Trends in Cap Rates, Values and Public and Private Market Real Estate Returns

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What is a cap rate?

- Ratio of a single year’s Income to Value
- But….
  - What year? Last year, Current year, Next year?
  - “Stabilized”?
  - Is there a reserve allowance in the NOI?
  - Are leasing commissions and TIs included?

Where do they come from?

- Surveys, i.e., PWC (Korpacz report)
- Real Capital Analytics
- Comparable sales, brokers
- Implied by discount rate and projected growth in income

Who cares?

- Investors
- Developers
- Appraisers
- Lenders
- Consultants
- Assessors
- Attorneys

Why do cap rates differ?

- Above or below market leases
- Differences in expected growth in income
- Differences in risk
- Supply constraints (physical or political)

Cap Rates Used Improperly

- **Price does not always equal market value**
  - **Wholesale (portfolio) versus retail**
  - **Open bid versus insider deals**
- **Market value assumes typically motivated buyer and seller, typical financing and sufficient time to market property**
- **Buyer motivations may differ – i.e. TICs, Private REITs with plans to sell off assets and keep others**
- **Financing does not influence value, but it does influence price**
- **Triple Net Leases are more about credit than property value**

Trends in Cap Rates

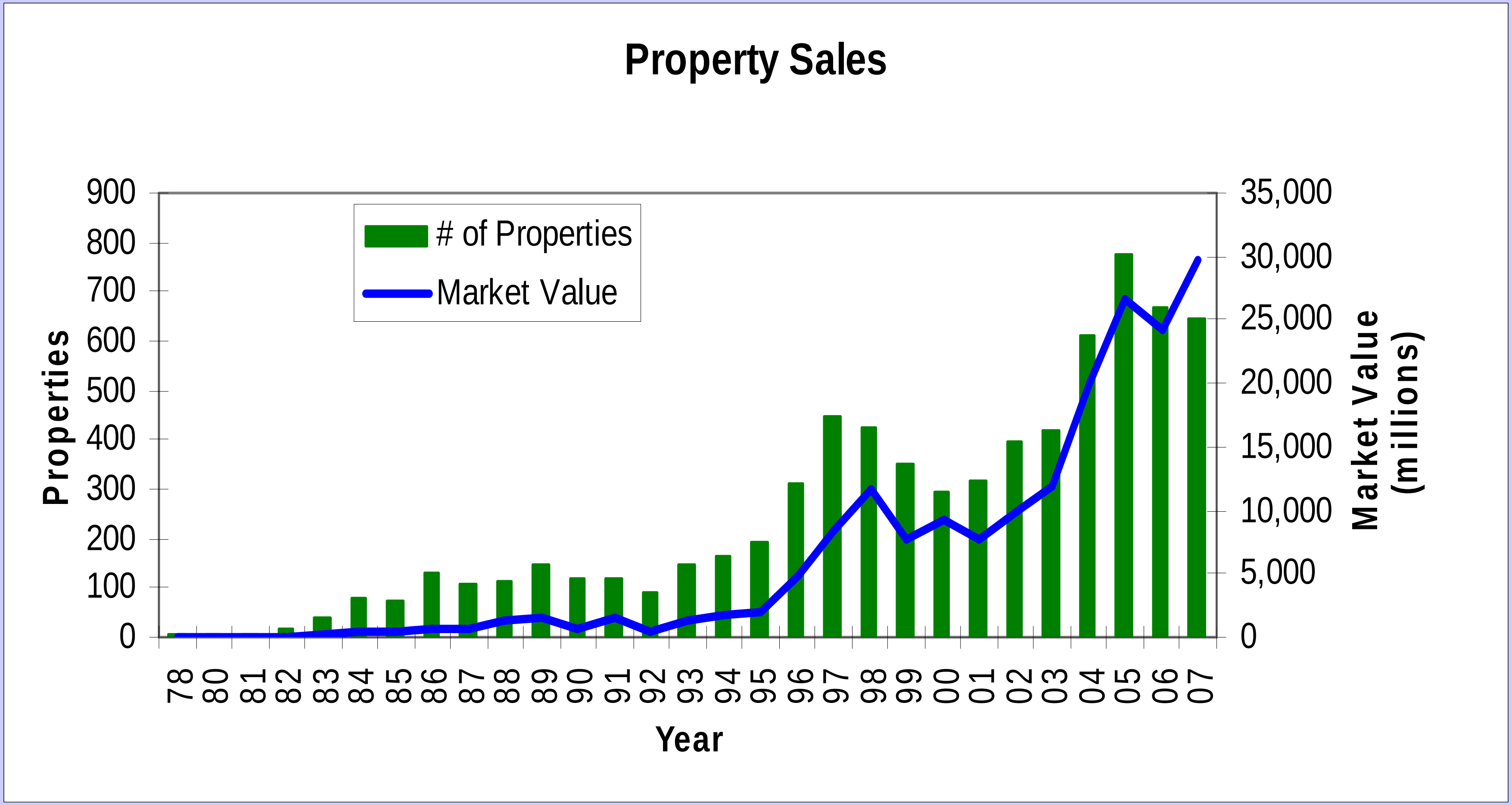
- Last year - still falling!
- This year still lower, then a bit flat with some recent signs of moving up based on fears of over building in some areas and for some property types, plus the spike in CMBS market (cost of capital)
- Condo converters have disappeared affecting multifamily market prices
- Capital flows continue to move into real estate away from other assets?
  - Need for yield income and lower yield expectations
  - Too many investors use history as a guide to future returns without regard to market turning points and over saturation

Private and Public Market Trends

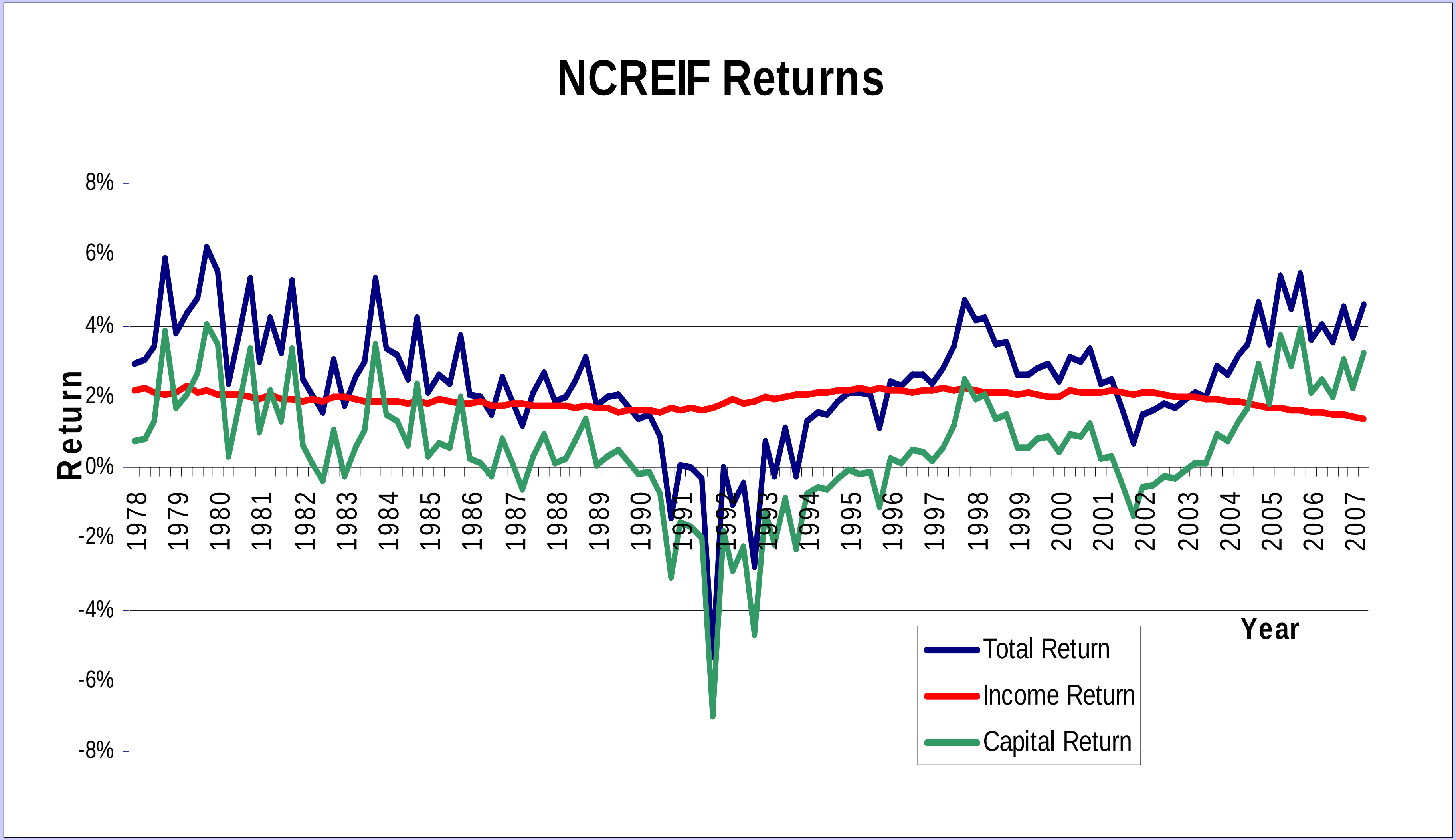
- Private markets – NCREIF
- Public Markets – NAREIT
- Transactional Data – Real Capital Analytics, REIS, Torto Wheaton, CoStar and others.

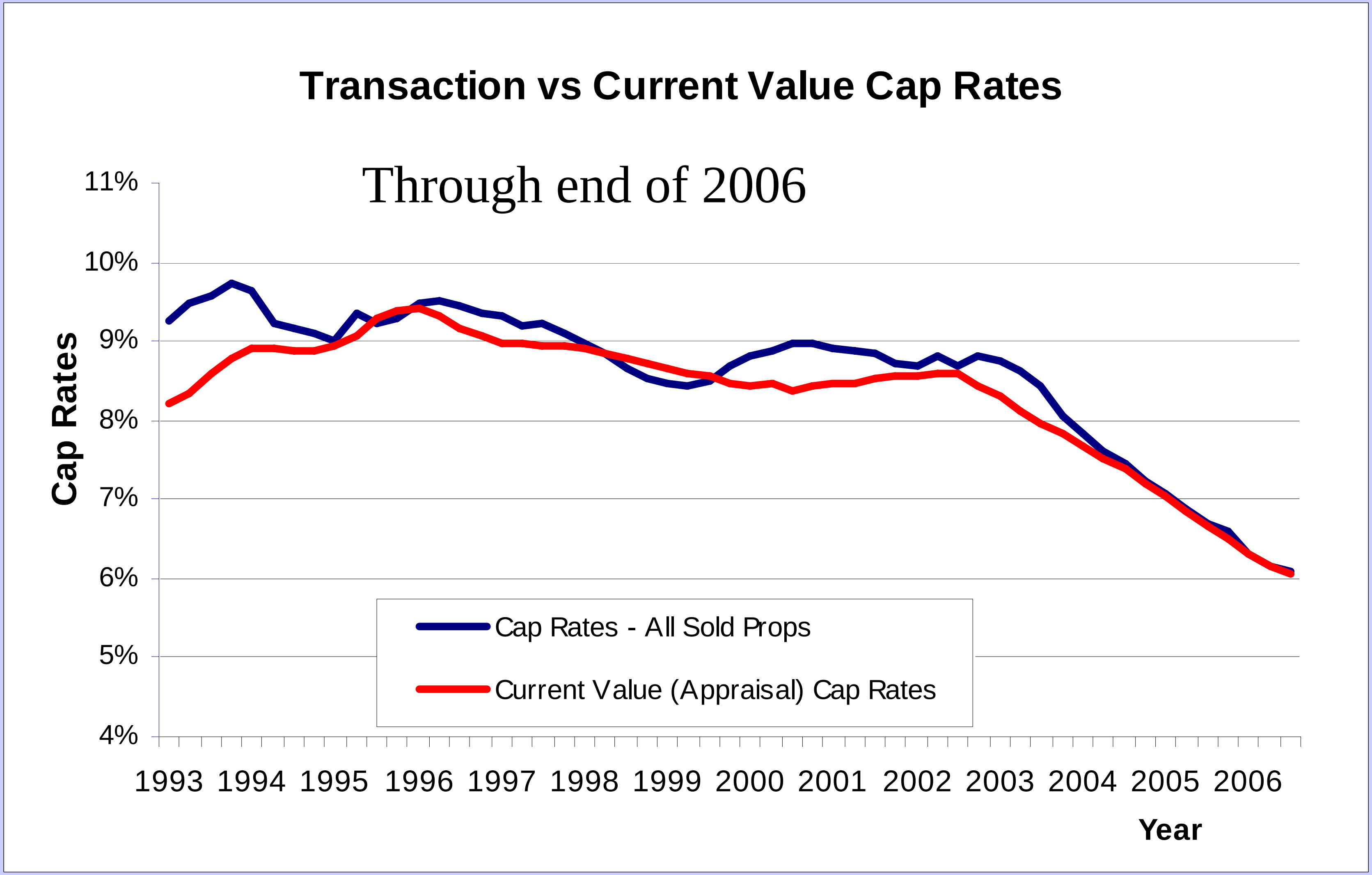
What/Who Is NCREIF?

- Not-for-Profit Industry Association
- Founded: 1982
- Index Starting Date: 1977
- Membership:
  - Investment Advisors (e.g., Prudential, JP Morgan, Morgan Stanley, Blackstone, UBS)
  - REITs (e.g., Equity Residential Properties, Prologis, Boston Properties)
  - Plan Sponsors (e.g., CALPERS)
  - Professionals (appraisers, accountants, data vendors)
  - Farm and Timber (e.g., John Hancock, UBS Agrivest)
  - Academics (university professors)


Property Sales
# of Properties
Market Value
Properties
900
800
700
600
500
400
300
200
100
0
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Market Value (millions)
78 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07
Year

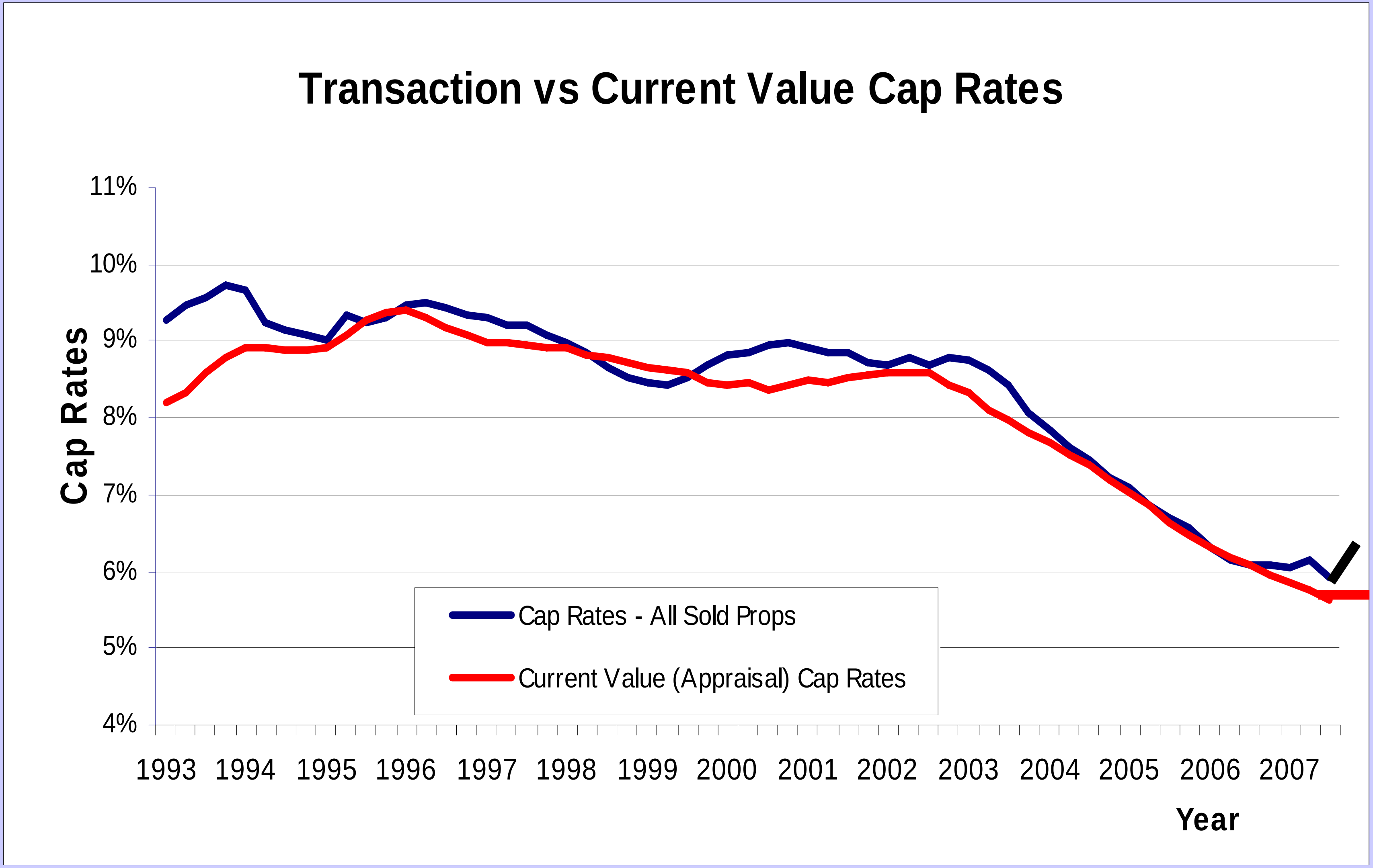
NCREIF Returns by Quarter for All Property Types

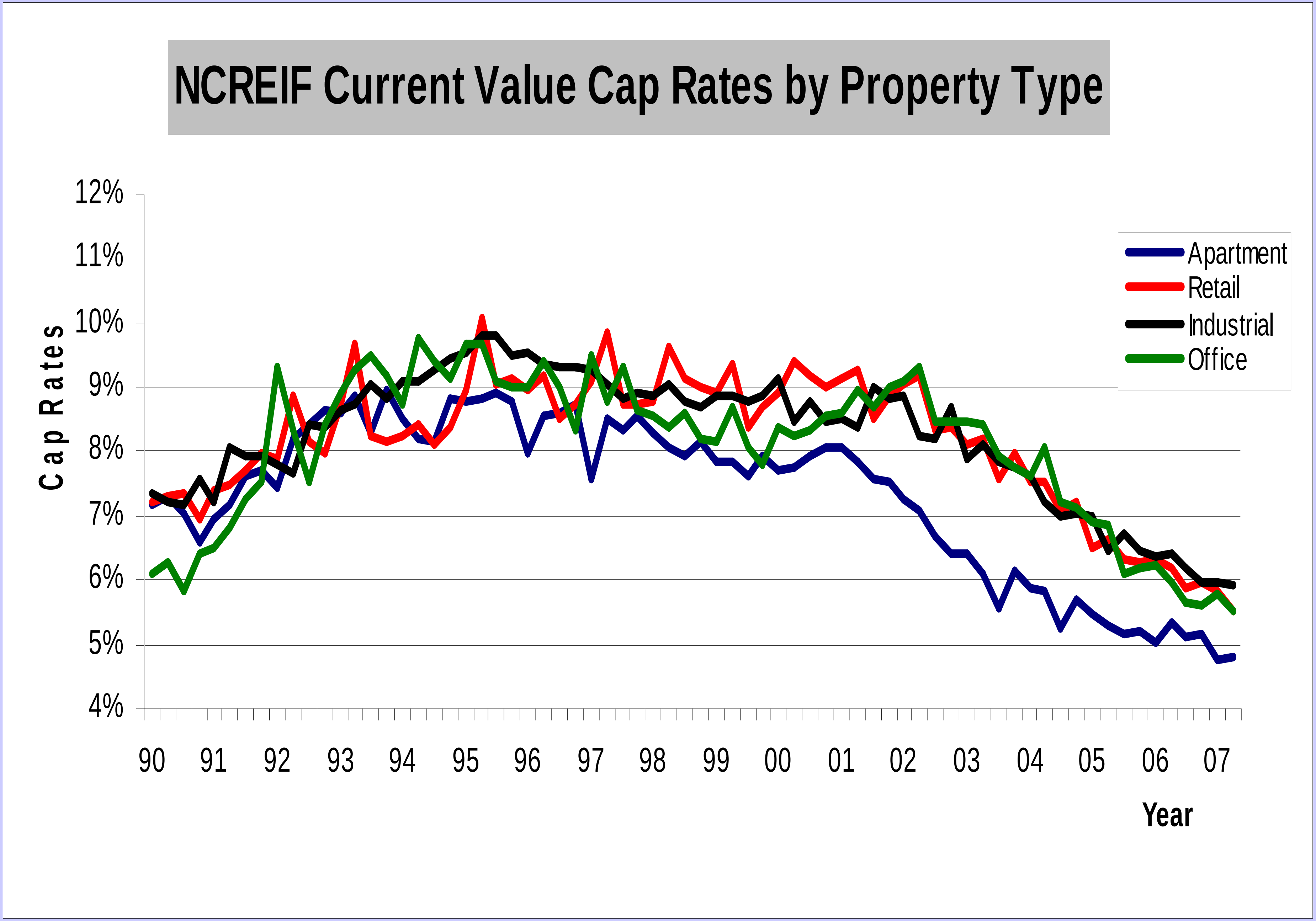




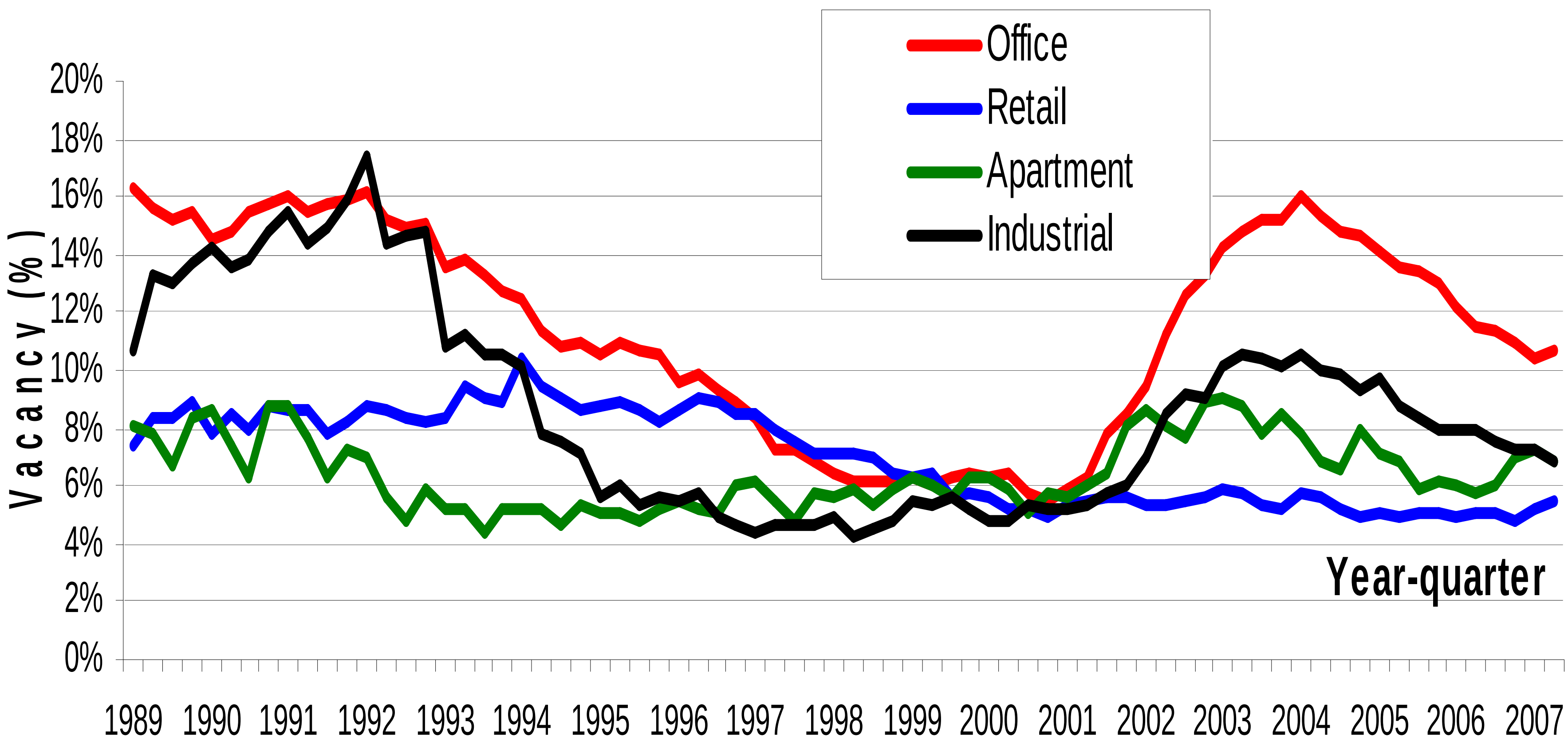
Transaction vs Current Value Cap Rates
Through end of 2006
Cap Rates
11%
10%
9%
8%
7%
6%
5%
4%
Cap Rates - All Sold Props
Current Value (Appraisal) Cap Rates
1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006
Year

Through second quarter of 2007 plus some third quarter estimates

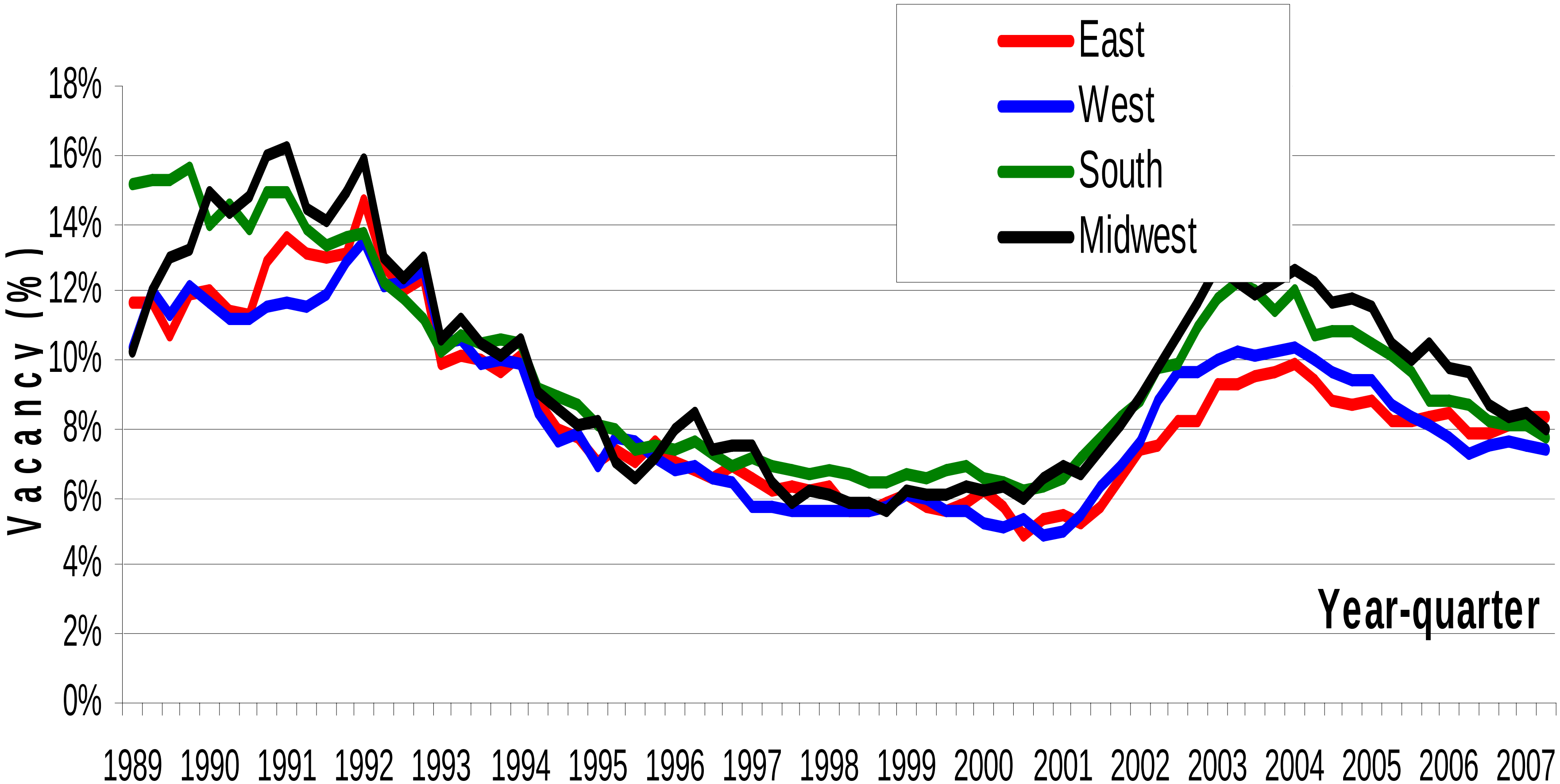



NCREIF Current Value Cap Rates by Property Type
12%
11%
10%
9%
8%
7%
6%
5%
4%
Cap Rates
Apartment
Retail
Industrial
Office
90
91
92
93
94
95
96
97
98
99
00
01
02
03
04
05
06
07
Year

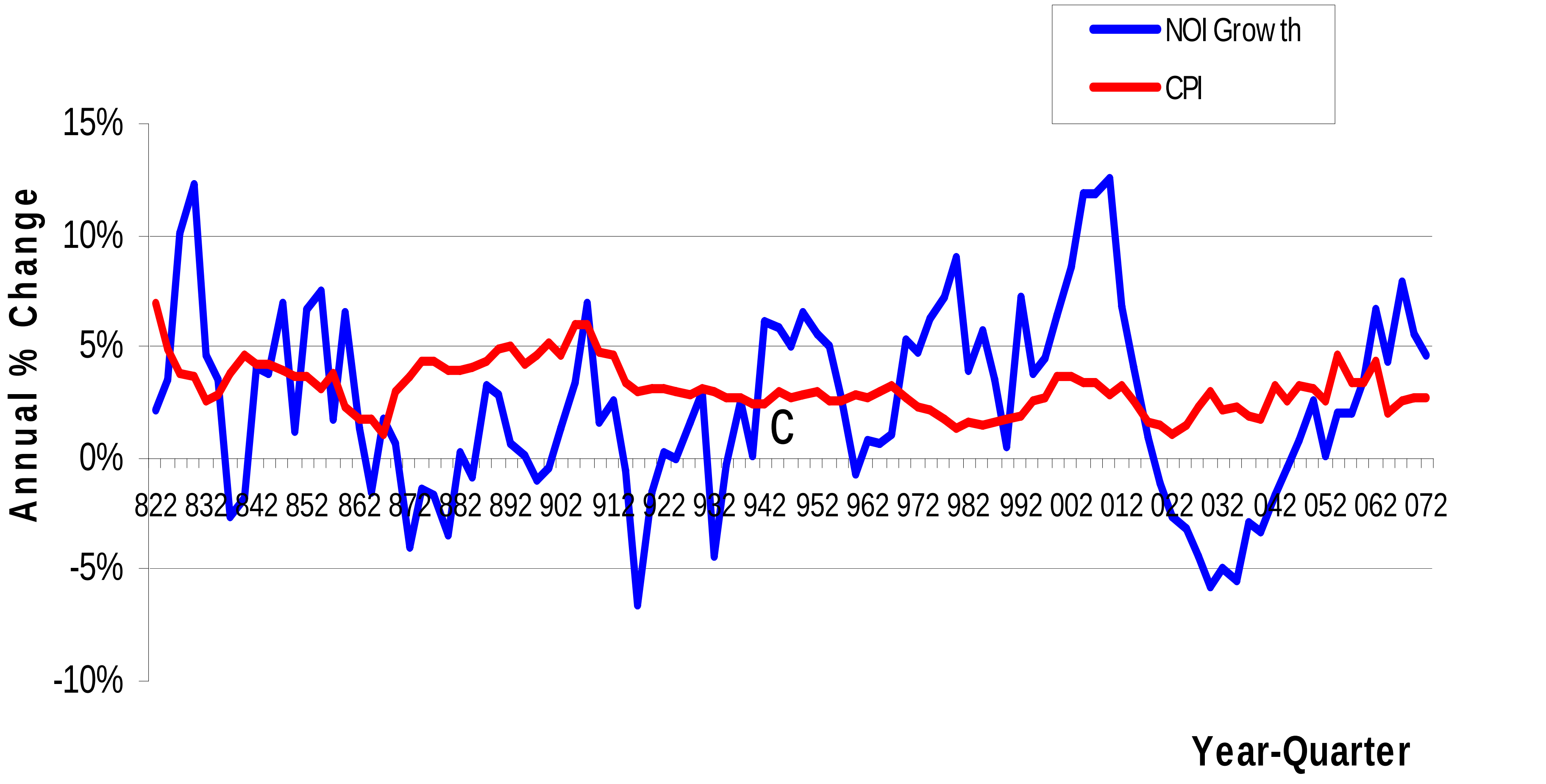
NCREIF Vacancy by Property Type



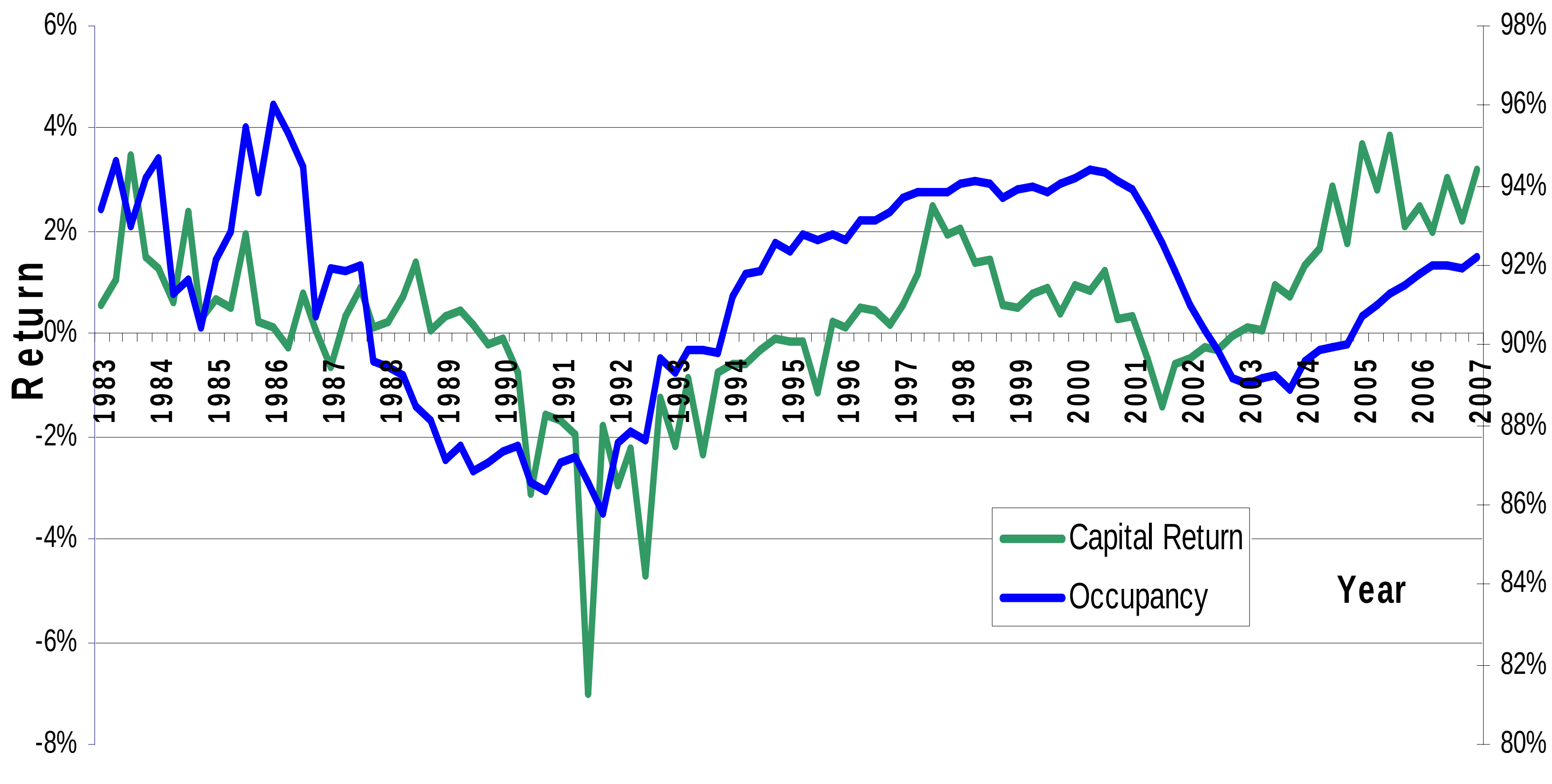
NCREIF Vacancy by Region



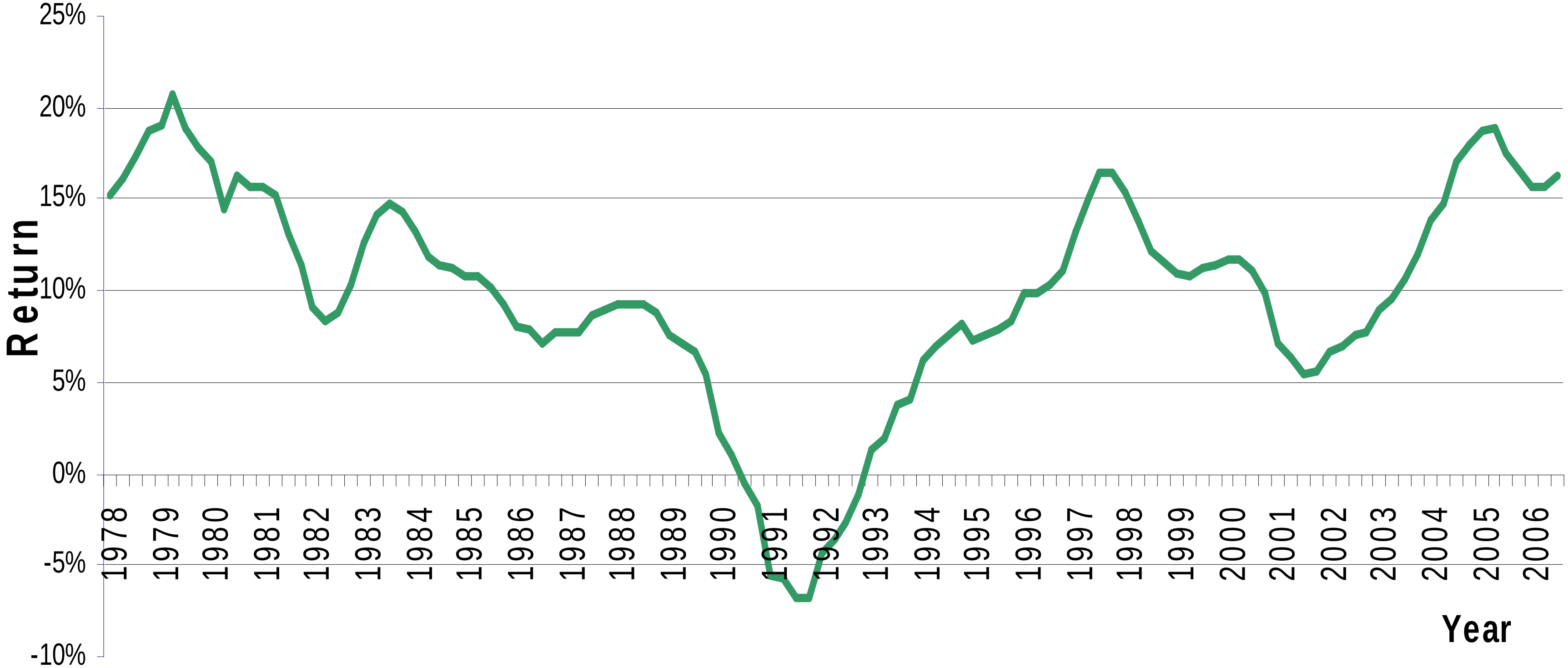
NCREIF NOI Growth (4 quarter moving average)



NPI Capital Returns vs. Occupancy



Private Real Estate Returns (Unleveraged)
Four Quarter Rolling Total



Public Markets - REITs

- REITs’ primary assets are real properties
- Income comes from various sources
  - Property Income
  - Third Party Management
  - Property Development
  - Other Miscellaneous Sources
- Income is distributed in the form of dividends with three components
  - Earnings
  - Depreciation
  - Capital Gains
- Tax advantages

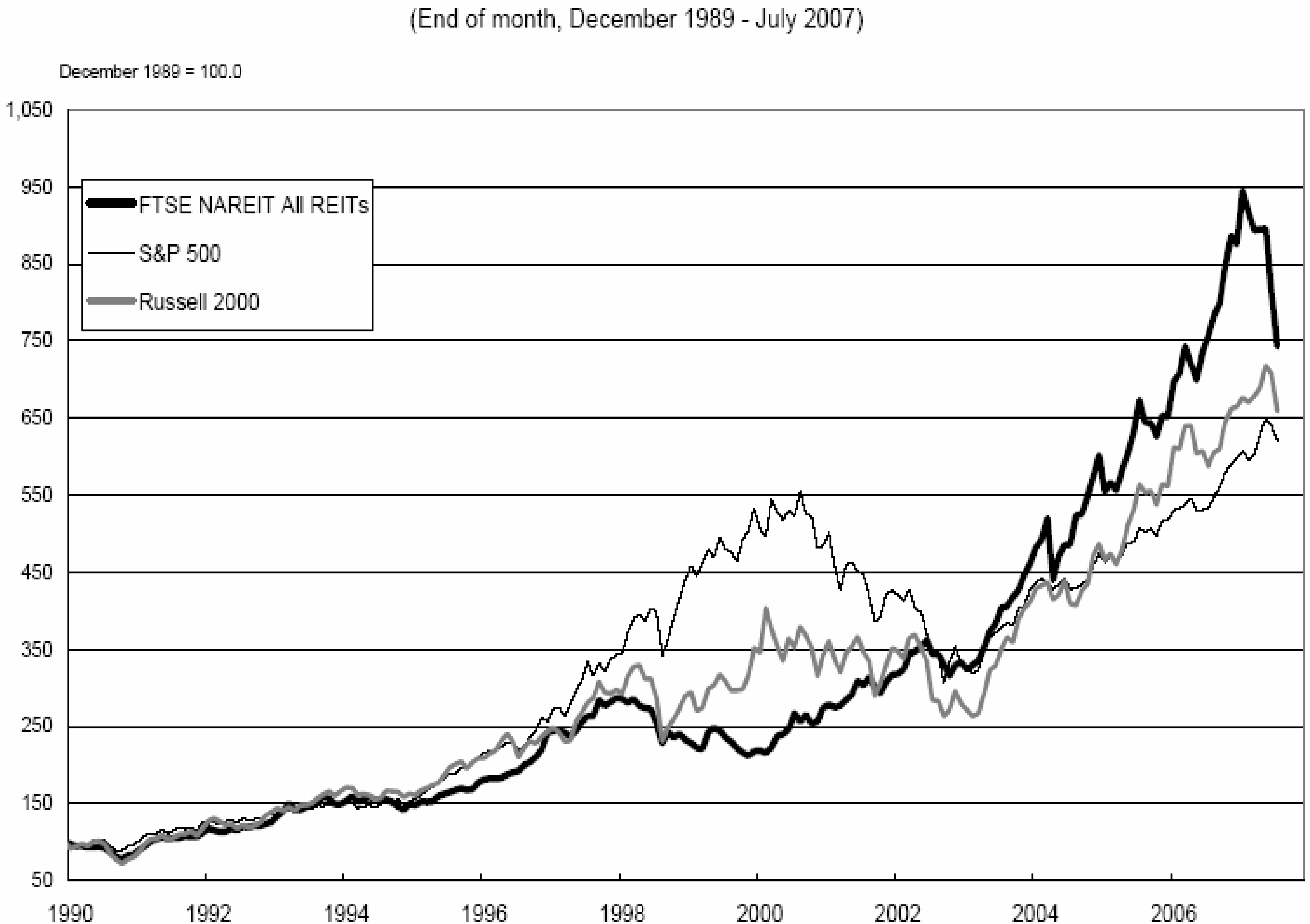
Current Market Conditions

- Property fundamental performance appears to be solid and improving in some sectors
- Dividend yields low by historic standards but have moved up a touch
- Payout ratios expected to decline
- Growth expectations – debt offsetting performance
- Prices were defying gravity in 2006 and early 2007, but took big hits in recent months
- Volatility much more pronounced
- Capital Market factors may overwhelm Space Market
- Premium to Net Asset Value – depends on which NAV – huge range now seems to be showing under pricing

REIT Data Availability

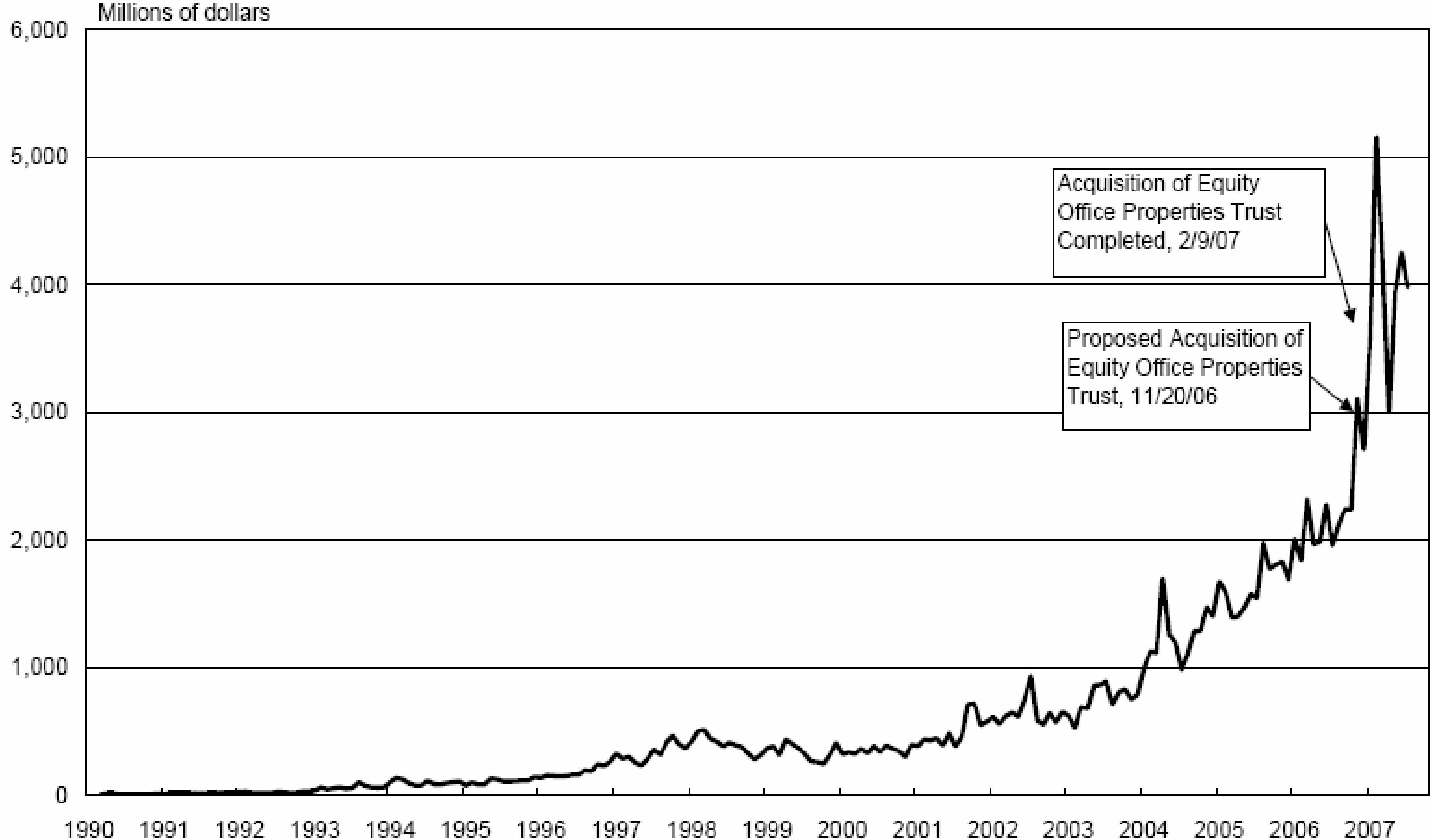
- Publicly available data
  - Acquisition and sale date – Whose numbers do you believe?
  - Individual property data – occupancy, tenants, but not income
  - Transactions reported in other data sets
- Daily pricing provides source of frequent, consistent data – but not well understood
- Data compiled by SNL Securities
  - 14,000 plus properties
  - Portfolio level operating performance
- Data reported in other sources – generally estimated or allocated across pool
- Good for the broad picture, bad for specific properties

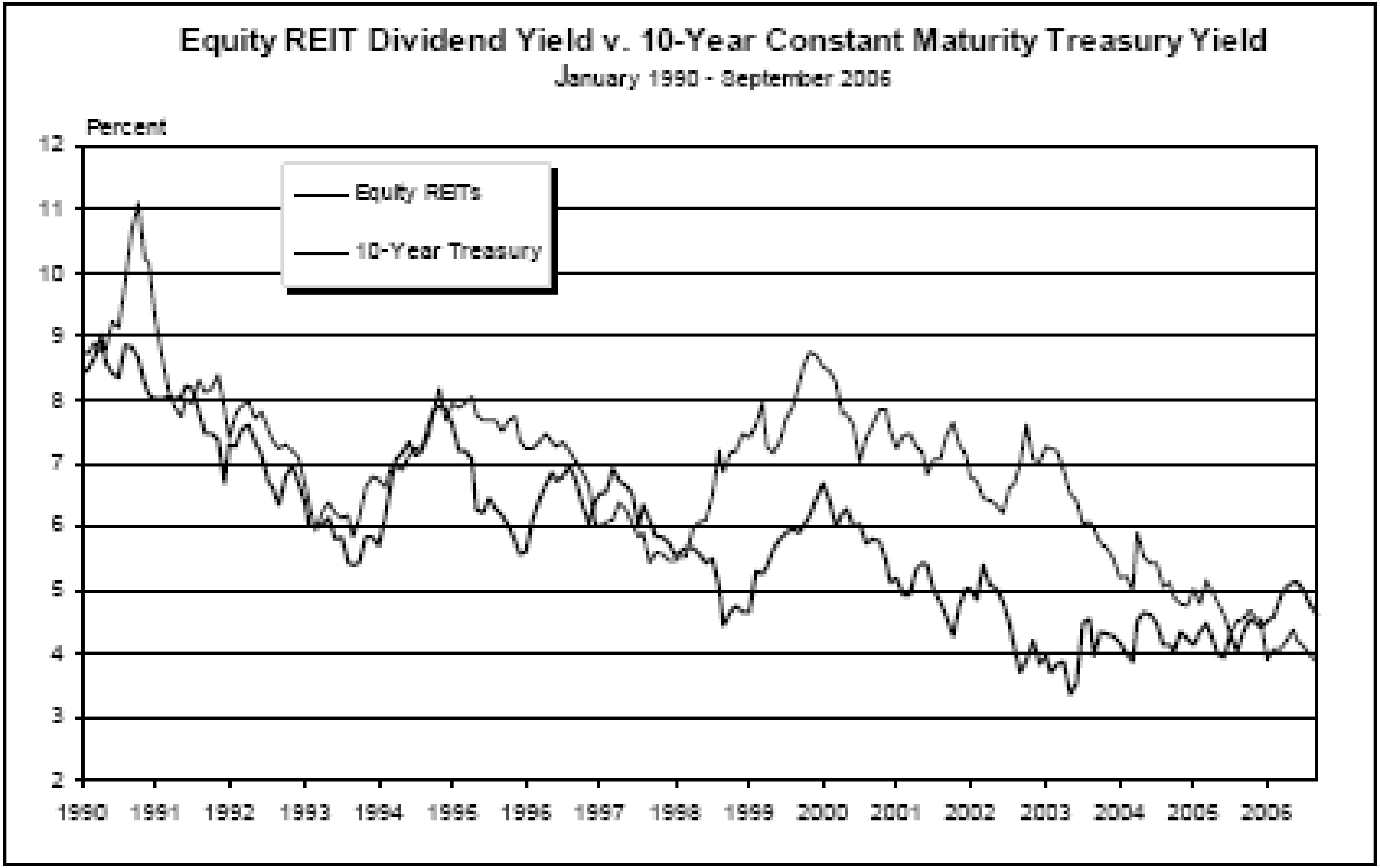
Major Stock Market Returns



Average Daily Dollar Trading Volume of the FTSE NAREIT All REIT Index

(March 1990 - July 2007)





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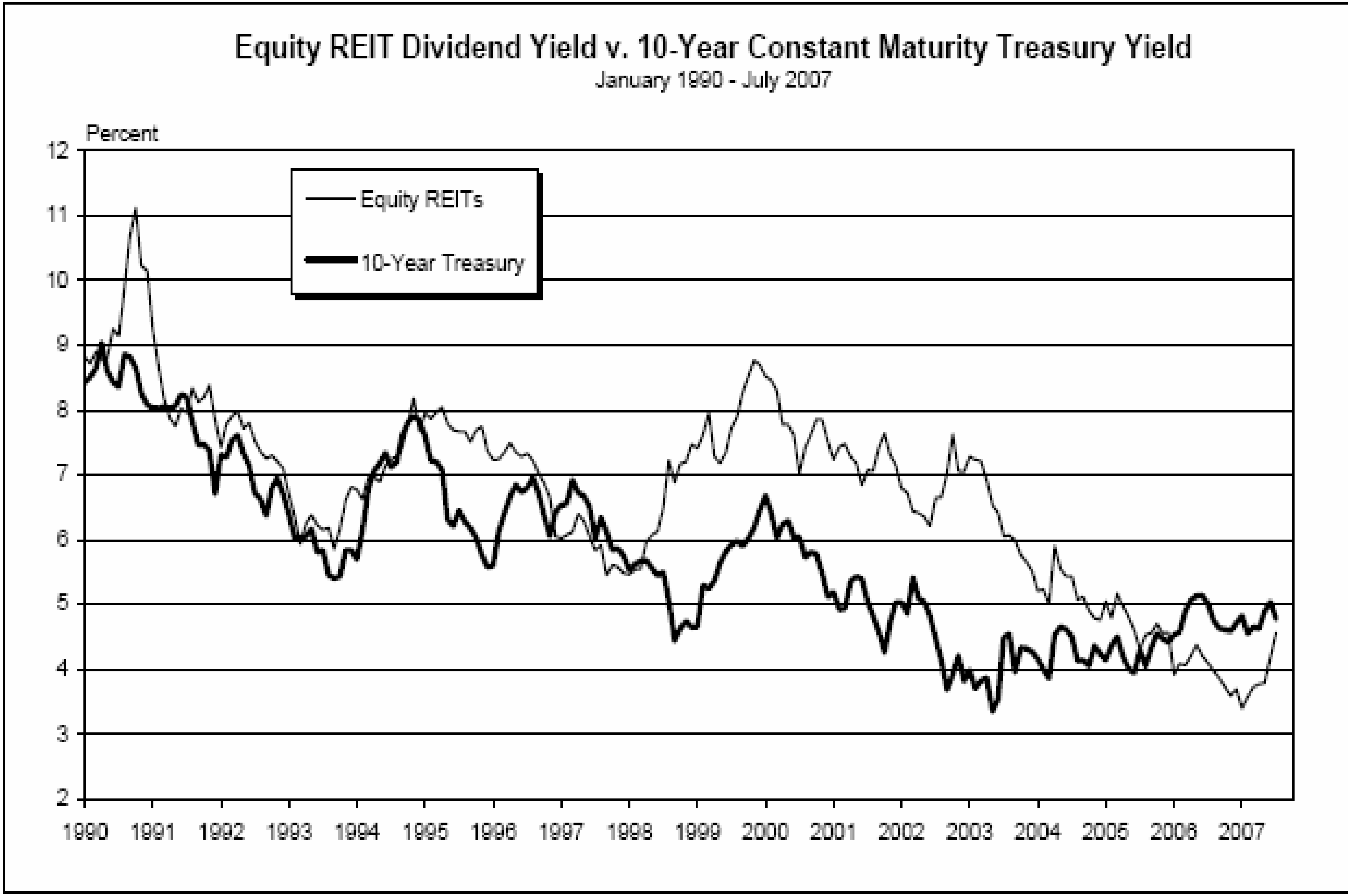
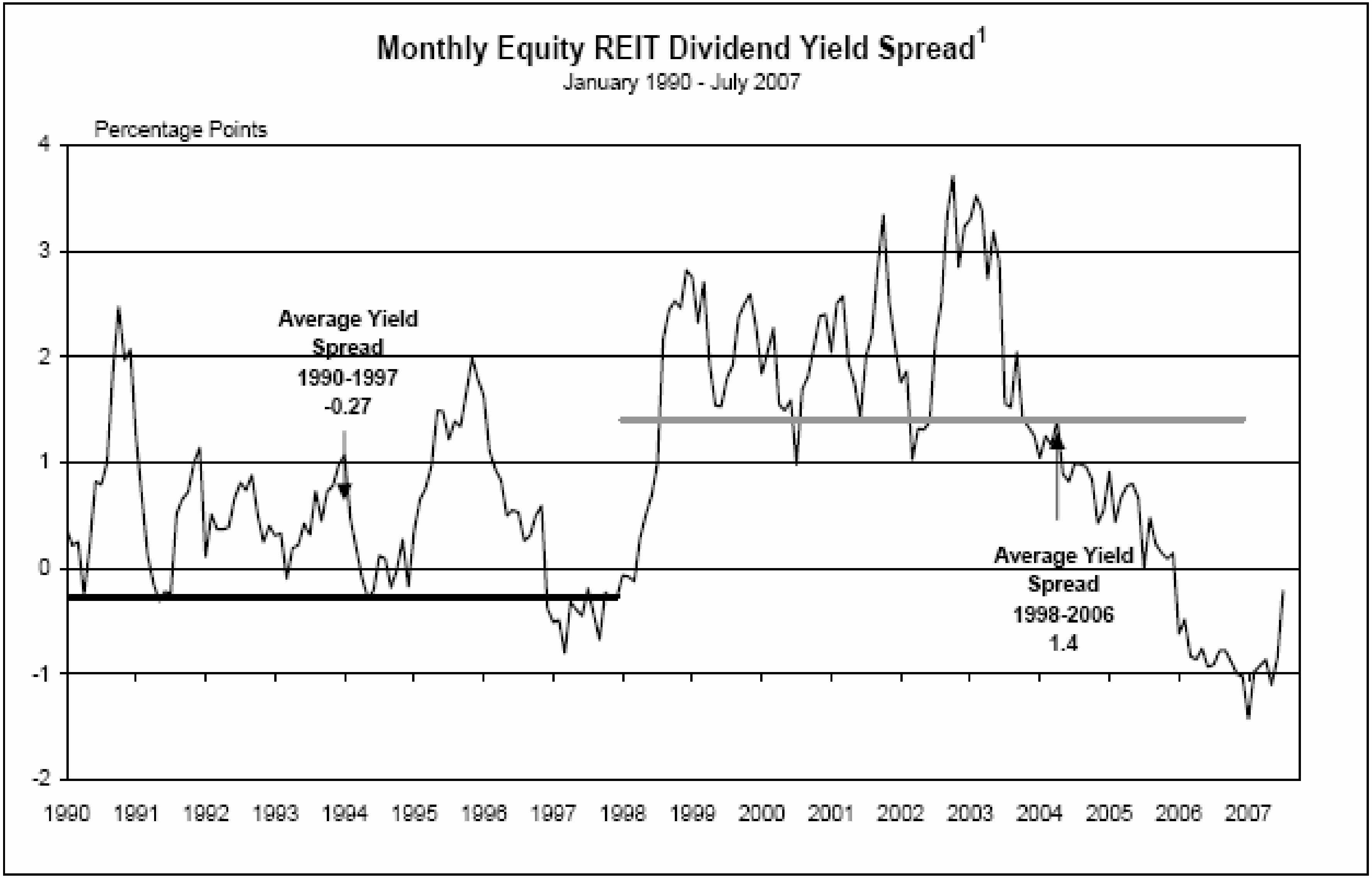


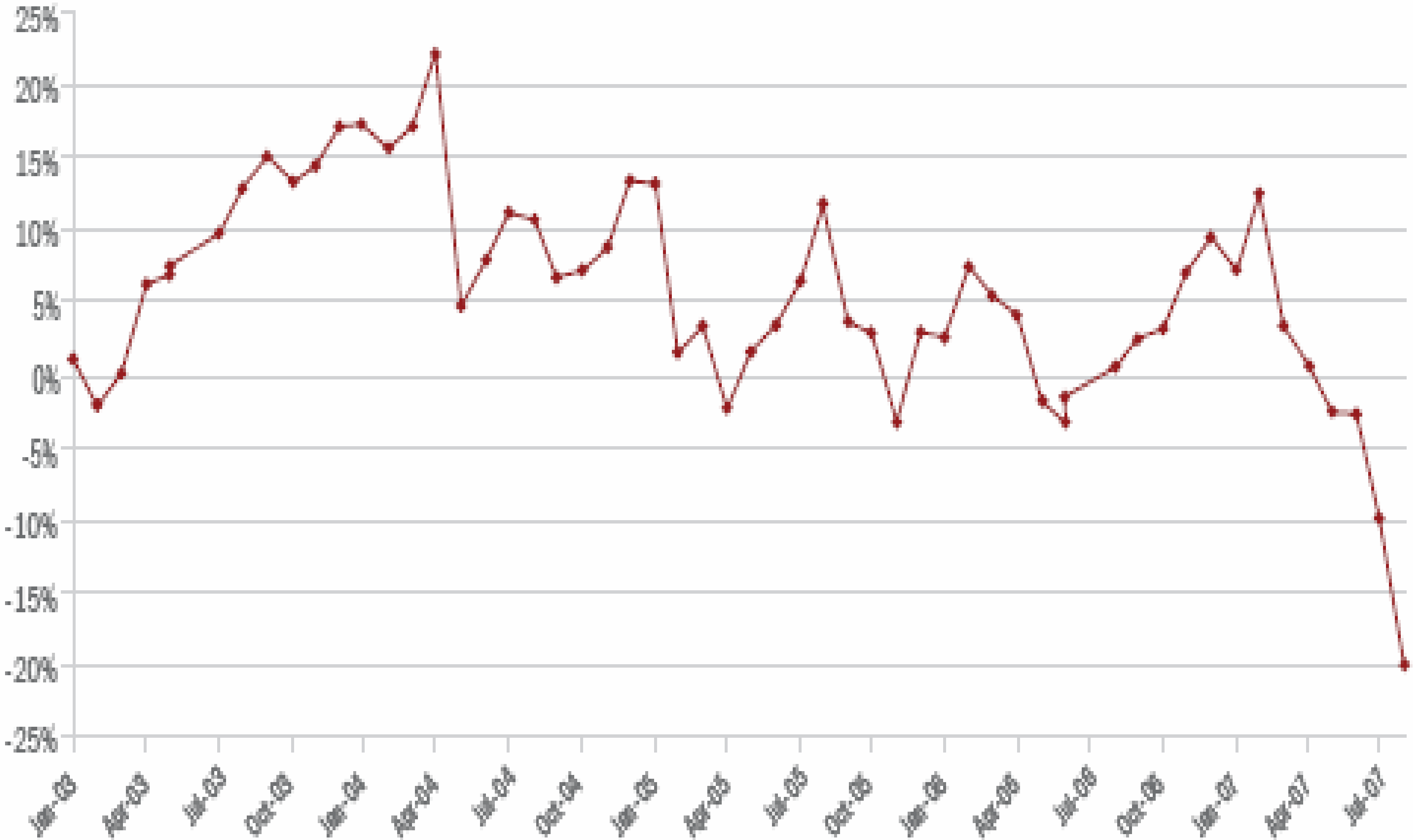
Equity REIT Dividend Yield v. 10-Year Constant Maturity Treasury Yield
January 1990 - July 2007
Percent
12
11
10
9
8
7
6
5
4
3
2
Equity REITs
10-Year Treasury
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007



[1] Yield spread calculated by taking the Equity REIT dividend yield less 10-year constant maturity Treasury yield.

Source: NAREIT.®

REIT Share Price Premiums to Green Street Net Asset Value Estimates

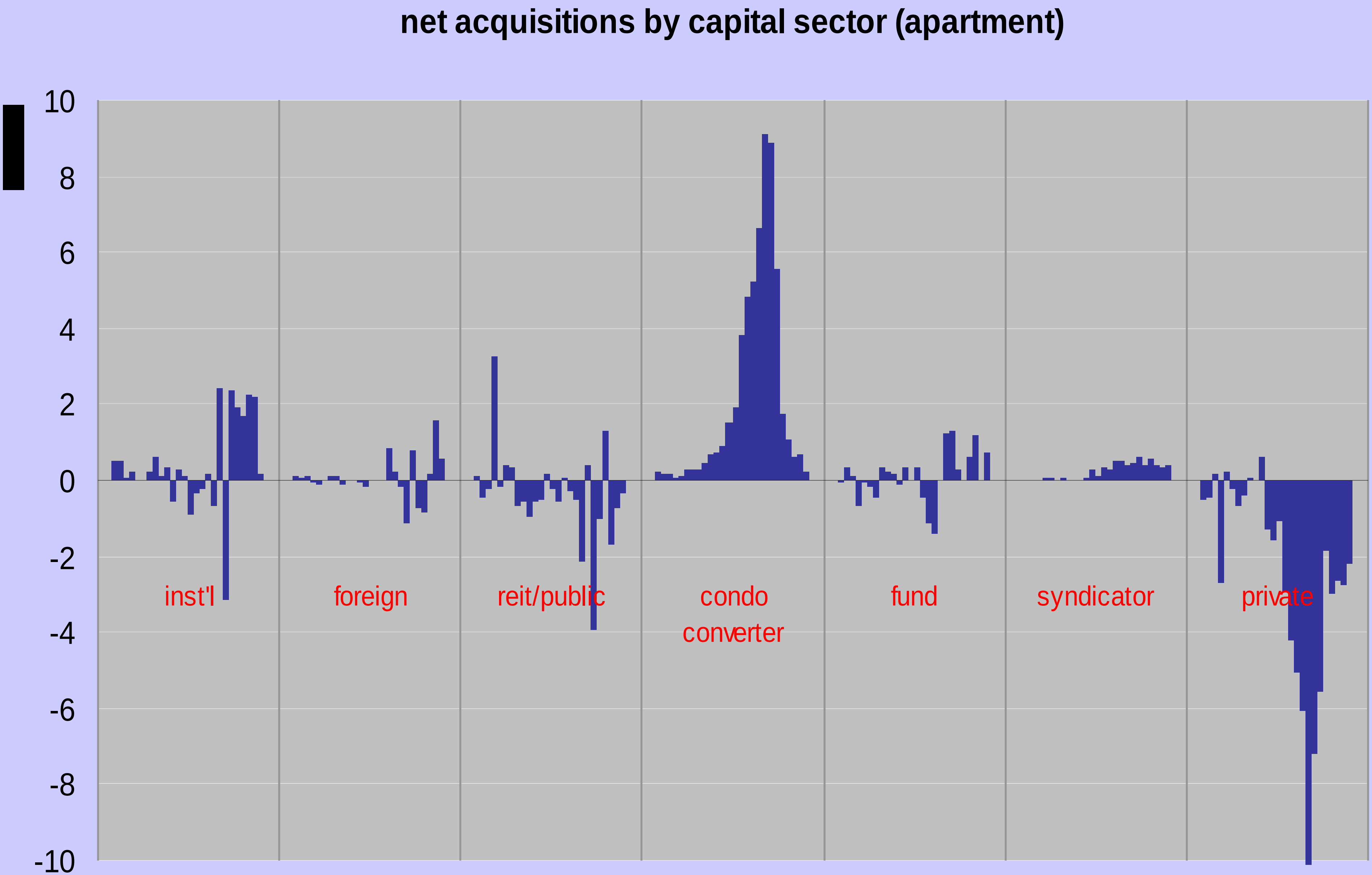


Source: Green Street Advisors

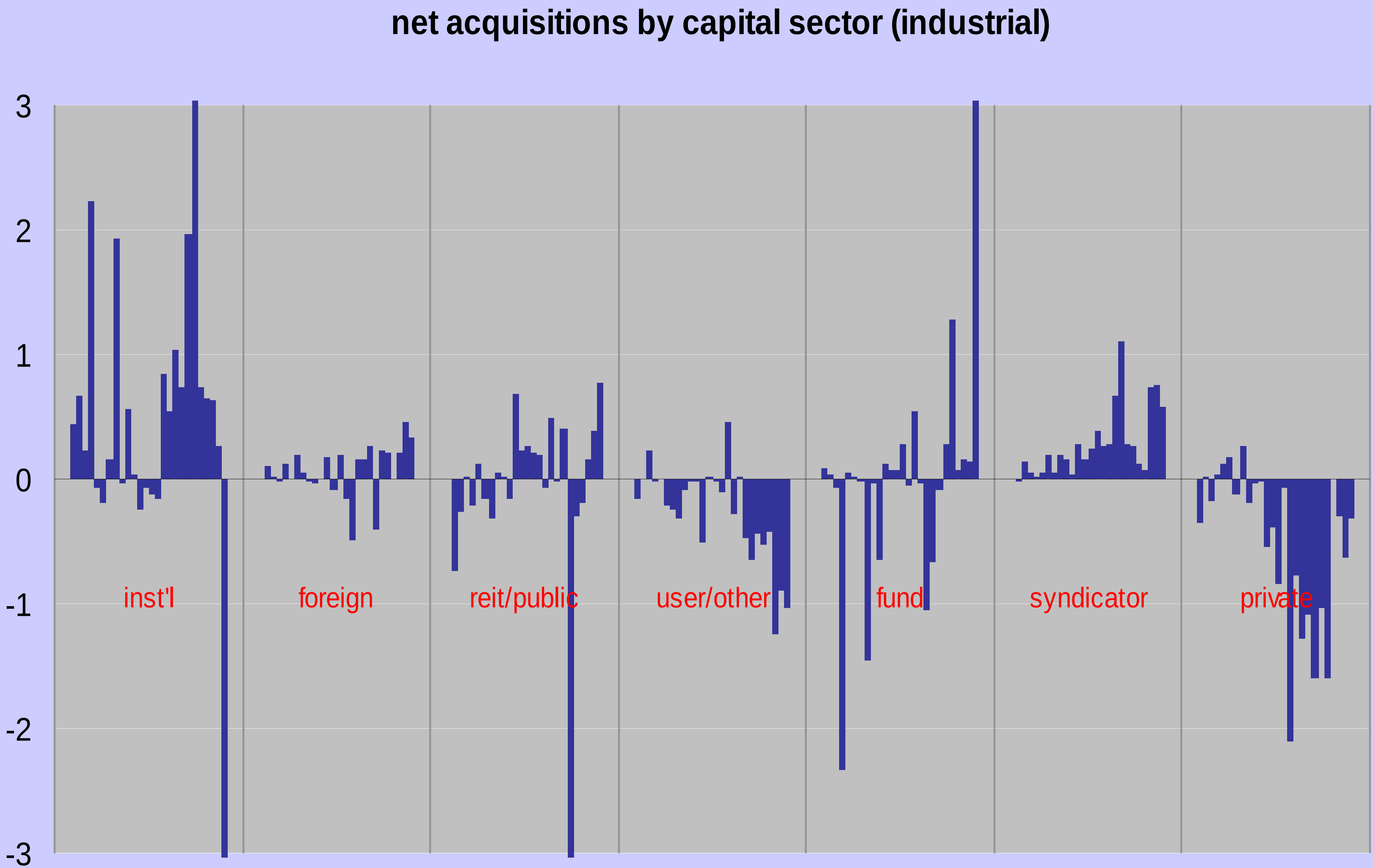
Private Data Insights from RCA, Real Capital Analytics

Starting with Apartments

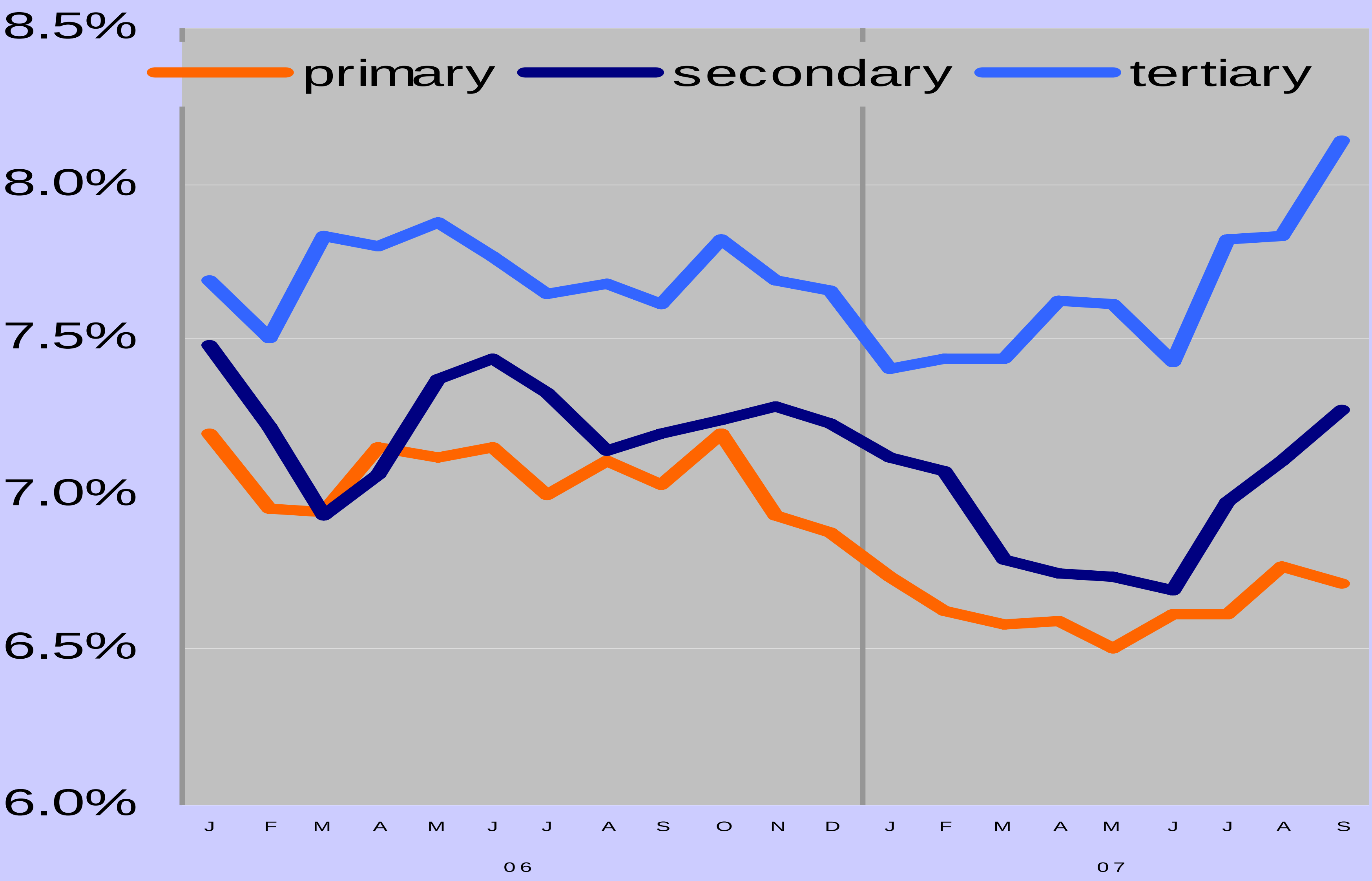
1/01 – 2/07 Volume By Qtr By Buyer/Seller Type



Same graph for Industrial Property

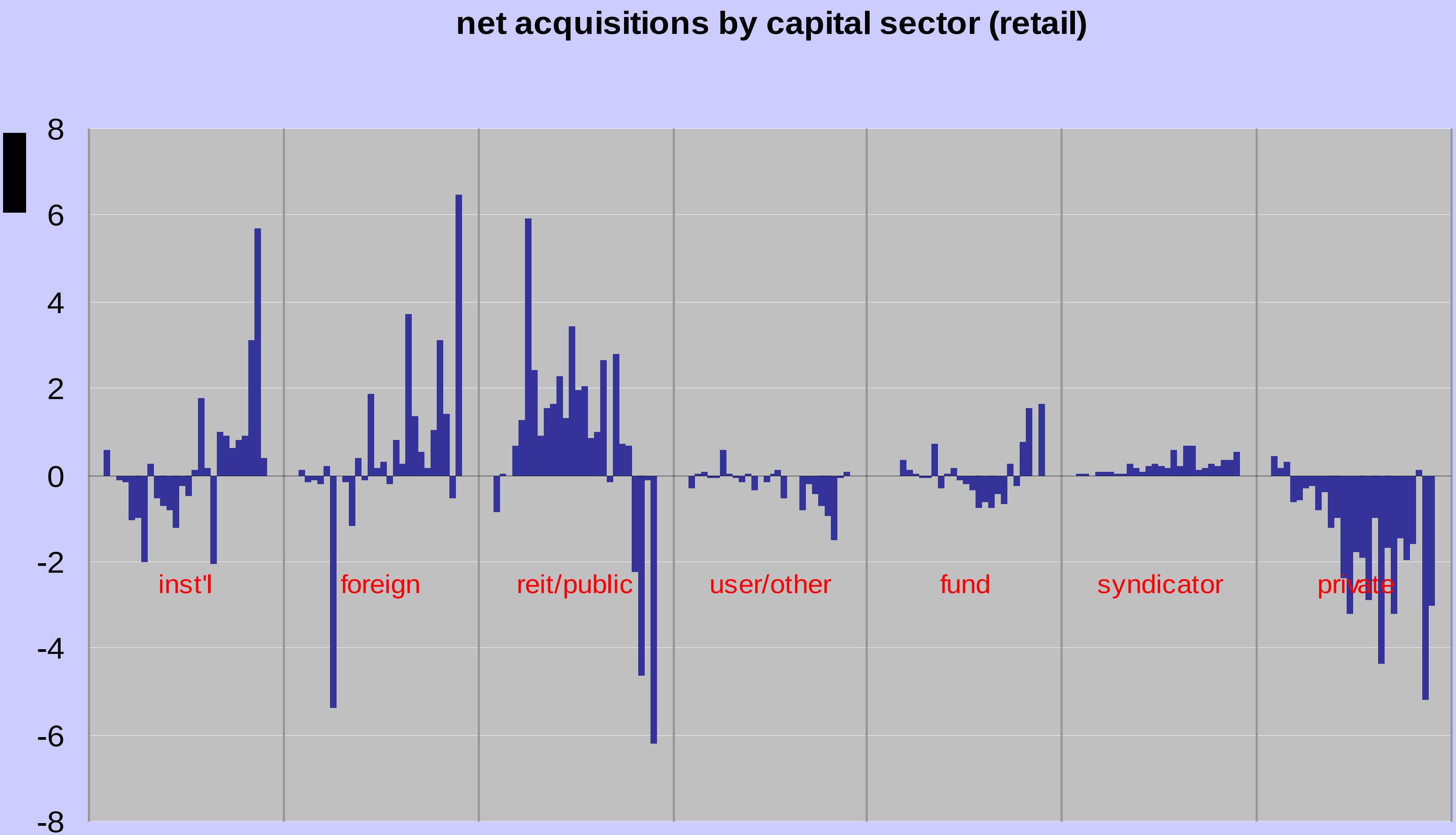


Cap Rates Have Started to Diverge By Market Size: Industrial

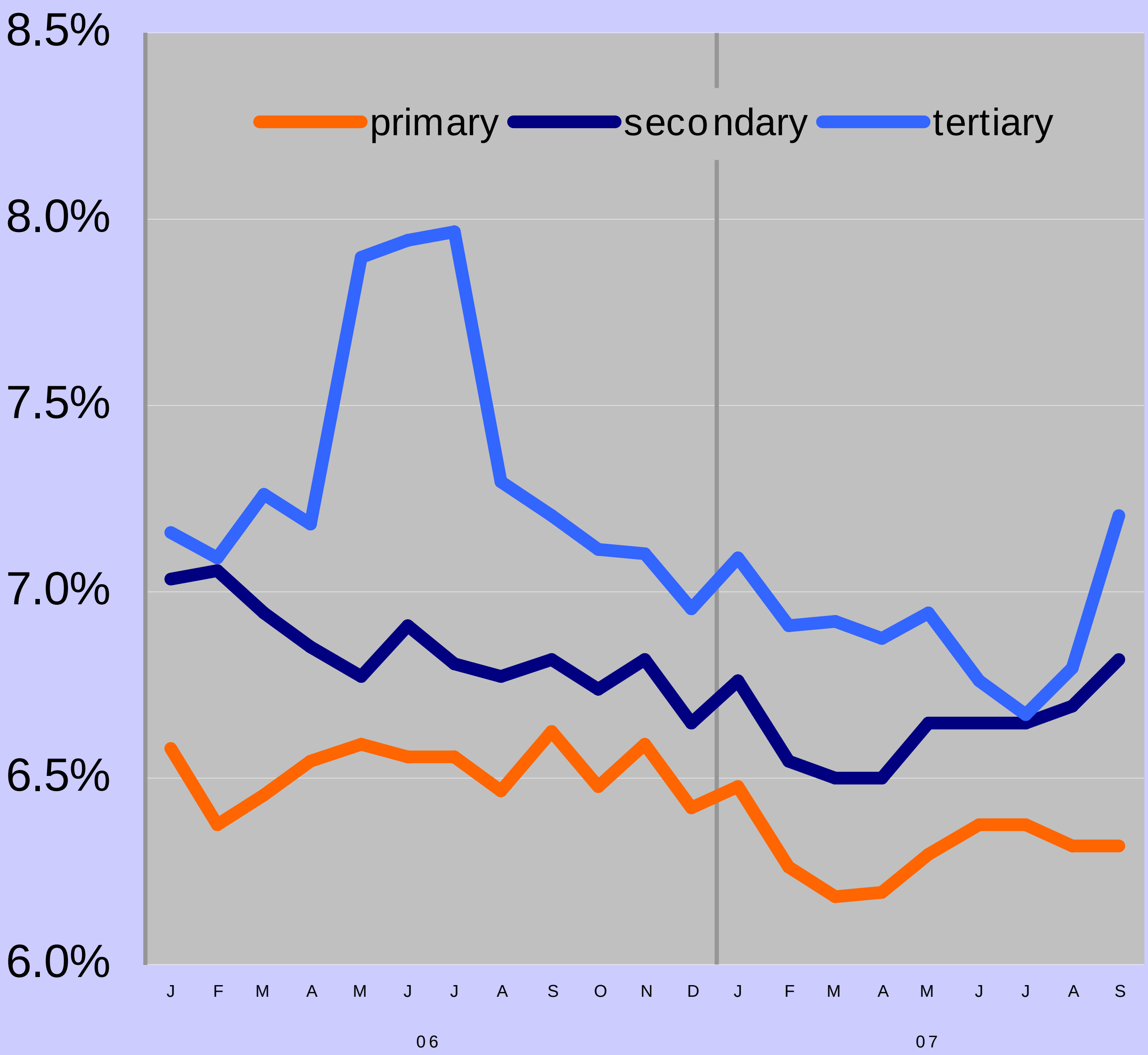


A third of the industrial property capital is coming from over seas compared to only 15% for apartment buyers

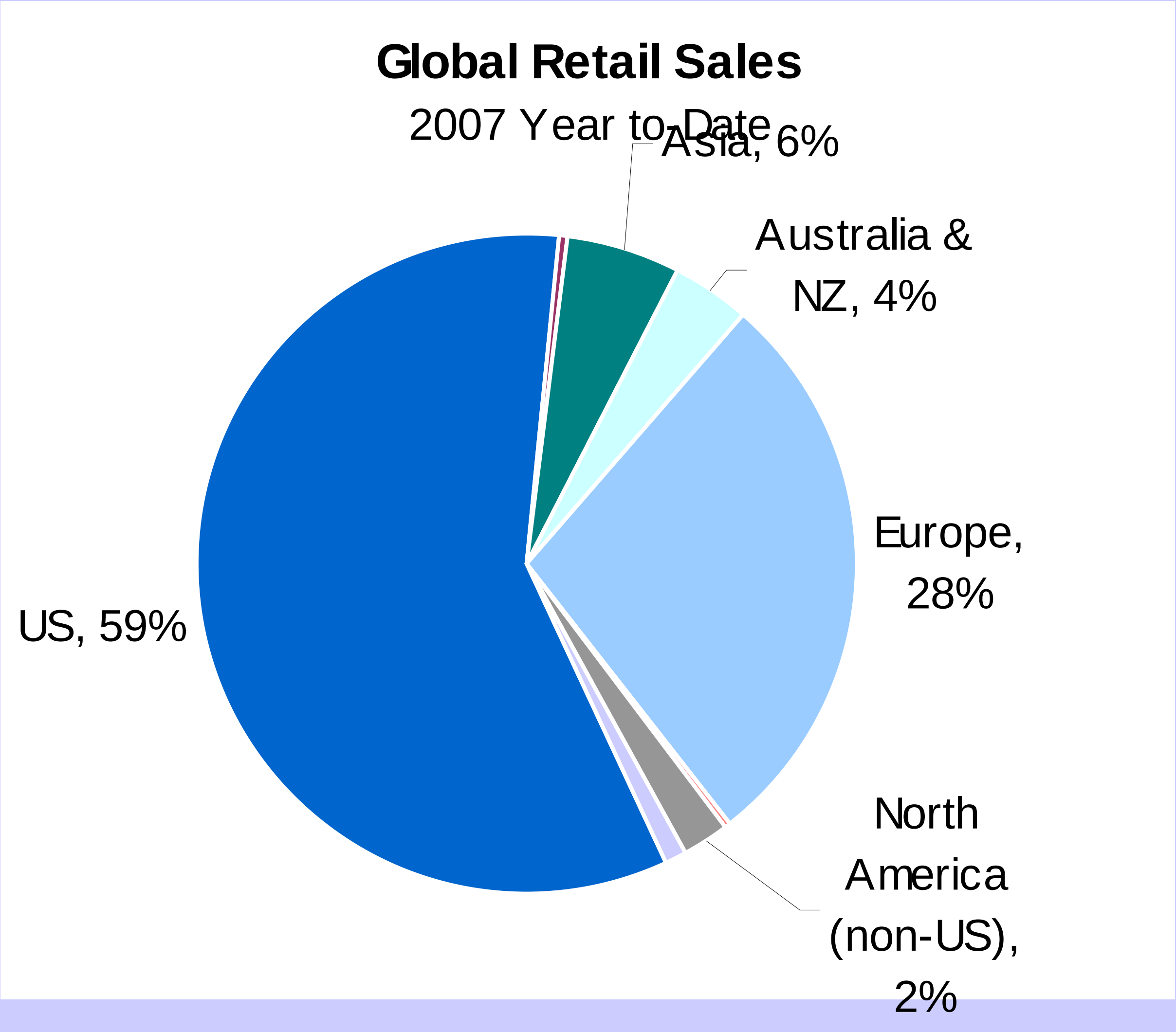
Retail Property Buyers/Sellers by Type 01/01 to 02/07 by Qtr



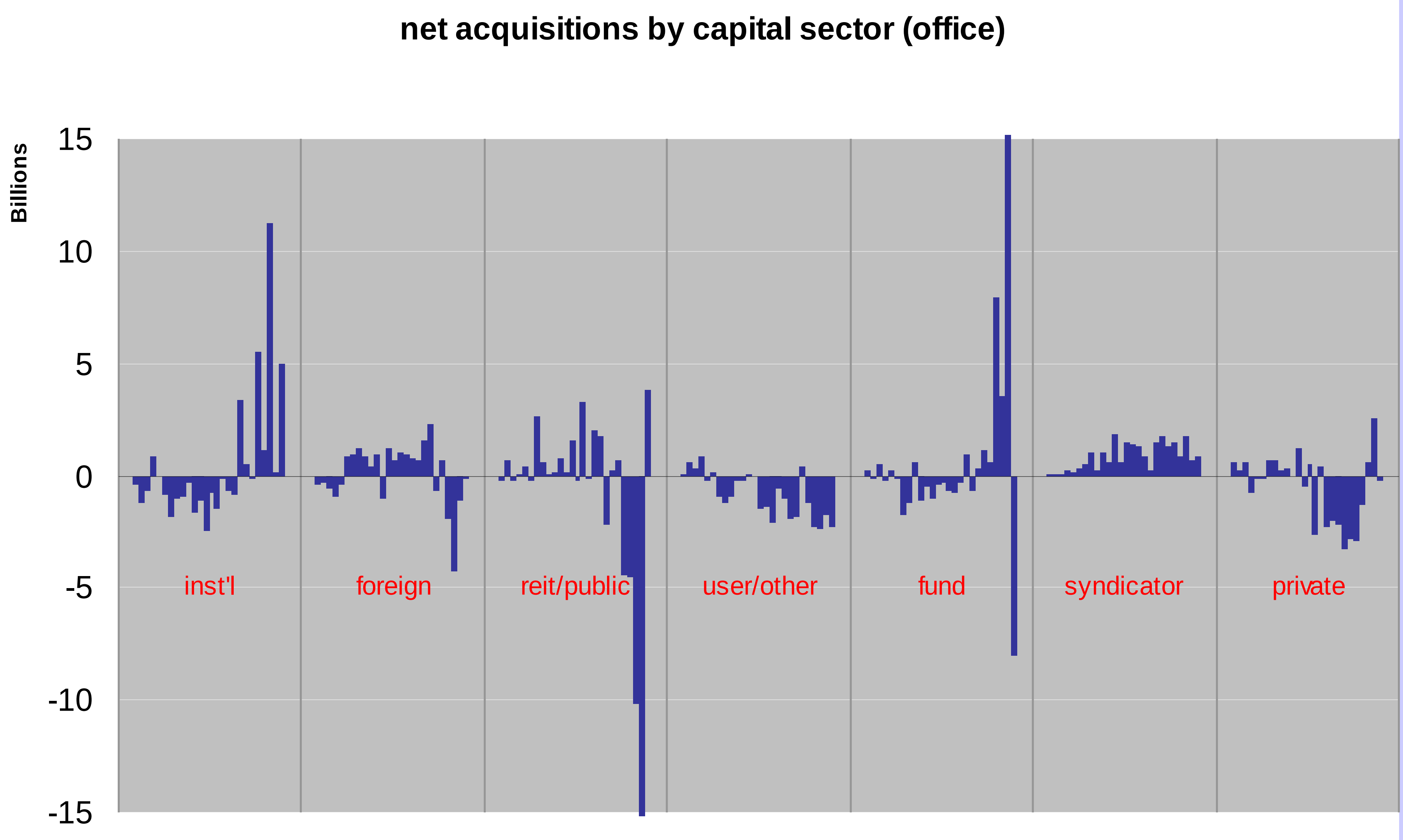
Retail Property Cap Rates by Size of Market



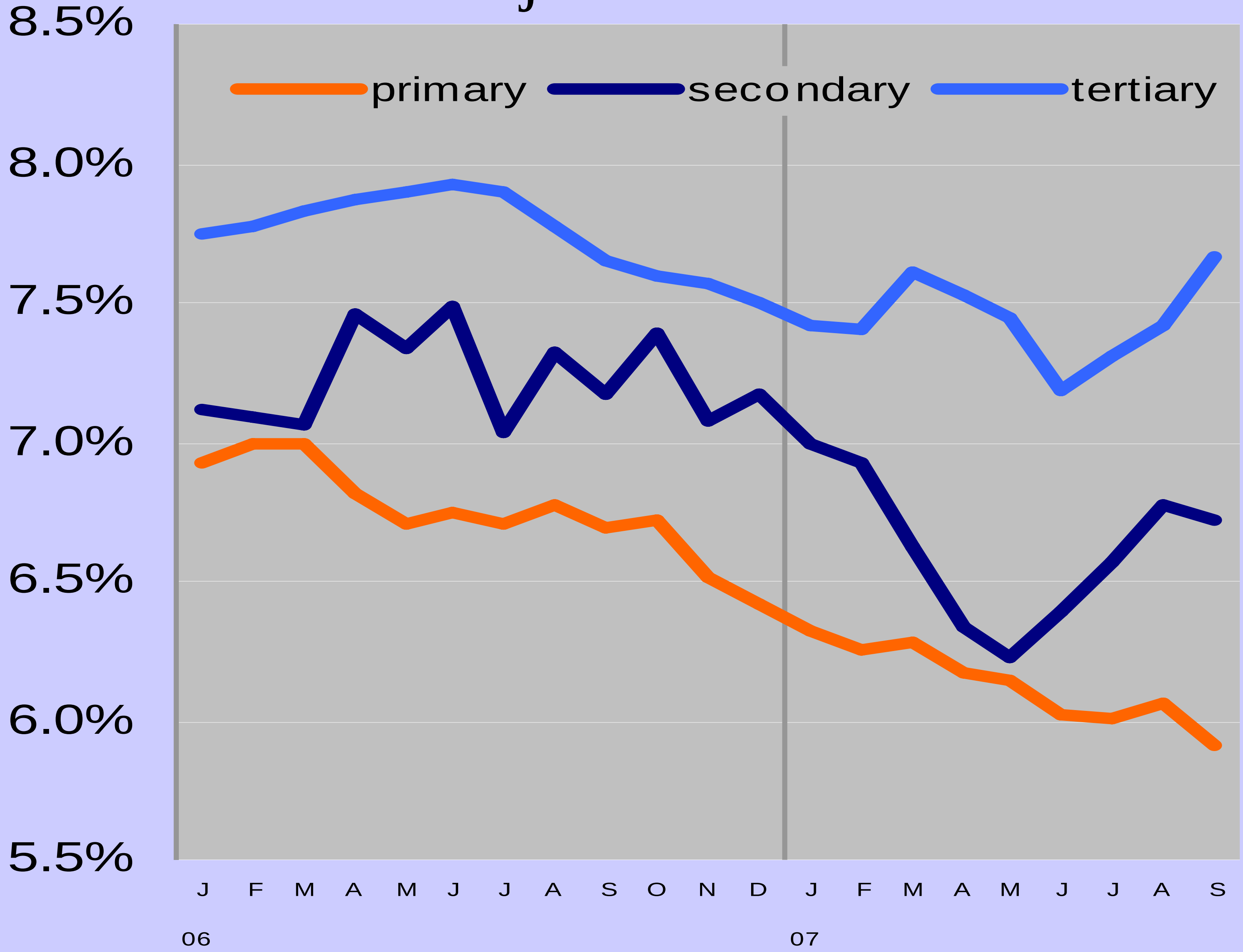
US Retail Property Acquisitions



Office Market Buyers By Type 1/01 to 2/07 By Qtr



Office Cap Rates Are Also Showing a Bias Towards Major Markets



Over a third of Office Buyers Come from Off Shore

Will low cap rates continue?

- They have already ticked up 25 to 50 basis points since June. Why?
  - Subprime tainting the CMBS market and increasing rates and taking some buyers off the market.
  - Concerns about inflation? Note reaction to last fed cut
- The most common forecast is a 10% decline in prices from last June but many factors muddy the picture
- Core markets have not seen increases in cap rates as much as non-core markets.
- Hedge Fund money is still flowing into real estate, both domestic and foreign money is still coming into core markets. (pay 6% more than locals according to Colliers)
- Recent stock price performance may redirect some capital away from real estate - we are herd animals!

A few other points affecting the future

- Subprime fall out
- I.e. Jumbos and CMBS
- Housing market induced recession fears
- Paying for the war(s)

Any Questions?