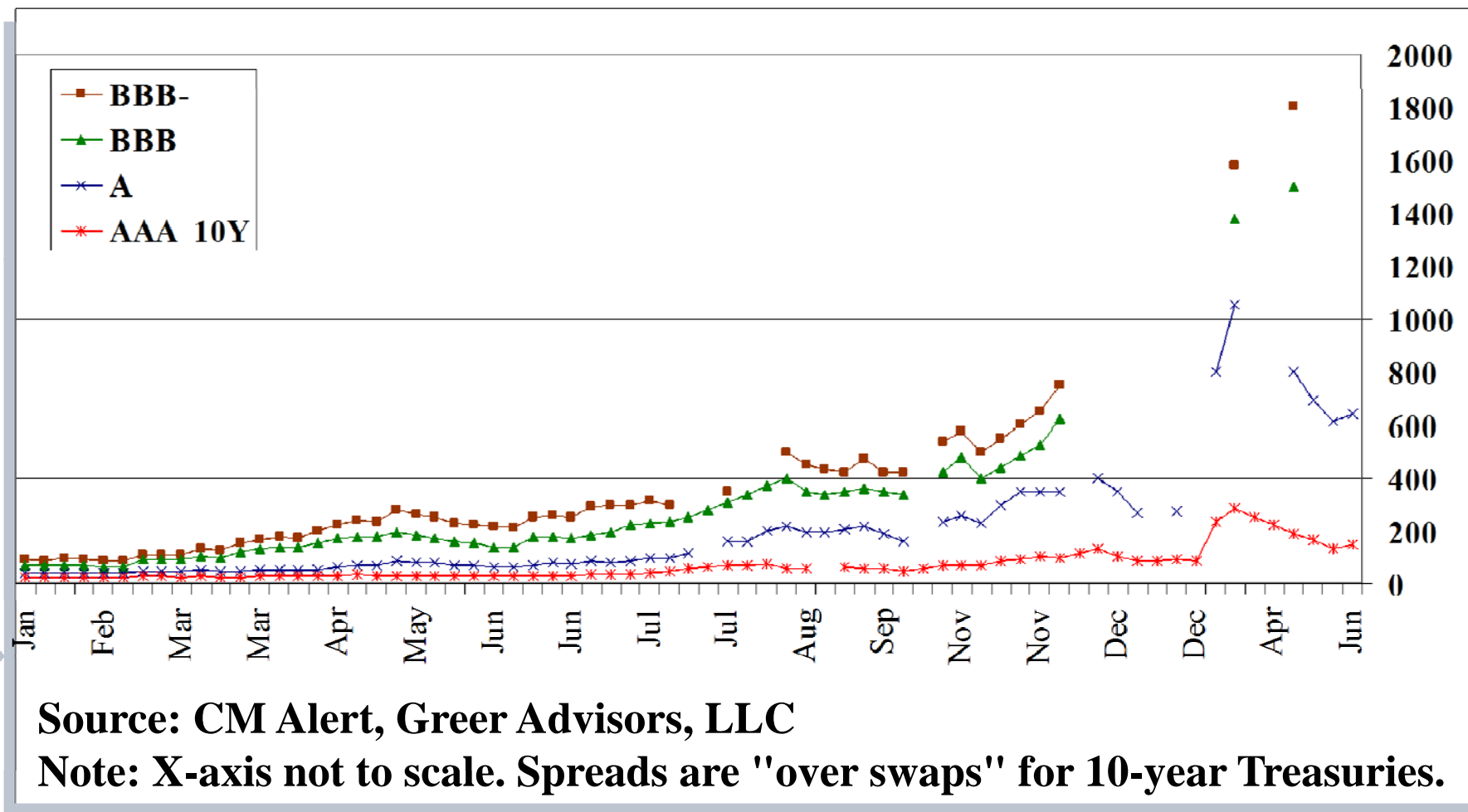
Source: CM Alert 20090911 and Greer Advisors, LLC

CMBS Issuance in U.S. – 2008 Off 99% YTD



Source: CM Alert 20090911, Greer Advisors, LLC

CMBS Yield Spreads (Spread to Swap)



Note: Last "TRUE" CMBS closed was June 29, 2008

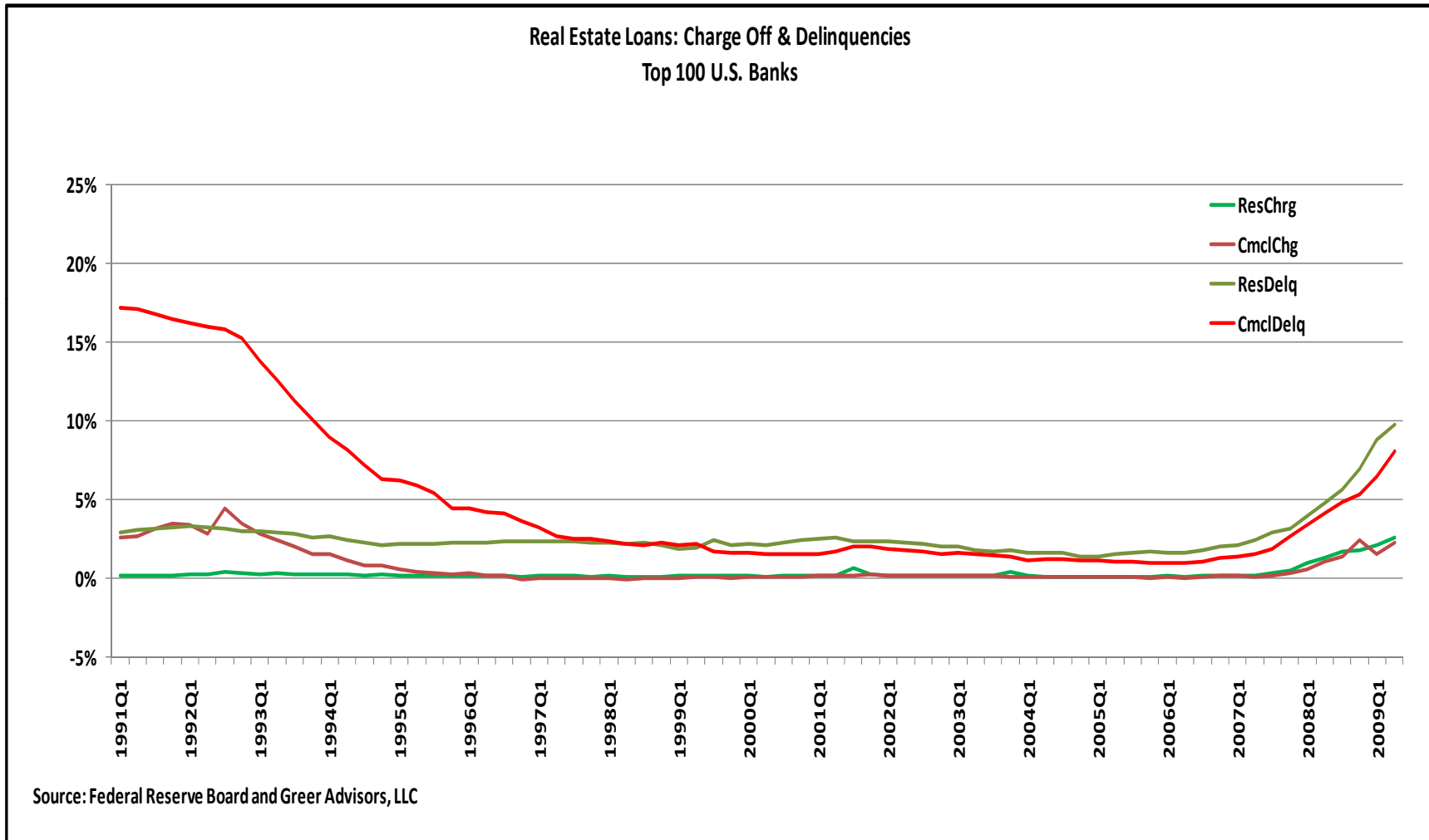
19 Graph covers 1/2007 – Jun 2008

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Future - Mortgage Backed Security

- Until MBS Returns, markets WILL NOT fully recover
- Most banks ARE NOT in the business of holding long term debt
- New MBS WILL EMERGE with terms as follows
 - No “quick buck” investment banks/mortgage bankers
 - Issuer will hold 1-5% of pool as “1st Loss / Good Faith” position
 - 60-70% of pool will be AAA, not 90+%
 - Buyers of paper will “re-underwrite” pools, regardless of SRA

Real Estate Loans



Rise in CMBS/x Yields

Tranche *	Yield 9/16/09	Approx Yield 1/07 **	Rise in Yields**
CMBX.5 AAA Sr	4.71%	3.25%	1.46%
CMBX.5 AAA Jr	8.20%	3.30%	4.90%
CMBX.5 AA	15.65%	3.35%	12.30%
CMBX.5 A	26.90%	3.45%	23.45%
CMBX.5 BBB	44.10%	3.70%	40.40%
CMBX.5 BBB-	48.65%	3.95%	44.70%
CMBX.5 BB	138.34%	3.95%	134.39%

Note: Markit Data and Calculations were based on close of 09/16/2009. Treasury Yield as of close of 09/16/2009 at 3.48%.

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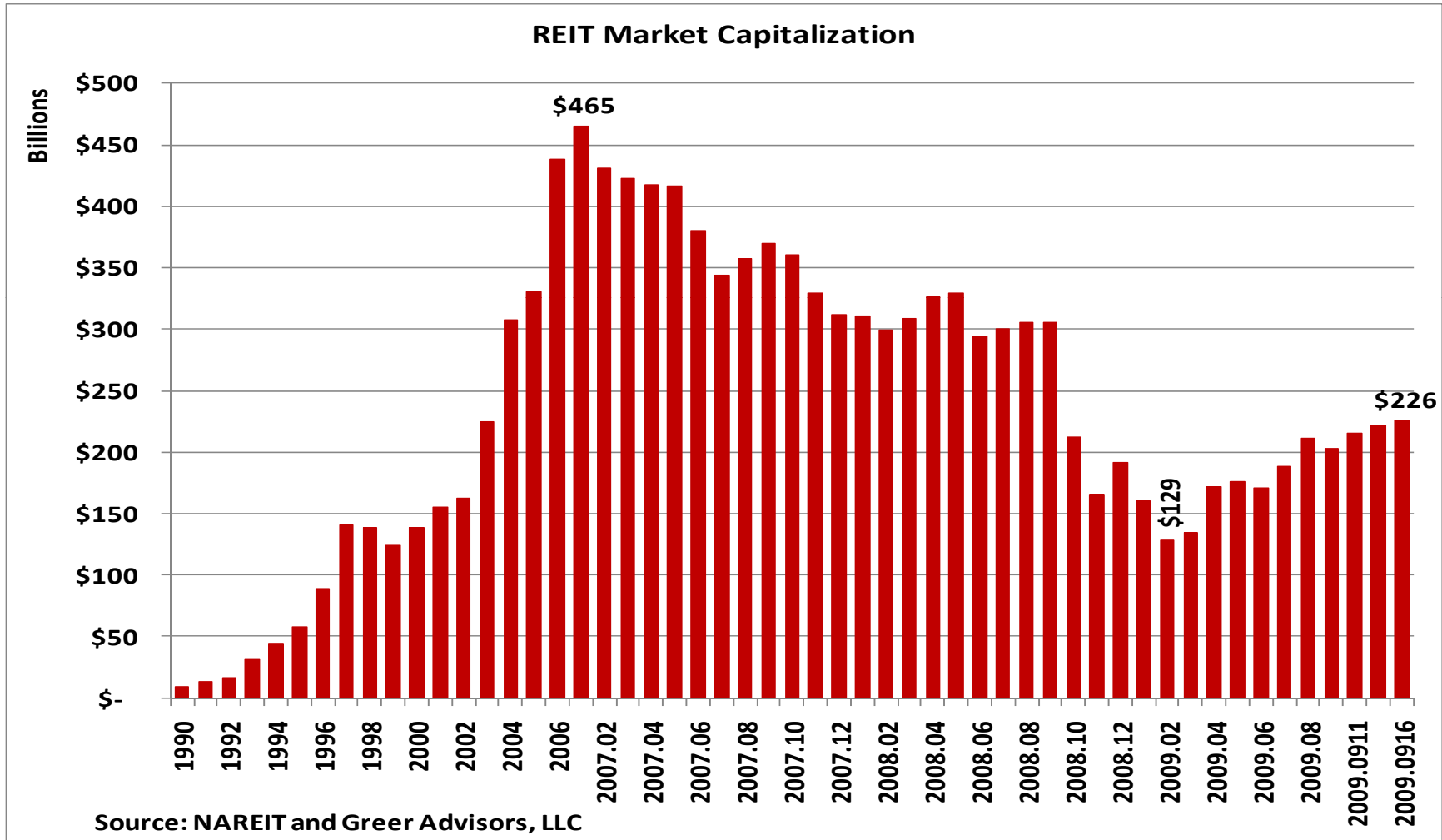
Class-B property equity yield was assumed equal to the Unrated yield, rounded to 100 bps.

CMBS/X – Implied R.E. Yields

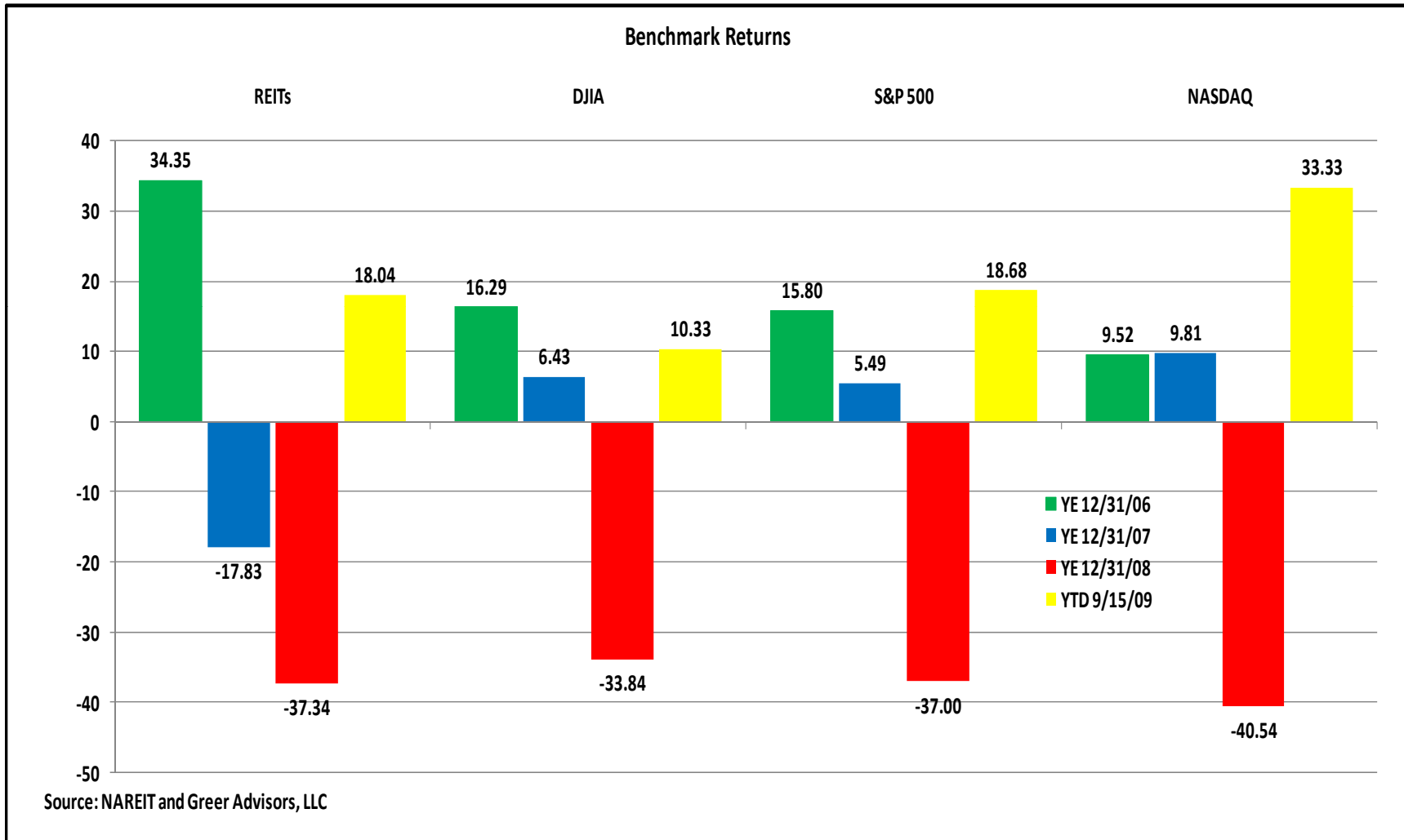
Greer CMBS/CMBx Yield Rate™				
Tranche	Yield	Suboord.	Weight of Debt	Contribution to Total
AAA Sr*	4.705%	29.76%	70.24%	3.30%
AAA Jr*	8.202%	12.70%	17.06%	1.40%
AA*	15.654%	10.63%	2.07%	0.32%
A*	26.898%	8.00%	2.63%	0.71%
BBB*	44.098%	4.72%	3.28%	1.45%
BBB-*	48.652%	3.68%	1.04%	0.51%
BB*	138.336%	2.69%	0.99%	1.37%
Unrated	228.000%	0.00%	2.69%	6.13%
			100.00%	
Implied Overall Debt Yield (i.e. Interest Rate)				15.19%
Loan to Value Ratio				75%
Class A Prop.	50.0%		100%	50.00%
Class B Prop.	228.0%		100%	228.00%

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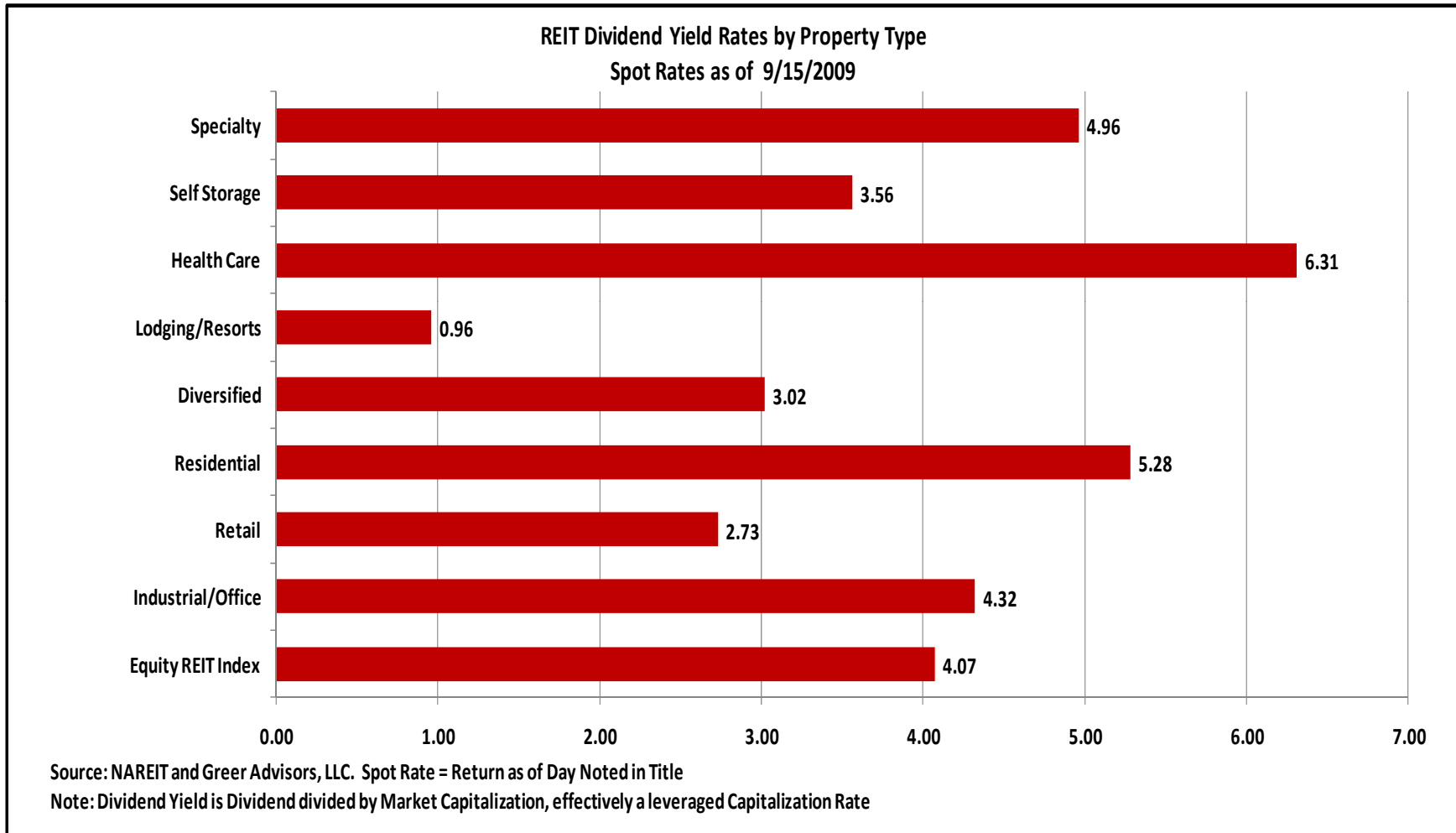
REIT Market Capitalization Trends



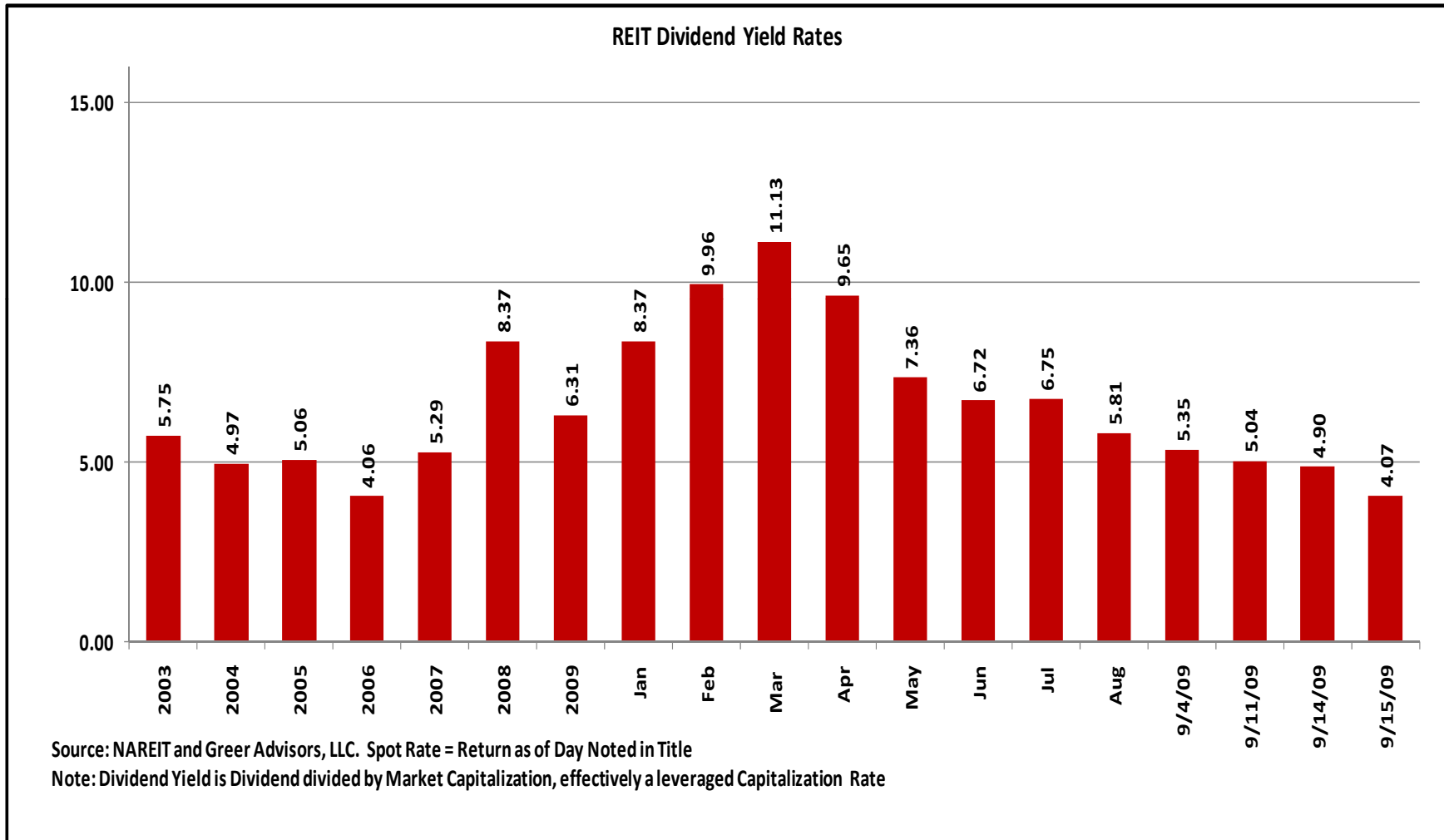
Benchmark Returns — Changes so Fast!



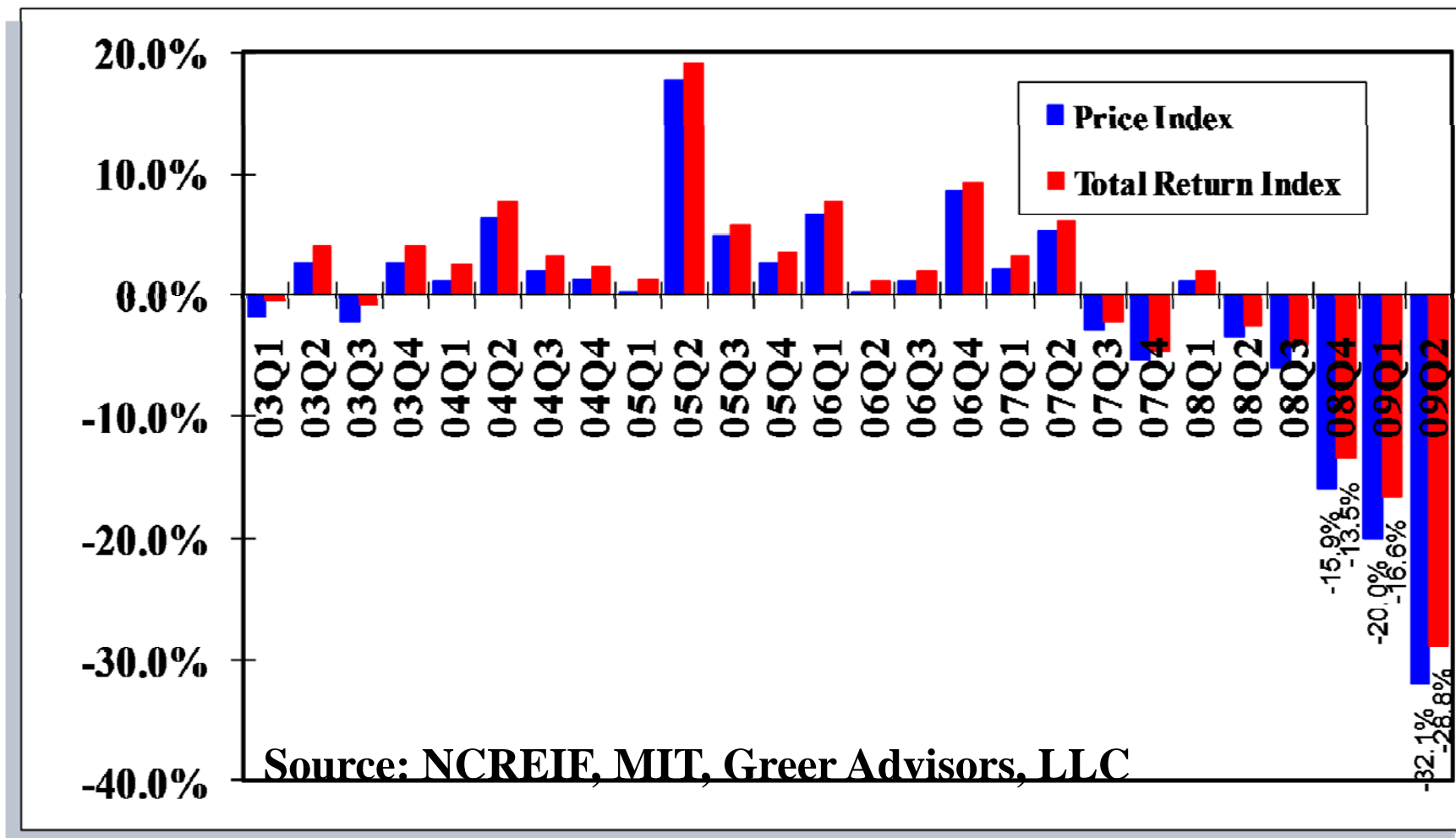
REIT Dividend Yields by Property Type



REIT Dividend Yield (Cap Rate) Trends



NCREIF 09.Q1 Continues Down



Value Fundamentals

CMBS Market is Effectively Broken = Opportunities

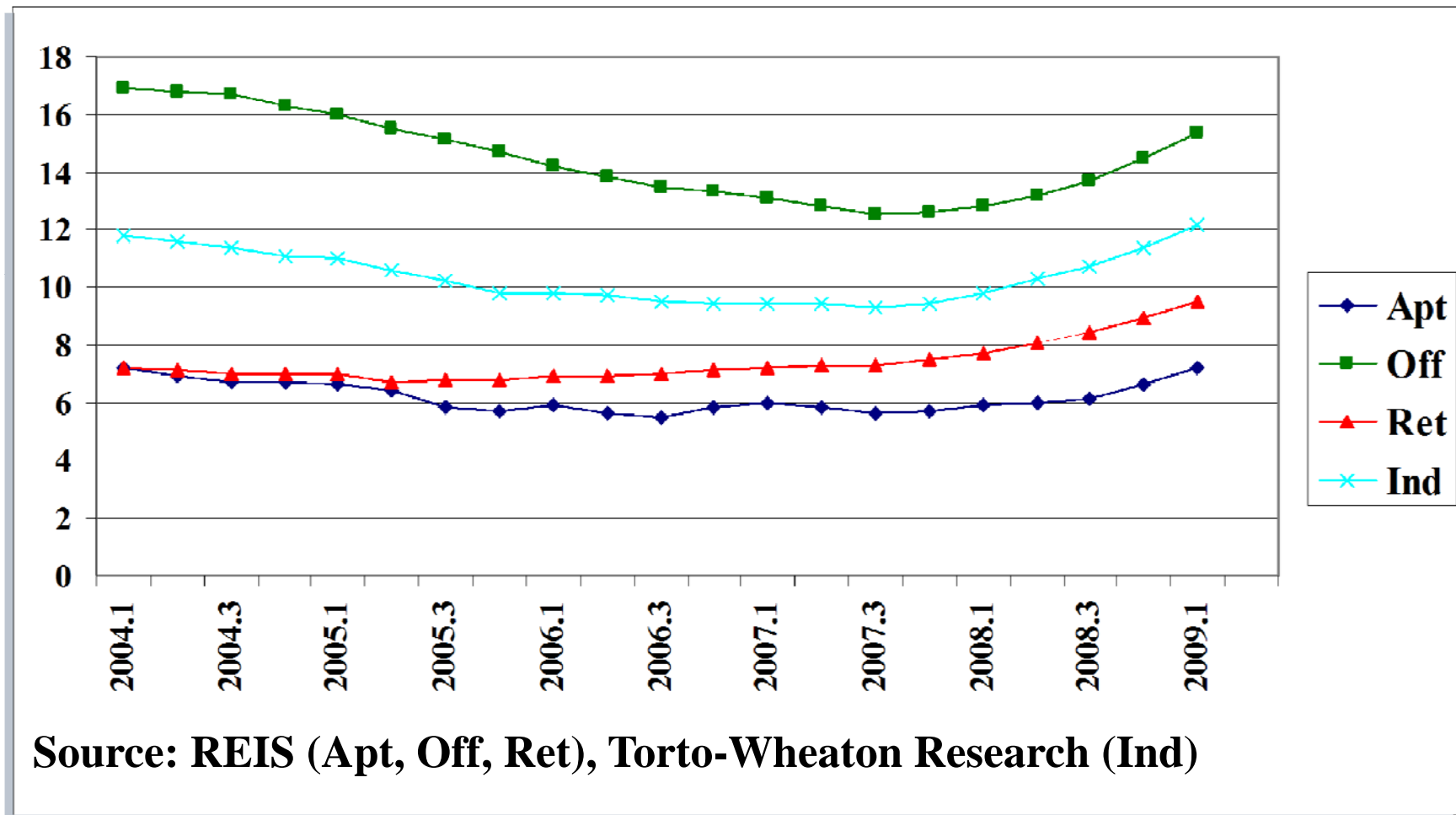
CMBS/CMBX Industry – Imply R.E. Yields Doubled

REITS are “Off” more than 50% = Opportunities

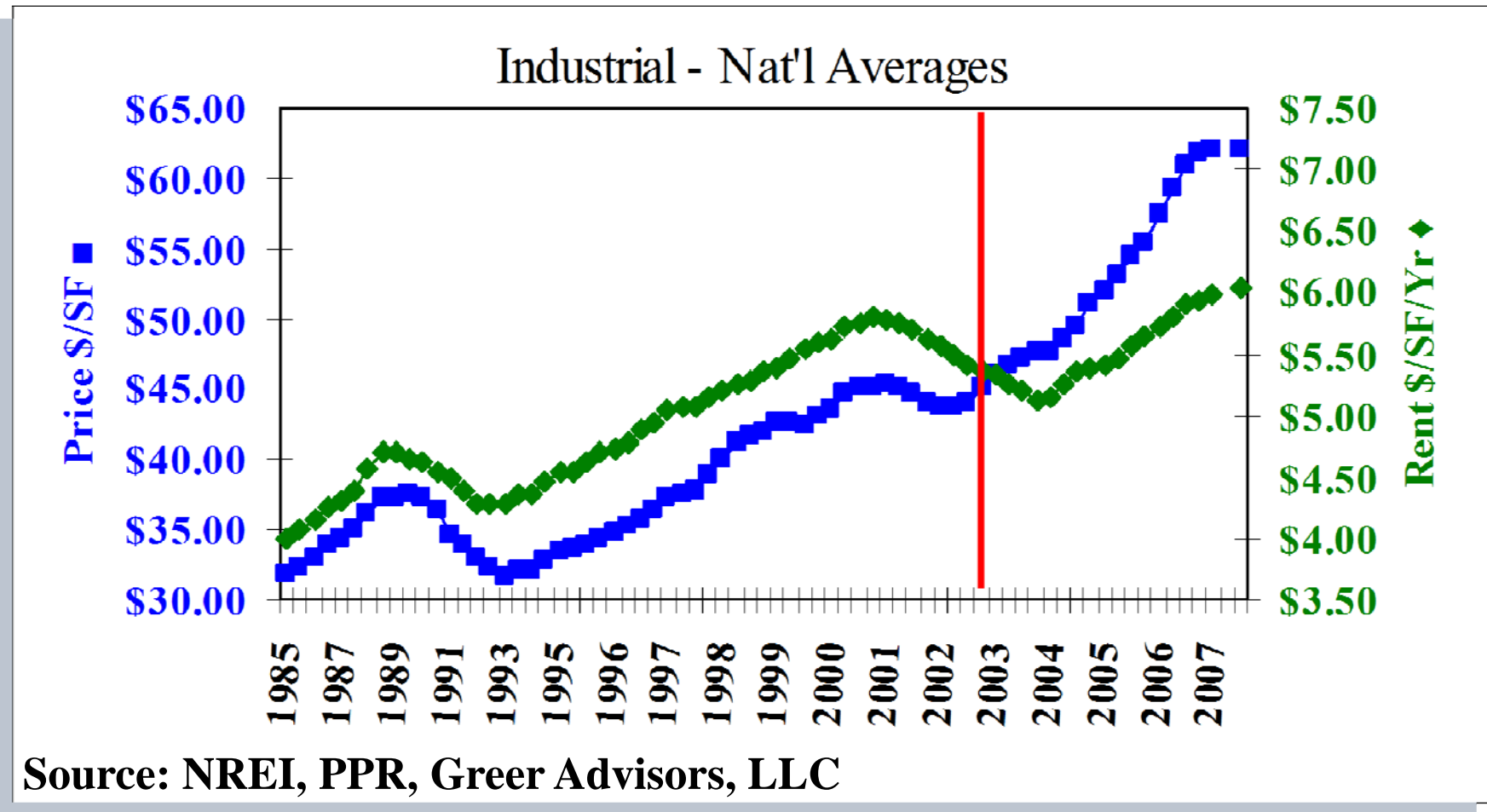
NCREIF is nearly Flat (down 2-3%)

Market Change brings Opportunities!

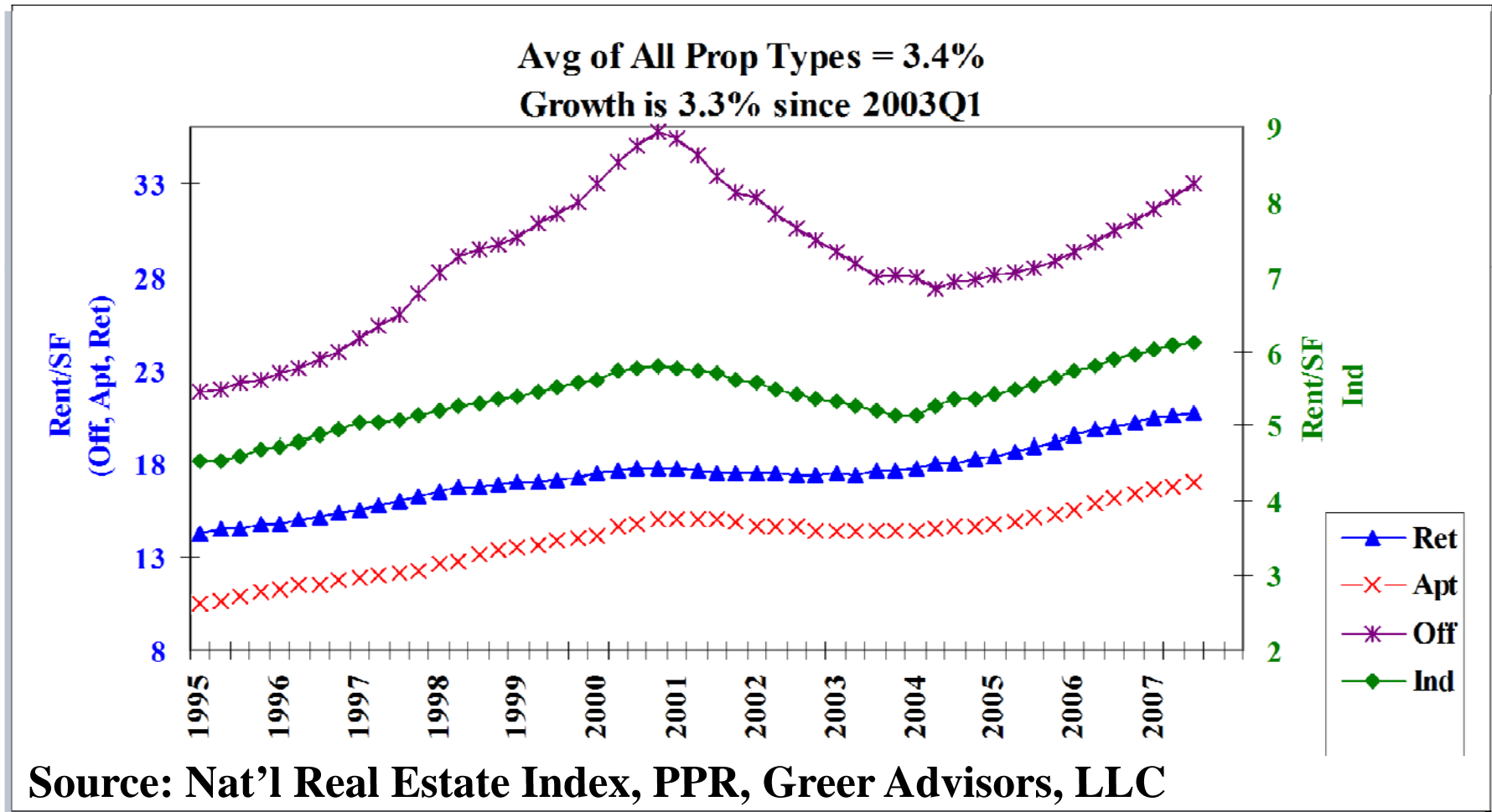
National Trend — Vacancy – thru '09Q1



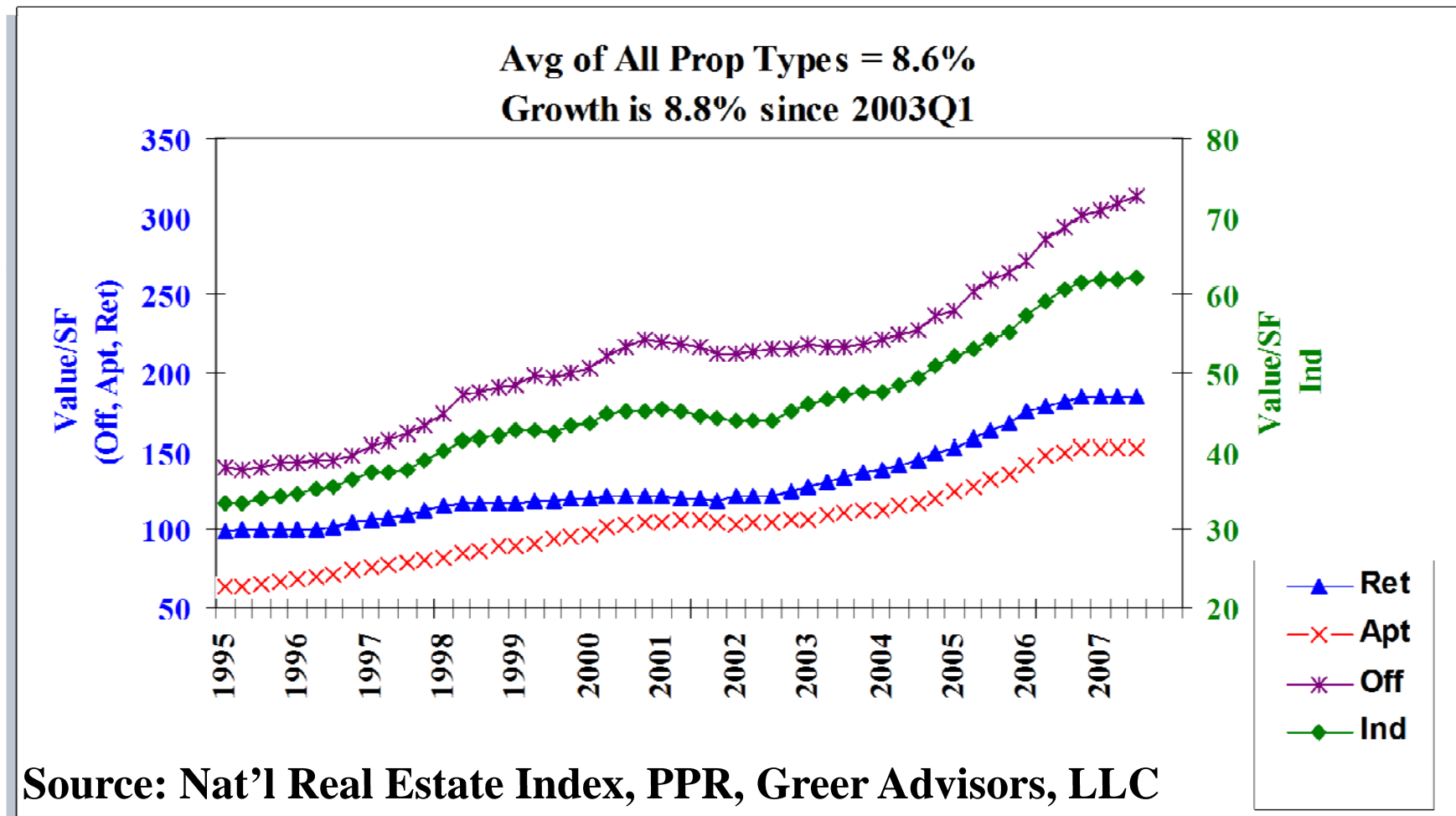
The Relationship Breaks in 2003



Market Trends — National Rents



Market Trends — National Values

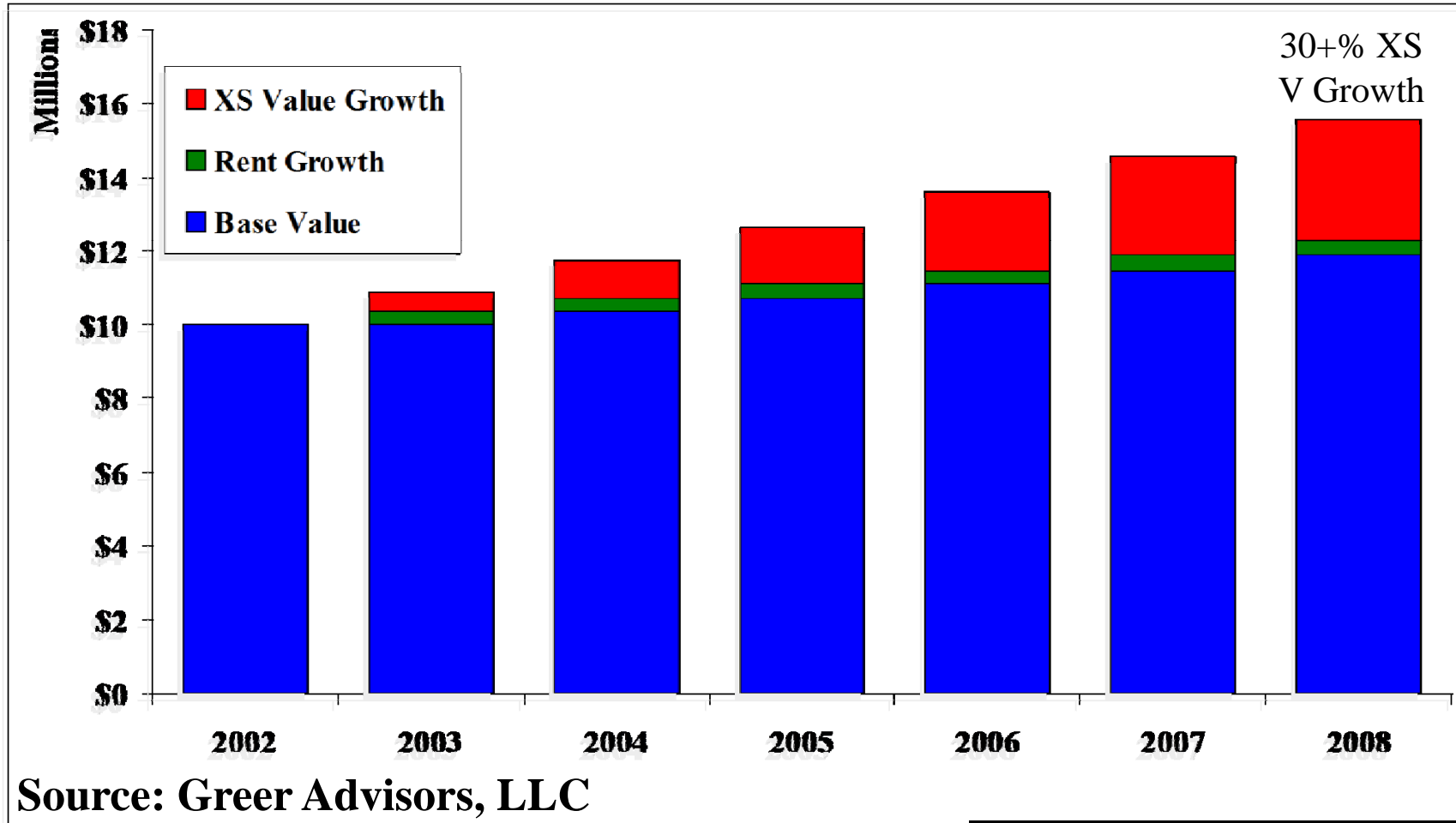


Growth Example — Value vs. Income

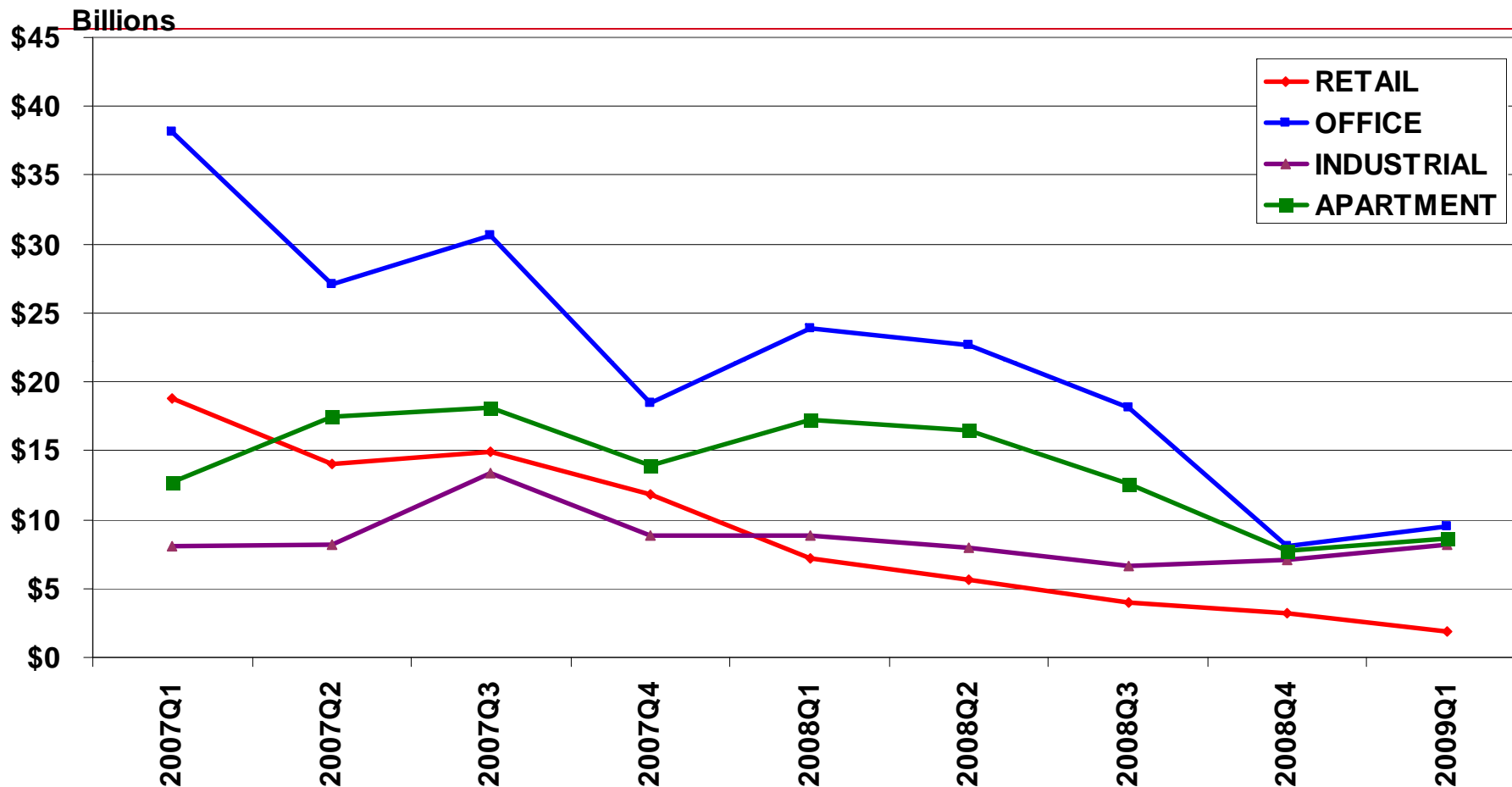
Year	Rent	RentG	Ind Cap	Value
2002	750,000	3.30%	7.50%	\$10,000,000
2003	774,750	3.30%	7.12%	\$10,880,000
2004	800,317	3.30%	6.76%	\$11,837,440
2005	826,727	3.30%	6.42%	\$12,879,135
2006	854,009	3.30%	6.09%	\$14,012,499
2007	882,192	3.30%	5.79%	\$15,245,598
2008	911,304	3.30%	5.49%	\$16,587,211
	average	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

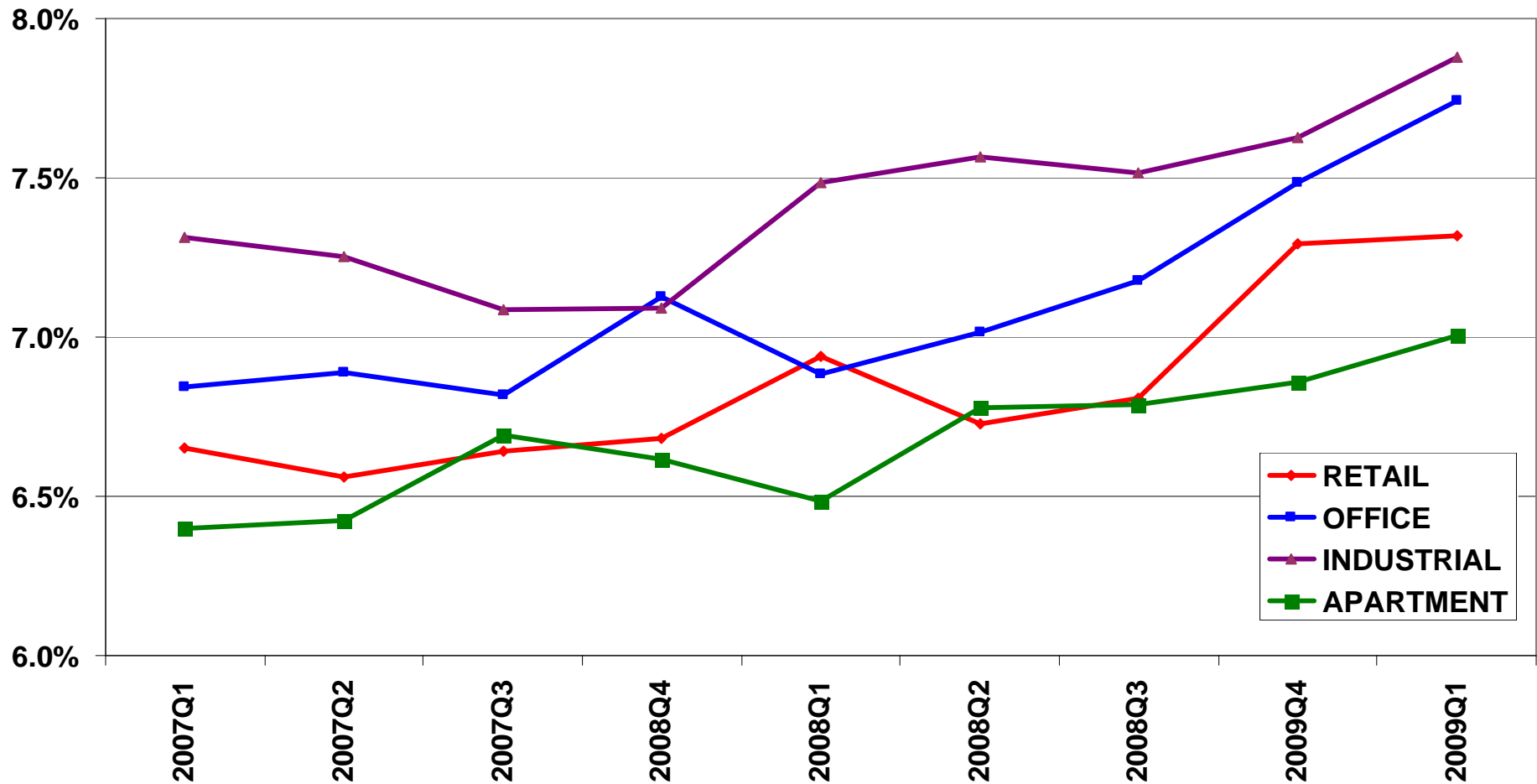


Sales Trends – Volume



Source: Real Capital Analytics, Greer Advisors

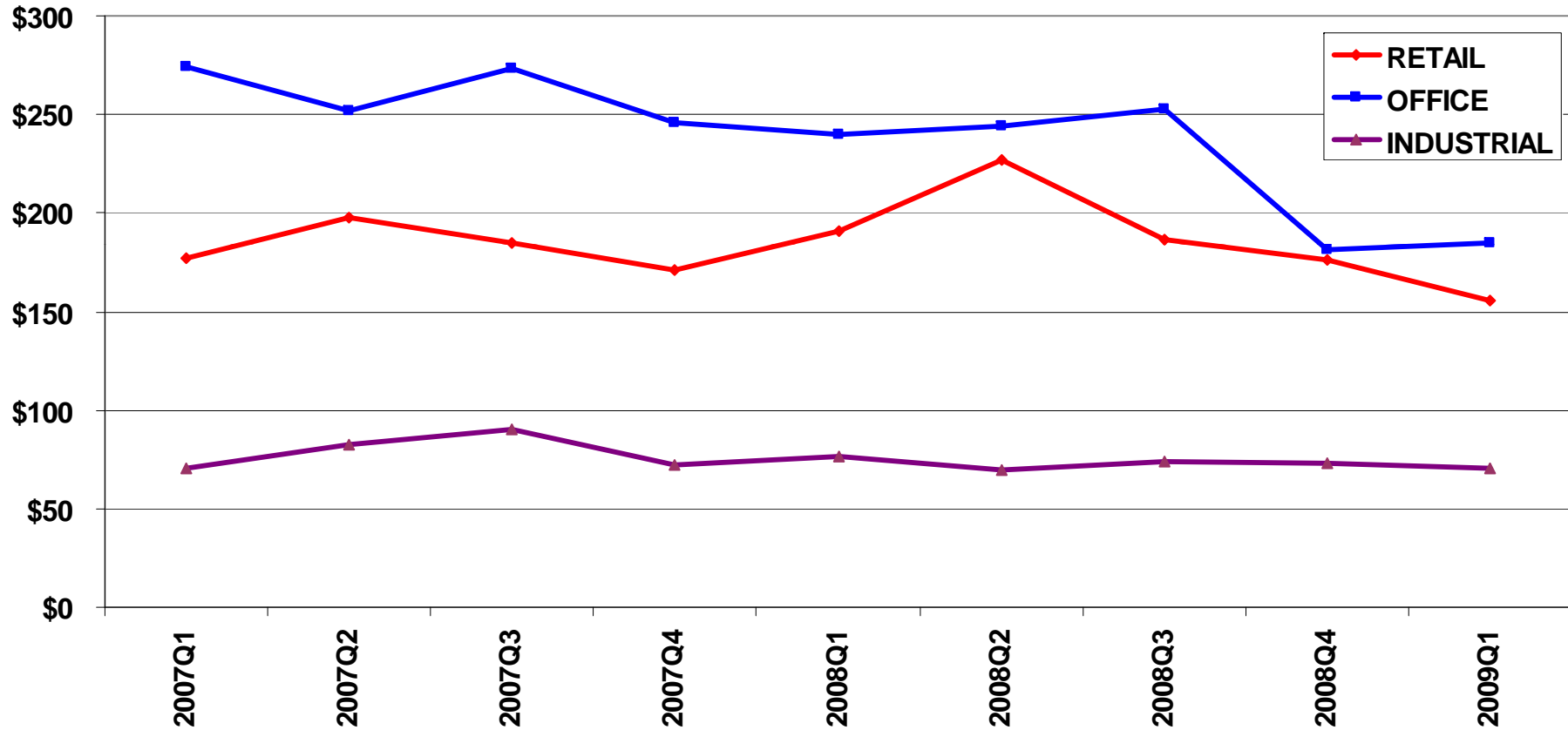
Sales Trends – Cap Rates



Source: Real Capital Analytics, Greer Advisors

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Sales Trends – Price per SF



Source: Real Capital Analytics, Greer Advisors

Quote of the Day

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

~~NY Yankees #8, Yogi Bera~~

Niels Bohr

Nobel Laureate, 1922

Atomic Structure /

Quantum Mechanics



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Conclusions

- CMBS Market – Yield Spreads are 10-100x higher than 1/07
- CMBS – New Business Model will Arise
- REITs – Down 60%
- NCREIF – Mixed / Marginal Changes
- Most Lenders Closed, Stopped or Reduced Lending
- Financing Cap/Yield Rates Have RISEN
- CASH IS KING!
- Value Growth will Lag Rent Growth
- Rents / Vacancies Remain better than early 1990s
- Values Undergoing Correction

Greer's 3-Year Forecast as of 9/17/2009

- Borrowing Rates will Rise Dramatically
- Margins (to 10 Yr Treasuries or LIBOR) will rise 200+ bps in 2009 and settle 350±50 bps over 10 year Treasuries, but might over-correct in the short run, say 10Yr+500 bps
- Rent Growth will Lag CPI growth by 0-5%
- Values will fall 5-15% from 2008-2012. Individual Market Performance will vary widely (10-30% difference in Top vs Bottom)
- Capitalization Rates will Rise 2-5% during 2008-2012 (eg 5.0% to 7.25% = 30% decline in value)
- Declines: #1=Retail; #2=Industrial & Office; then Apartment
- Change Creates Opportunities

Greer's Recovery Signs

- CDS Exposure under \$25 Trillion (i.e. under 50% of peak)
- Decline in CMBx Yield Spreads for 6 straight weeks
- Re-emergence of CMBS market
 - New CMBS Market will include:
 - Issuer Keeps 1-5% 1st-loss piece
 - AAA Subordination near 30%....
 - AAA is 70%, not 90% of issue
- REIT Market Capitalization (Total Value) Stabilizes or Increases for 6 months
- Consumer Confidence Rises and stays above 70 for 6 months
 - As of 8/25/09 index stands at 54.1 (1985=100)
- Risk Curve (AAA Sr. vs BB) flattens to under 500 bps. As of 9/17/09, spread stands near 13,000 bps.

Questions / Answers

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