

COMMERCIAL REAL ESTATE OUTLOOK AND THE CREDIT IMPACT ON CRE MORTGAGES

PRESENTED TO:

MBA

APRIL 12, 2005

PRESENTED BY:

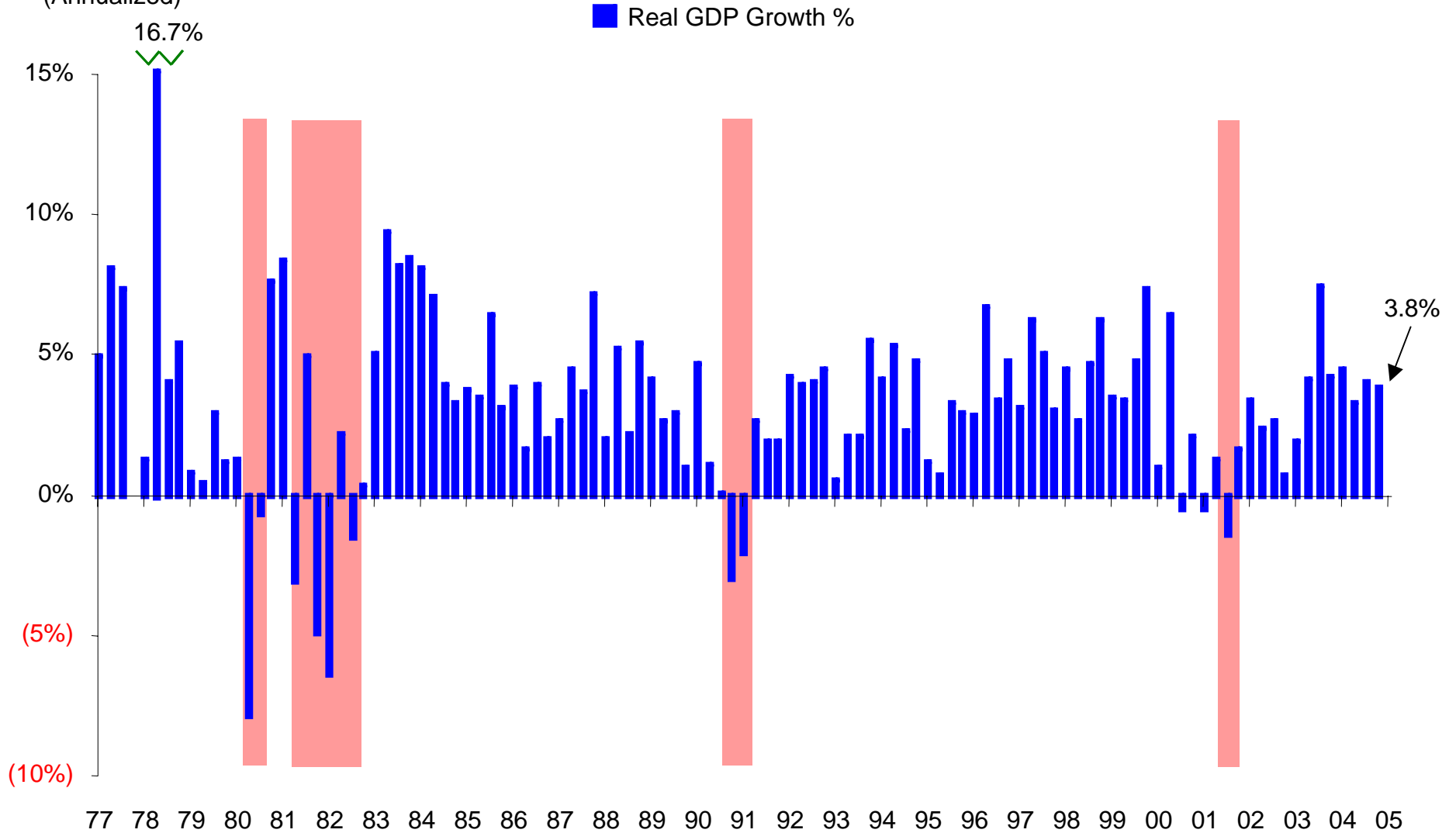
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DIRECTOR, RISK MANAGEMENT
AND DEBT RESEARCH



PPR
WWW.PPR.INFO

GDP Growth

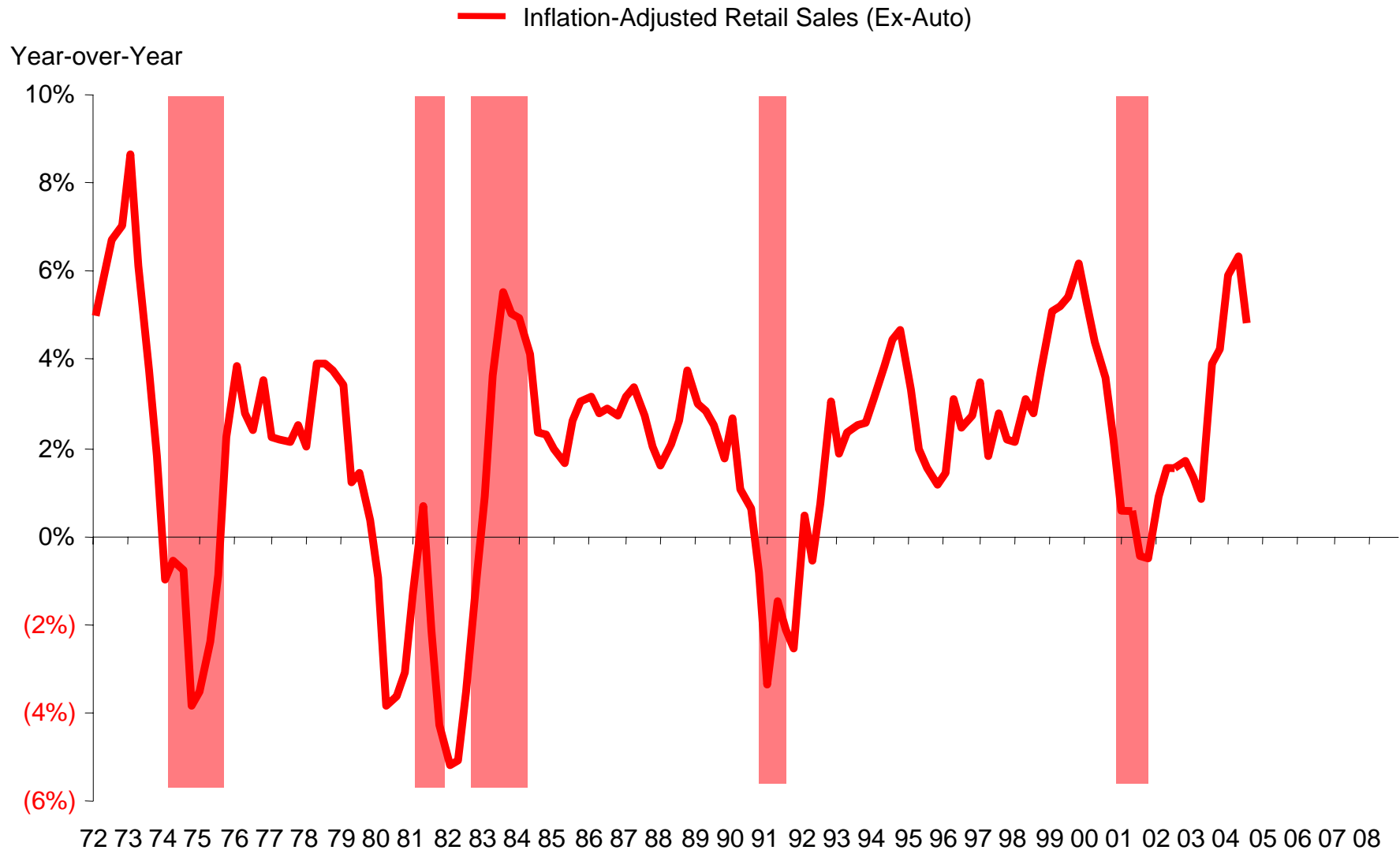
Quarter over Quarter
(Annualized)



Sources: U.S. Bureau of Economic Analysis; Economy.com

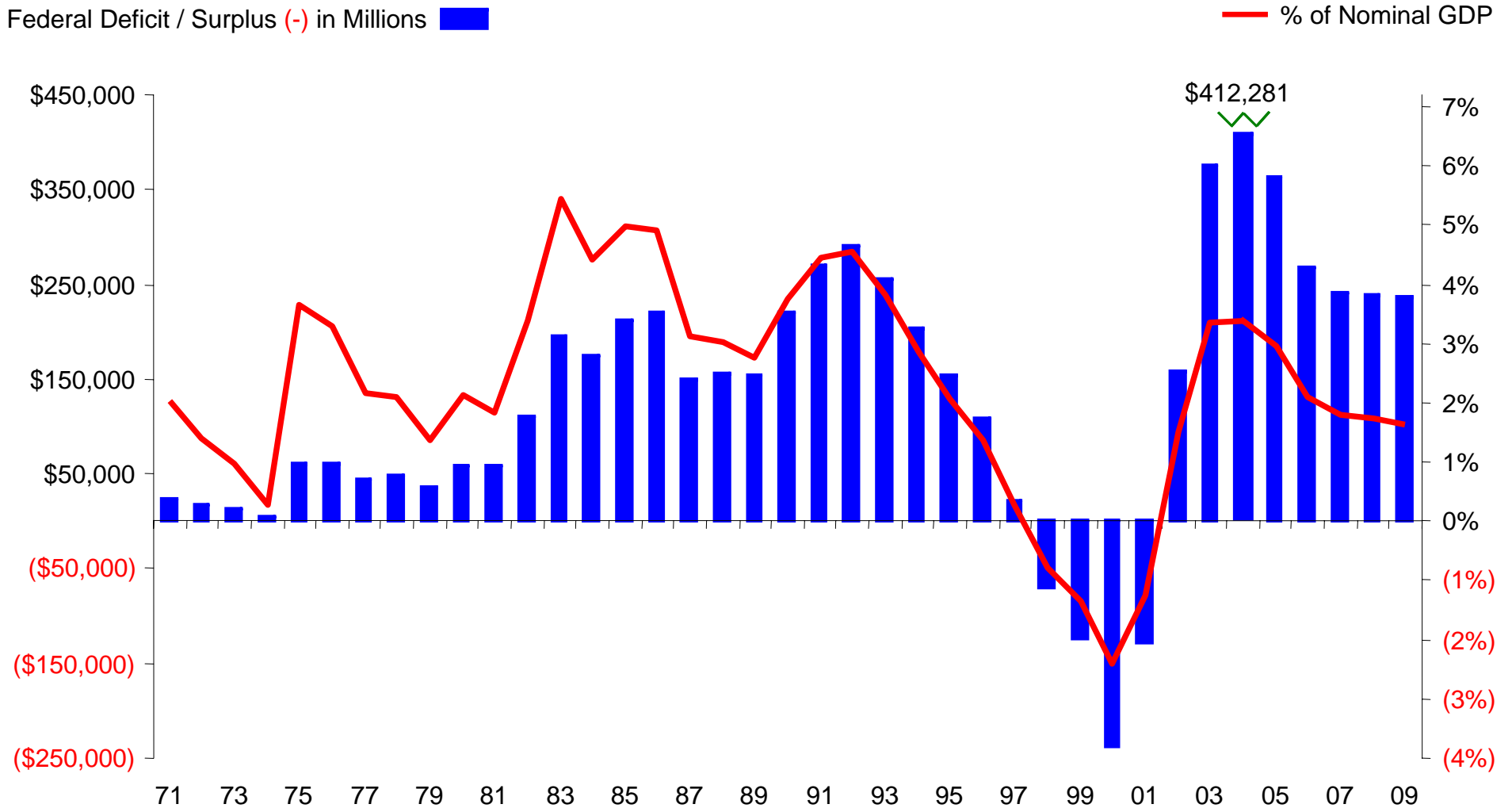
Lower Interest Rates, a Lower Unemployment Rate, and Solid Wage Growth...

...Have Helped Buoy Retail Sales Through This Cycle



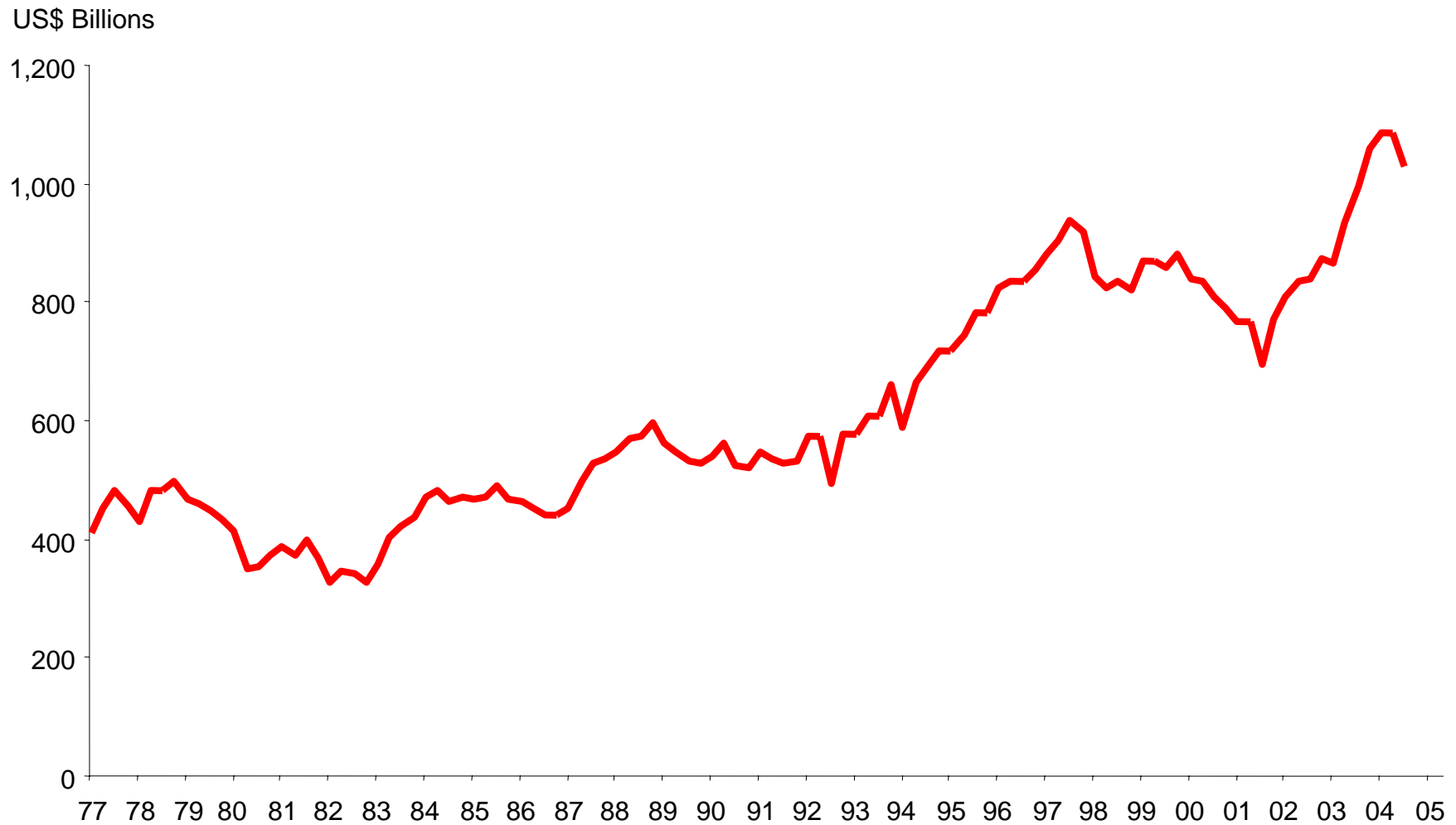
Sources: U.S. Census Bureau; Economy.com

Federal Budget Deficit



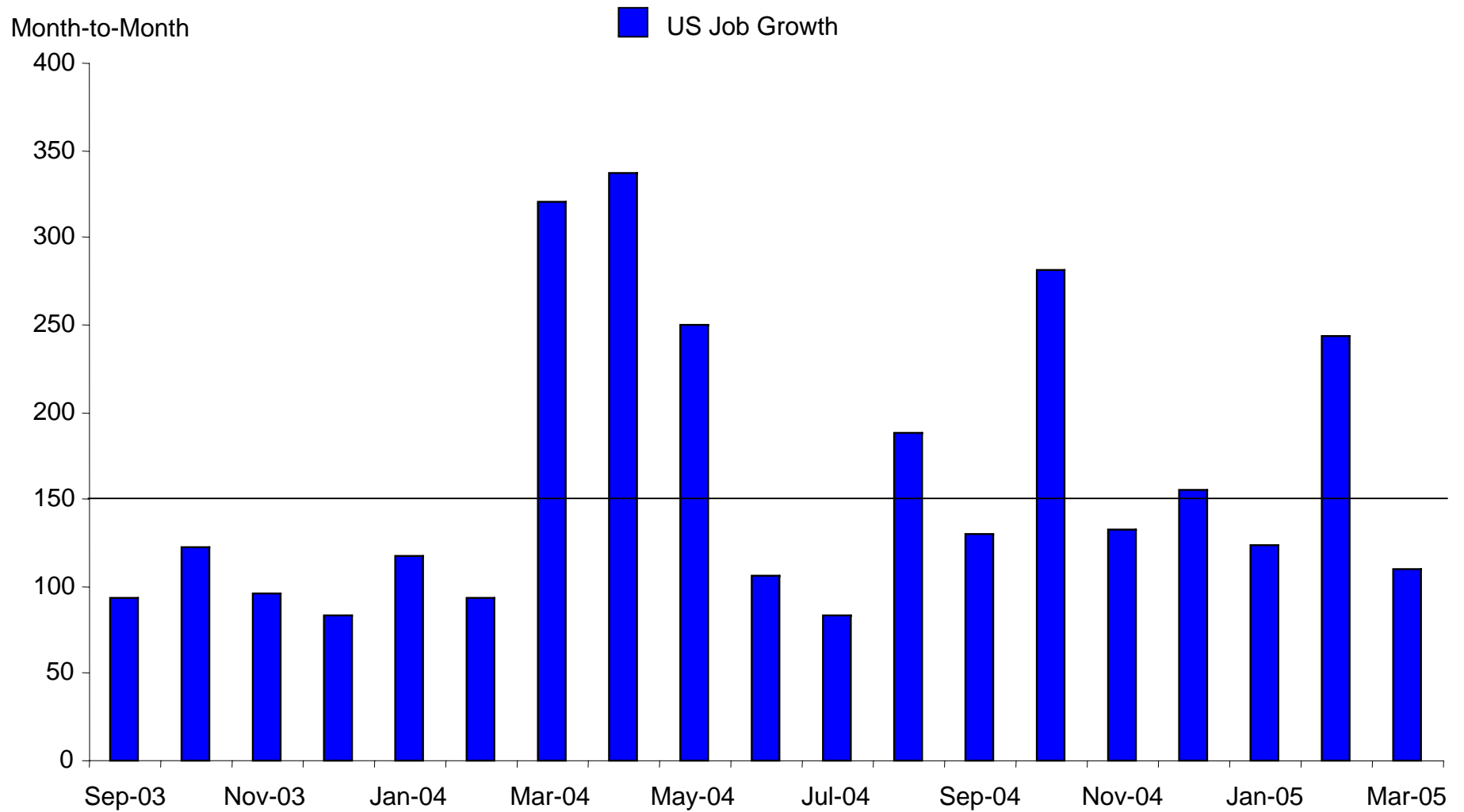
Sources: Department of the Treasury; Bureau of Economic Analysis; Office of Management and Budget

Real Corporate Profits



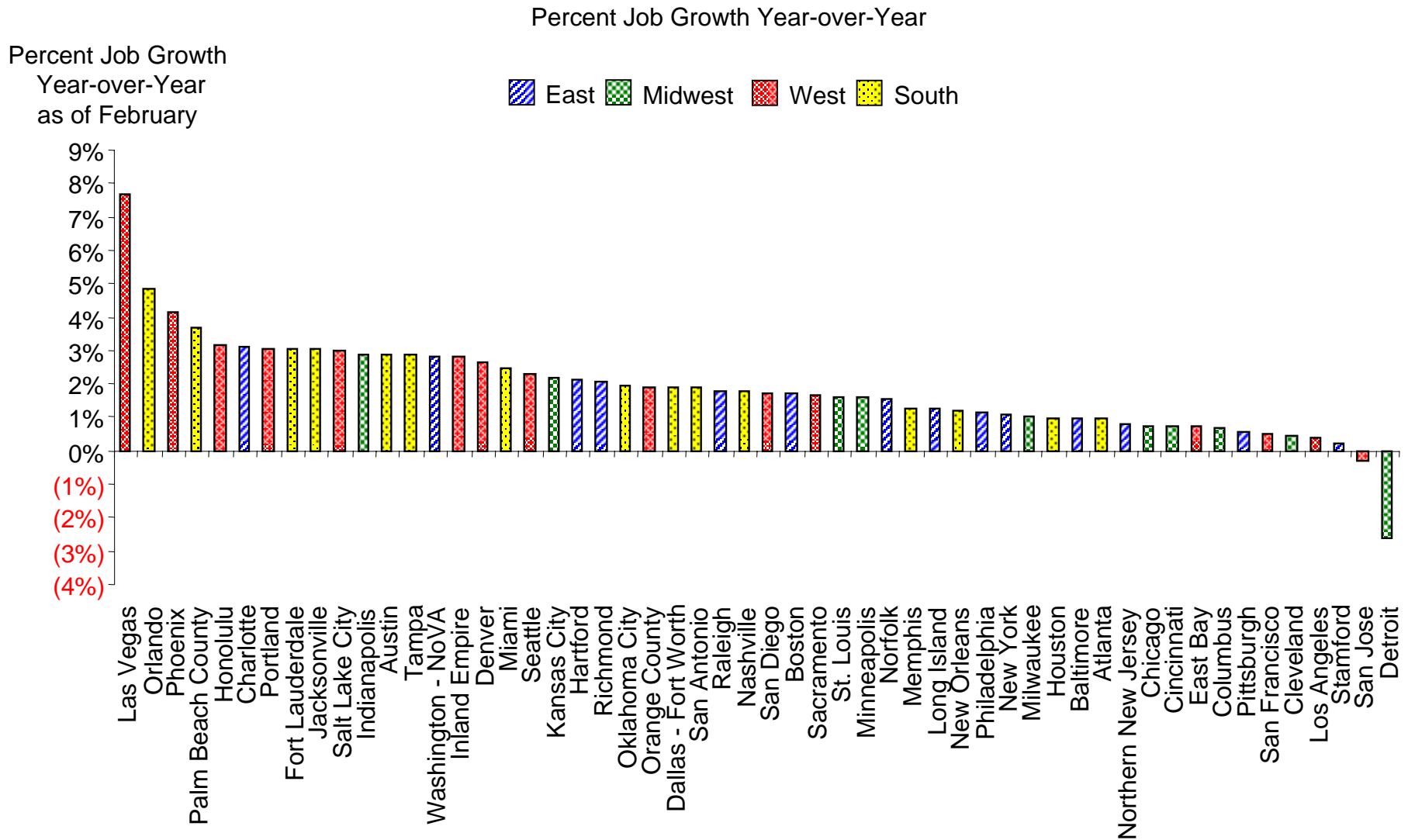
Sources: U.S. Bureau of Economic Analysis; Economy.com

Job Growth is on Rise



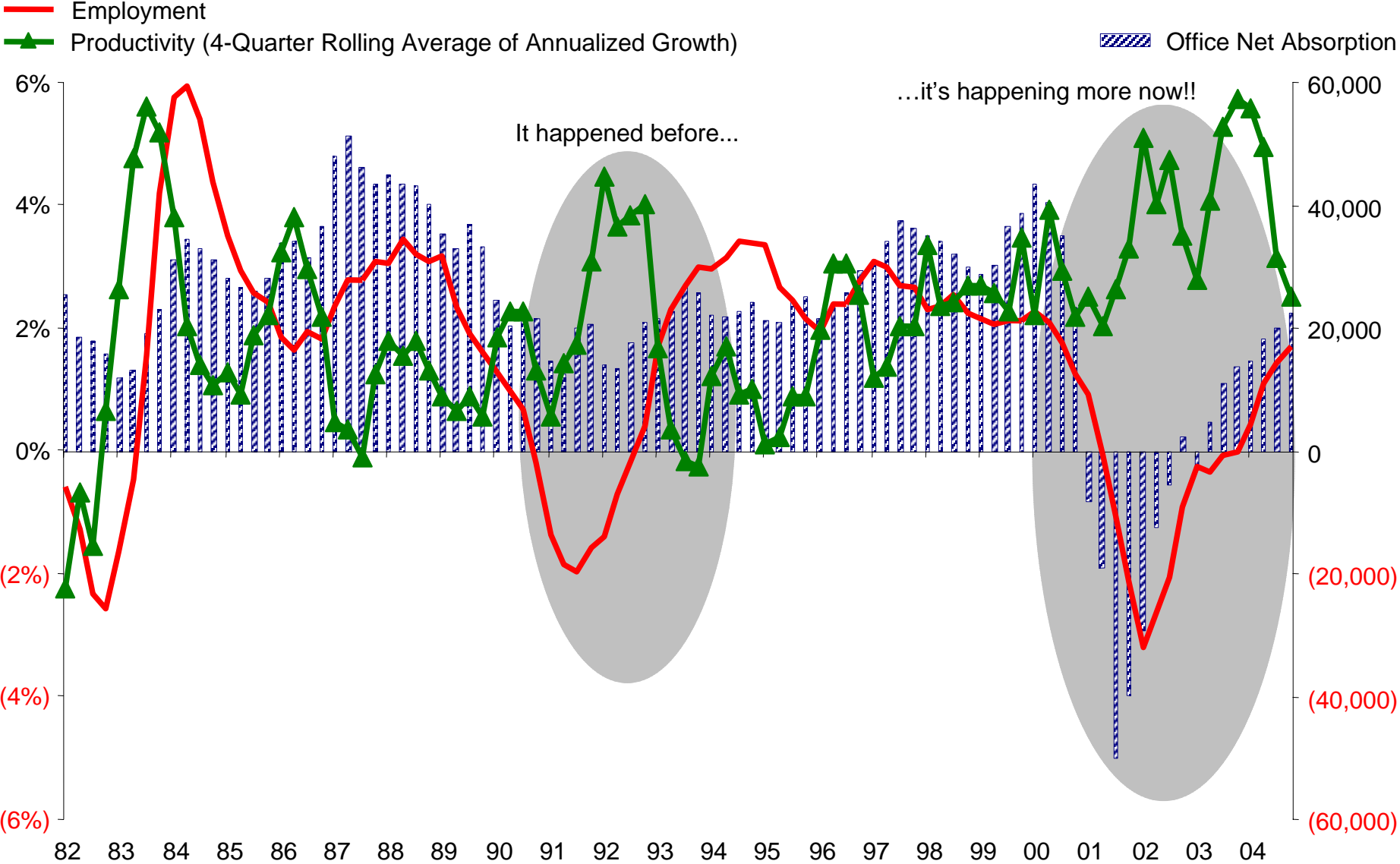
Source: U.S. Bureau of Labor Statistics

Rate of Job Growth Varies Widely By Metro



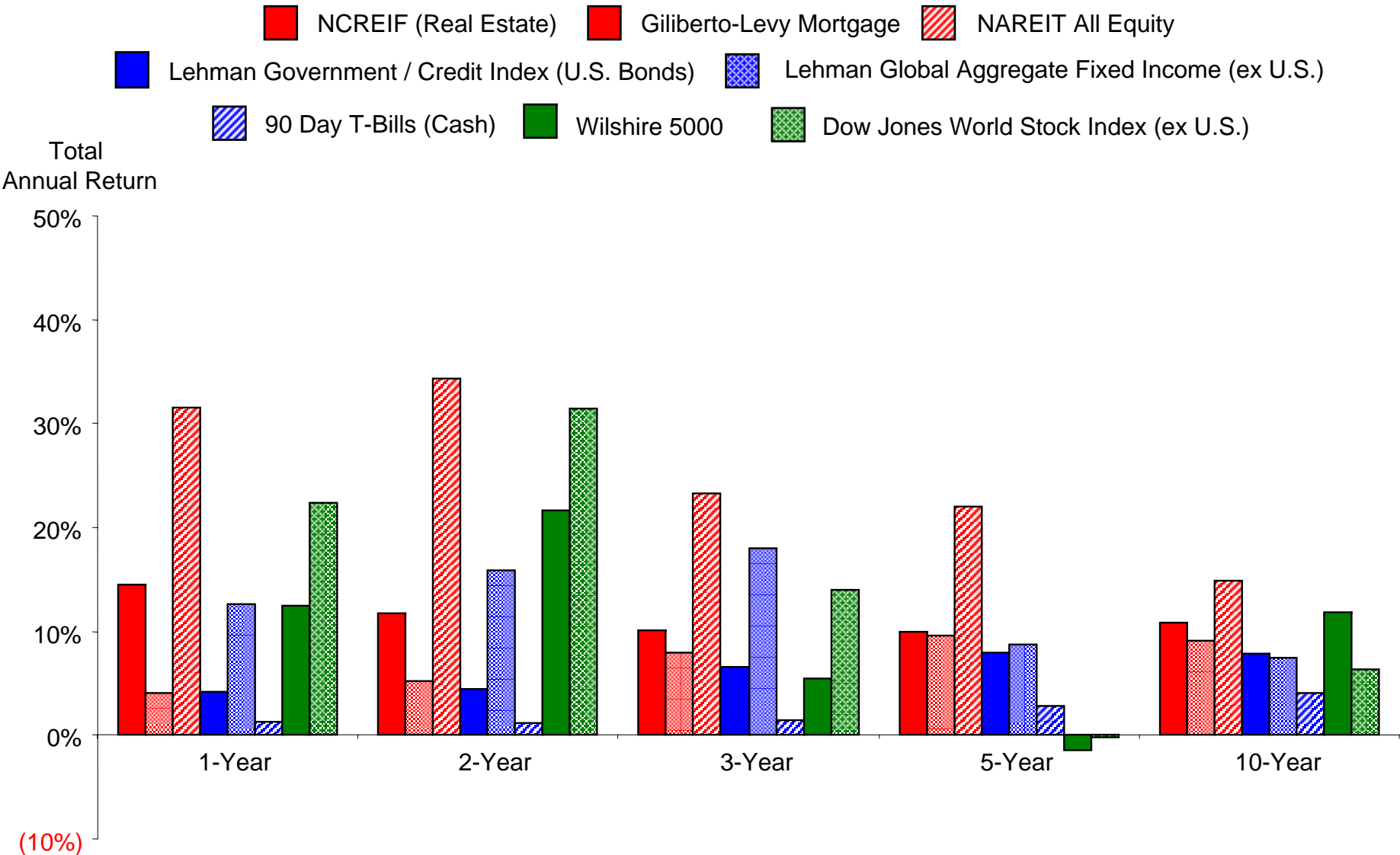
Sources: Economy.com; PPR

Time to Crank Up the Recruitment Machine



Sources: U.S. Bureau of Labor Statistics; PPR

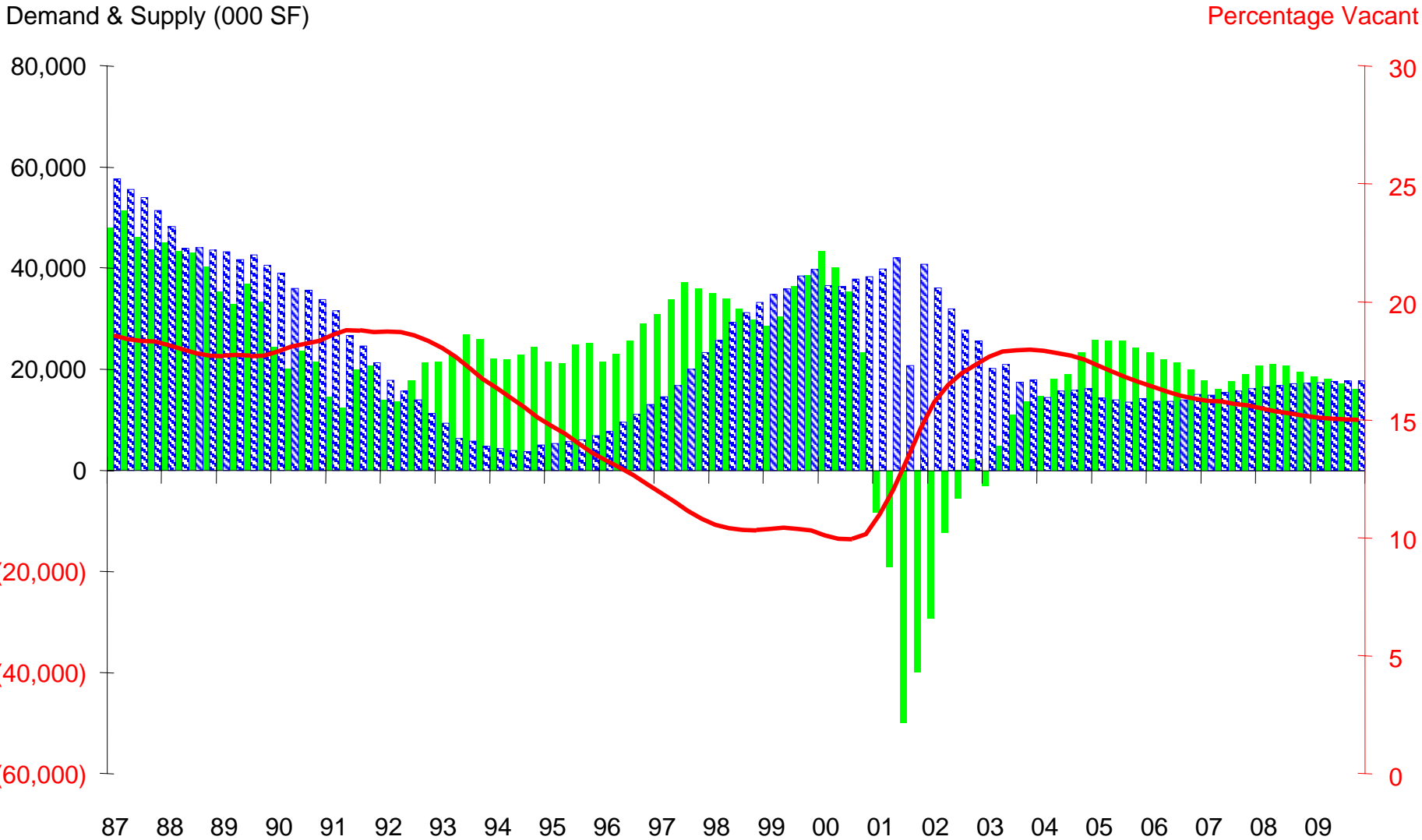
Real Estate Returns vs. Other Investment Options — 2004Q4



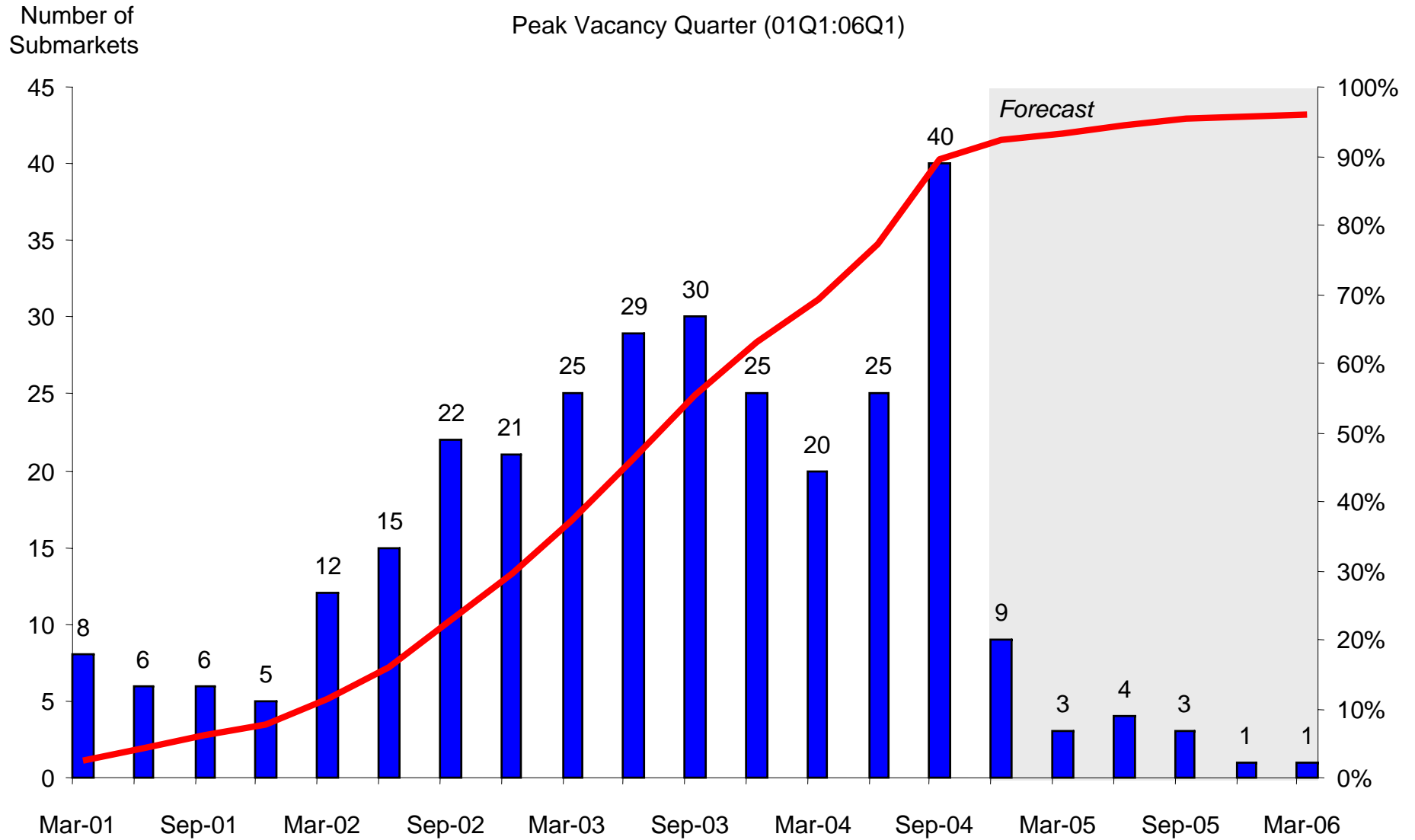
Gilberto-Levy Mortgage returns as of 9/30/2004

PPR54 Office Market Fundamentals

■ Quarterly Change in Demand
 ■ Quarterly Change in Supply
 — Vacancy Rate

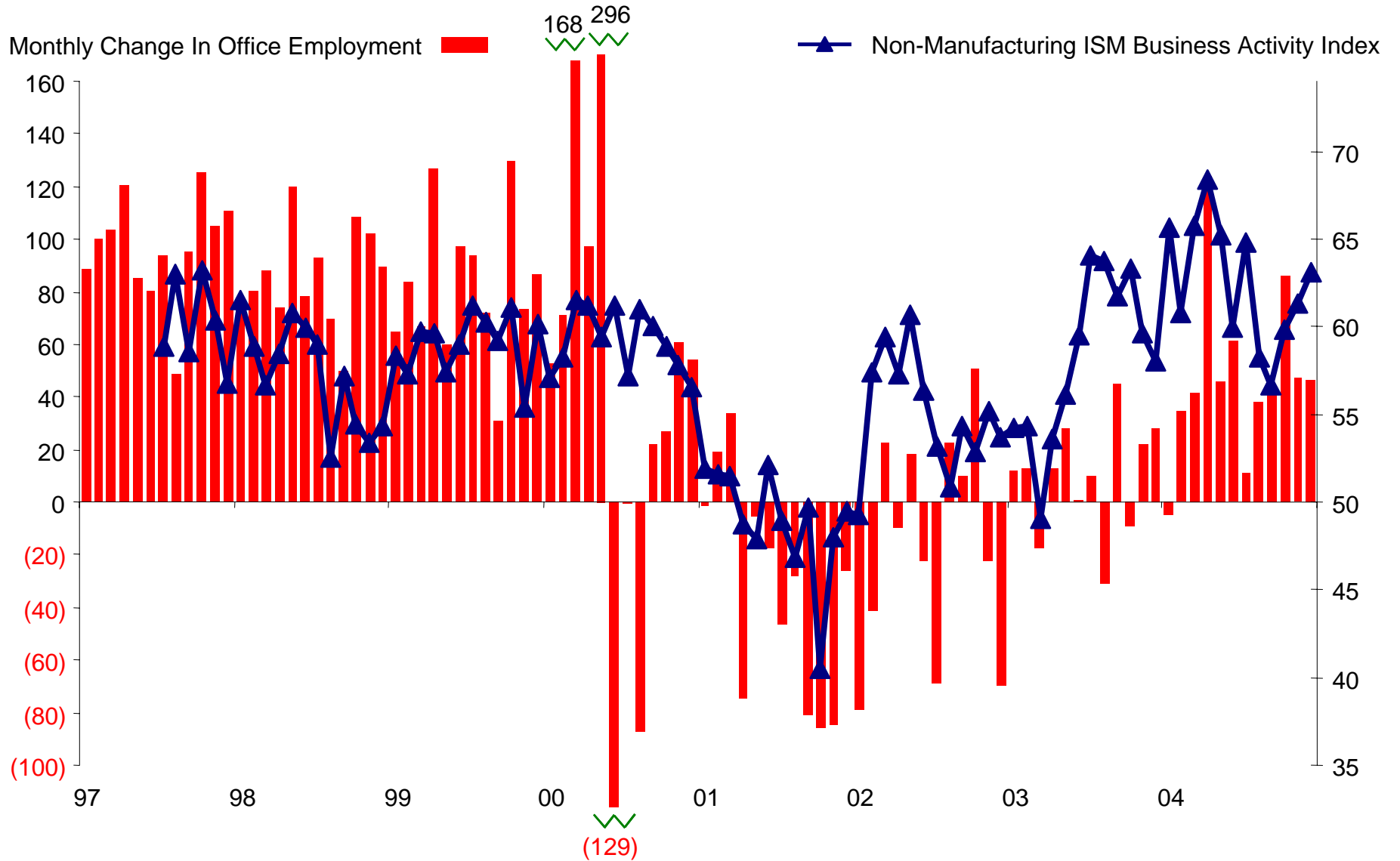


For Most Submarkets, The Peak Is Here or Near



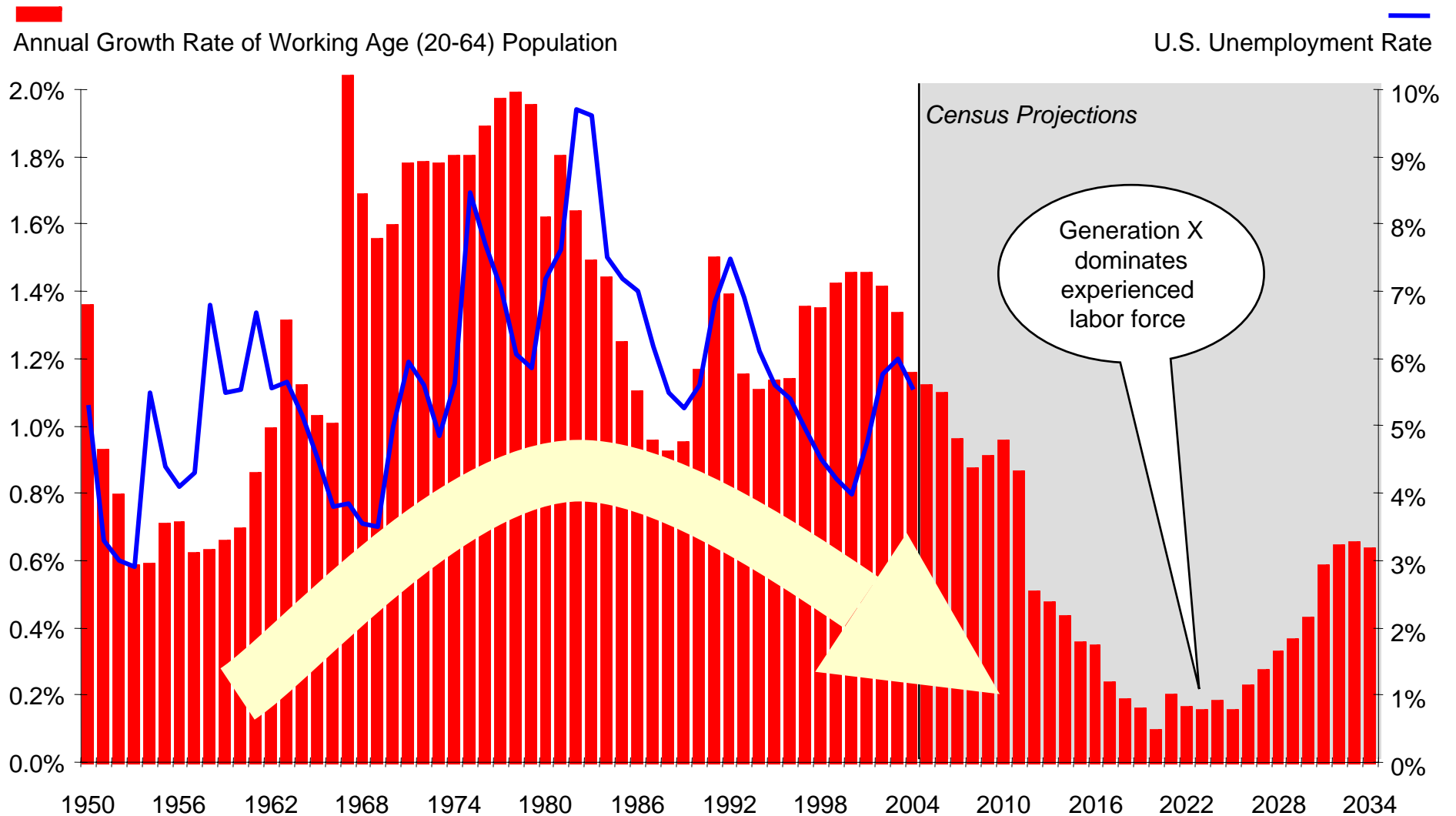
Source: PPR

Signs Pointing to a More Sustained Increase in Office Demand



Sources: Institute for Supply Management; U.S. Bureau of Labor Statistics; Economy.com; PPR

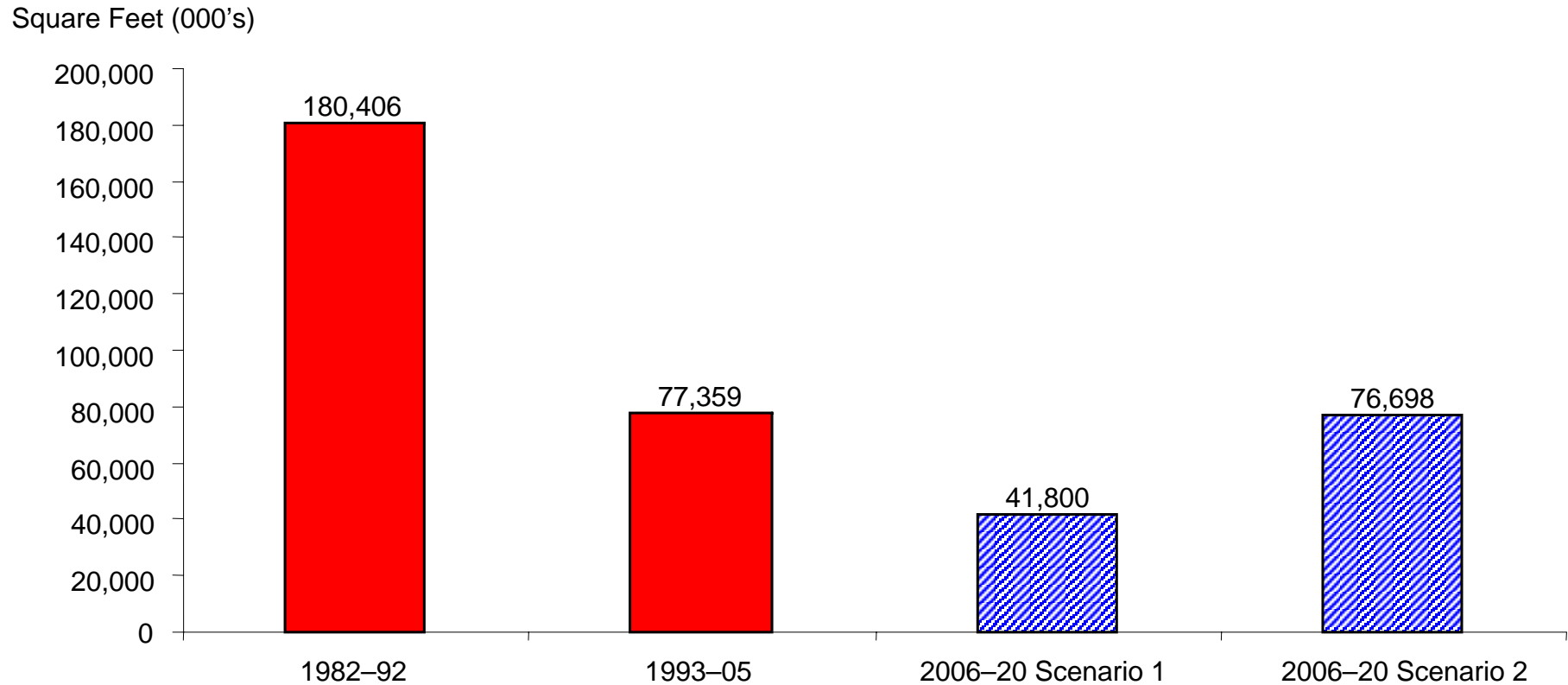
Long-term Labor Force Growth Will Wither. So Will the Jobless Rate.



Sources: U.S. Census Bureau; U.S. Bureau of Labor Statistics; Economy.com; PPR

Required Office Construction

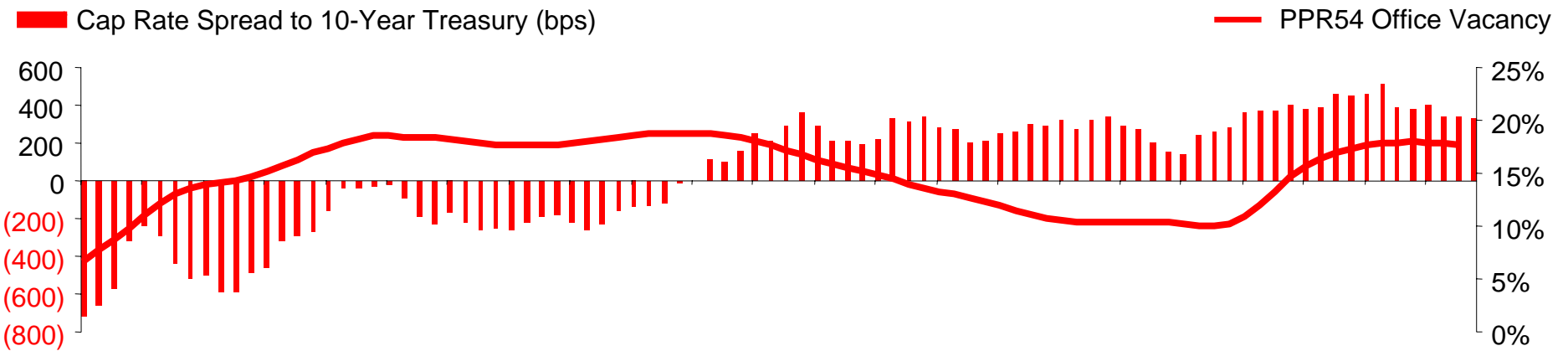
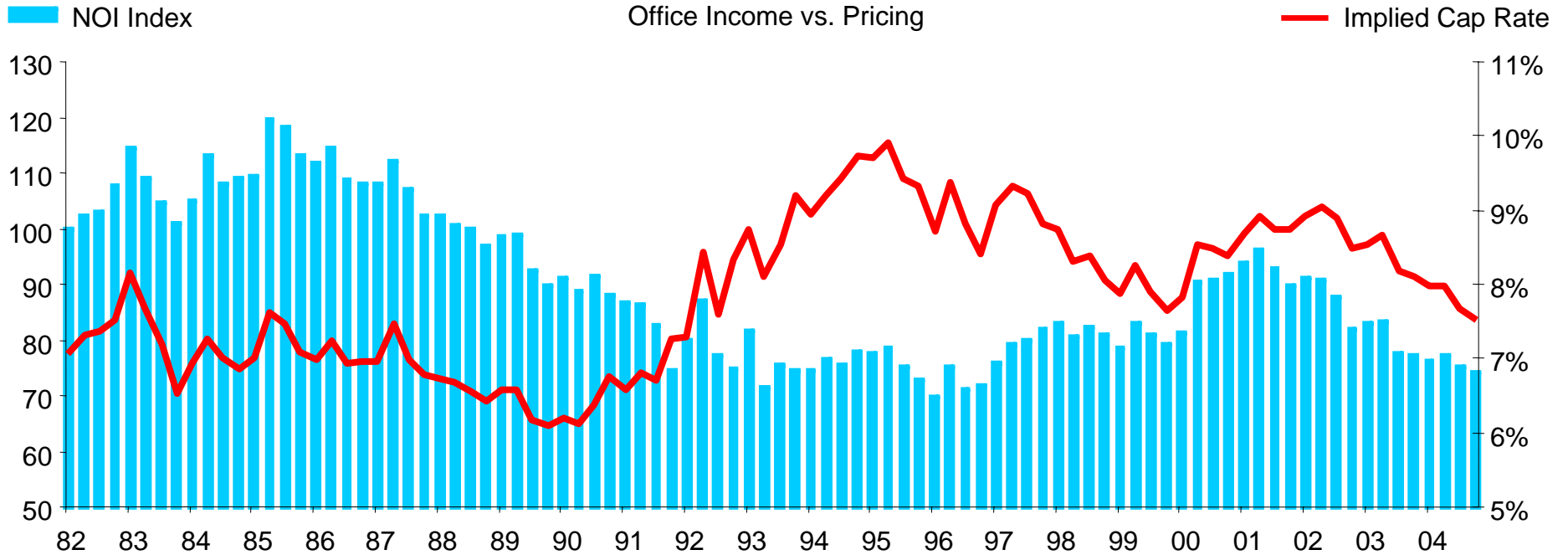
Average Annual Construction Completions



Source: PPR

- Scenario 1: Office Employment grows at the rate of working-age population (ages 20-64)
- Scenario 2: Office Employment grows at the rate of Economy.com's labor force forecast which assumes a delayed retirement and some re-entering the workforce
- Both scenarios end with a 10% vacancy rate in 2020.

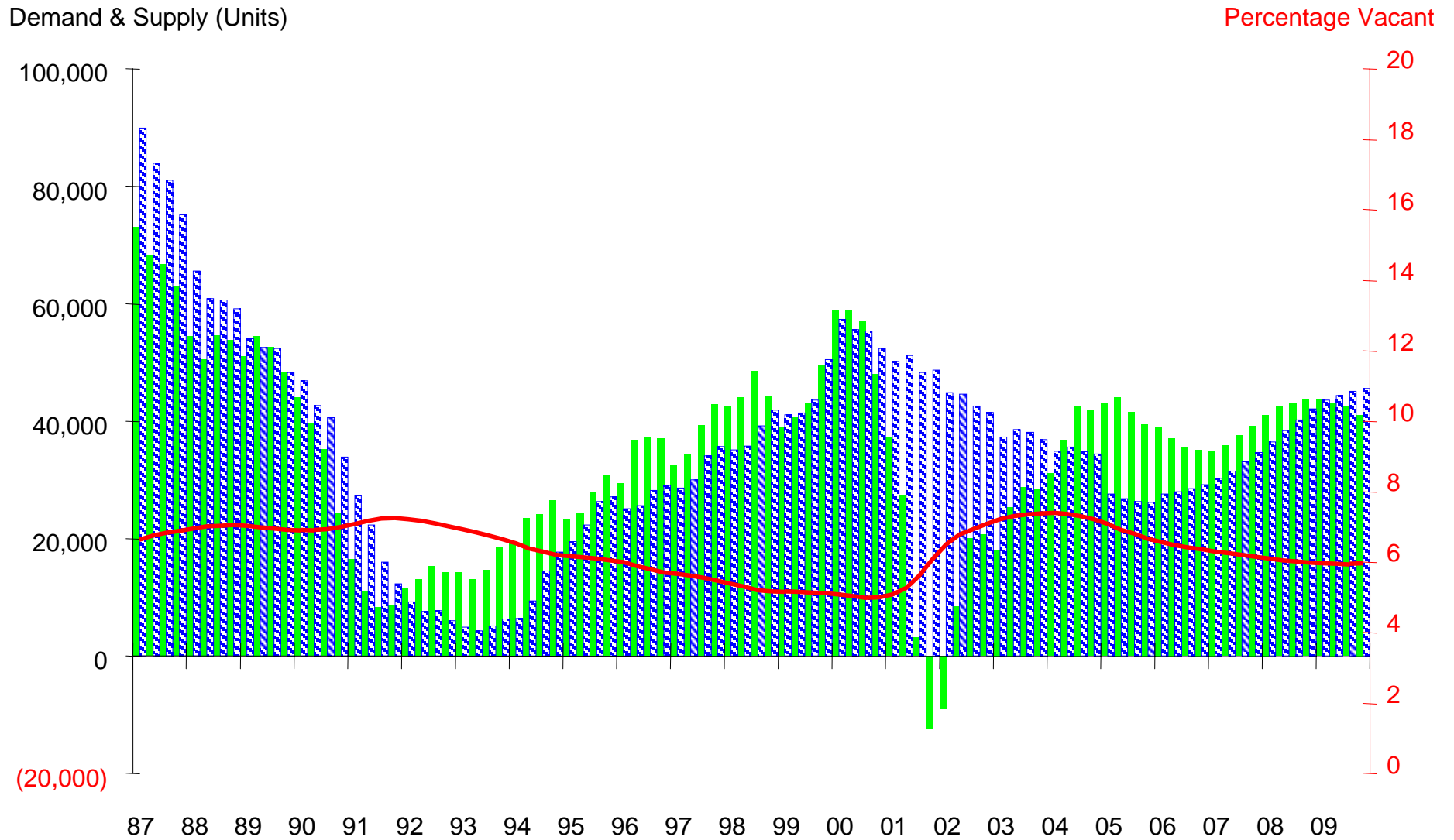
Office Income vs. Pricing



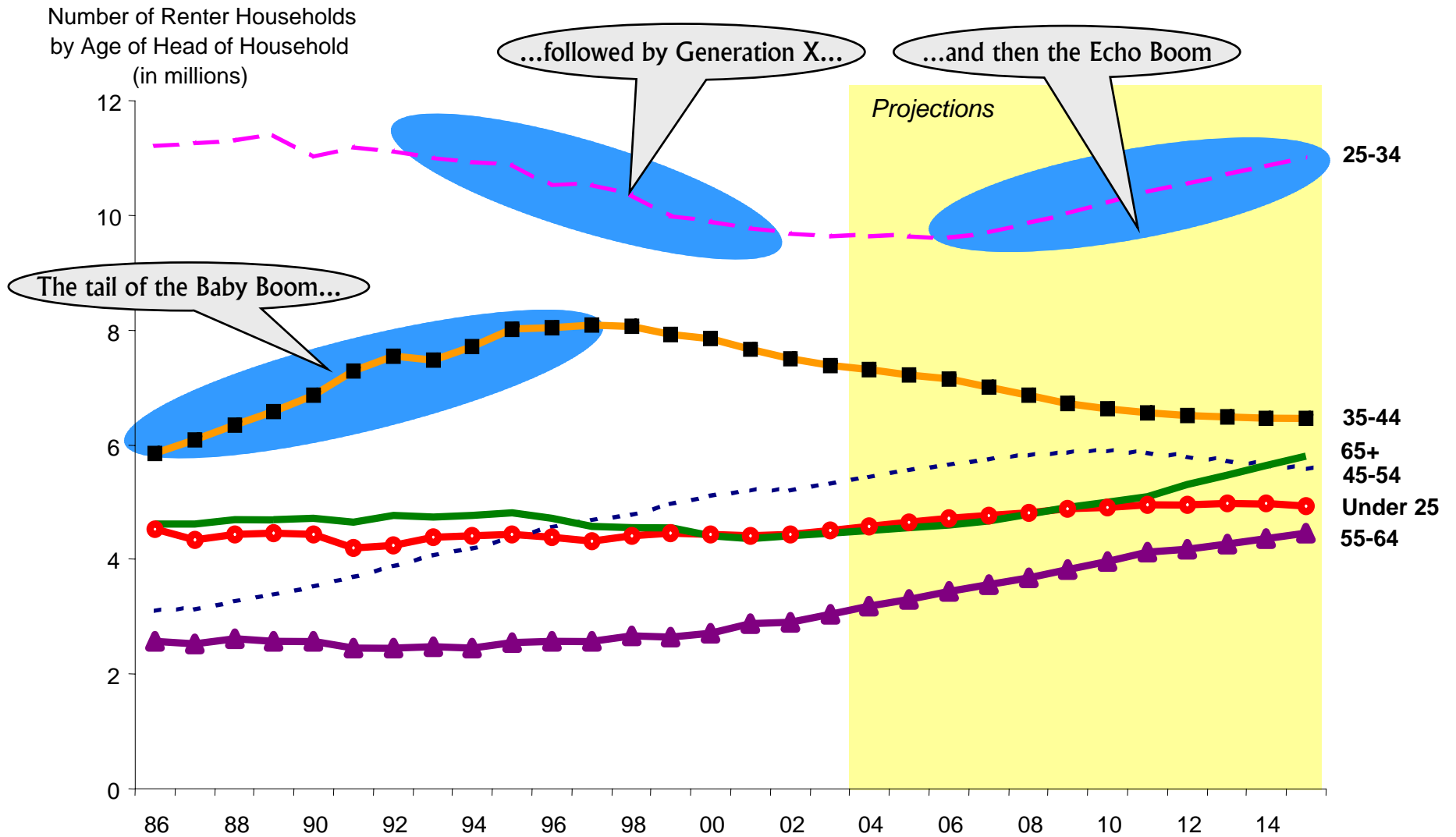
Sources: NCREIF; PPR

PPR54 Apartment Market Fundamentals

■ Quarterly Change in Demand
 ▨ Quarterly Change in Supply
 — Vacancy Rate

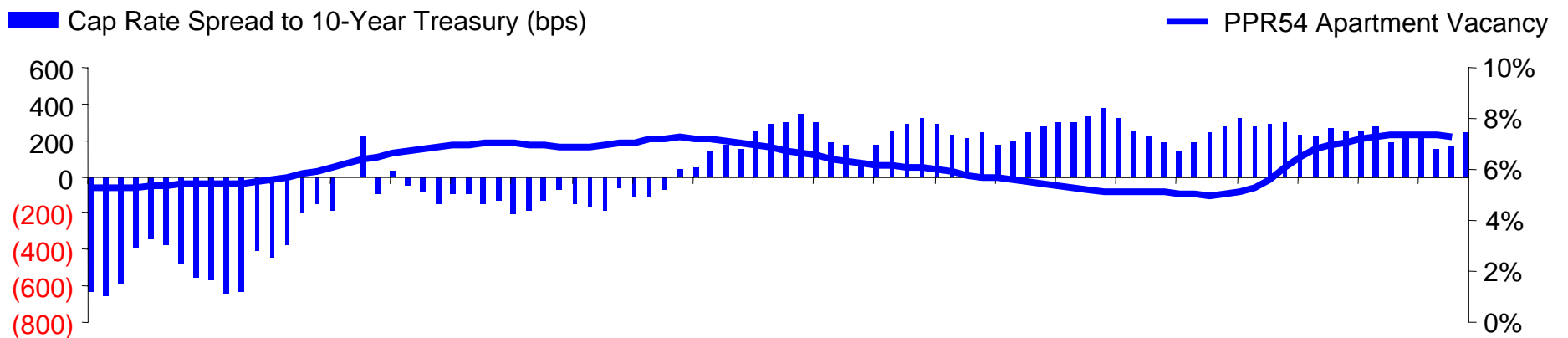
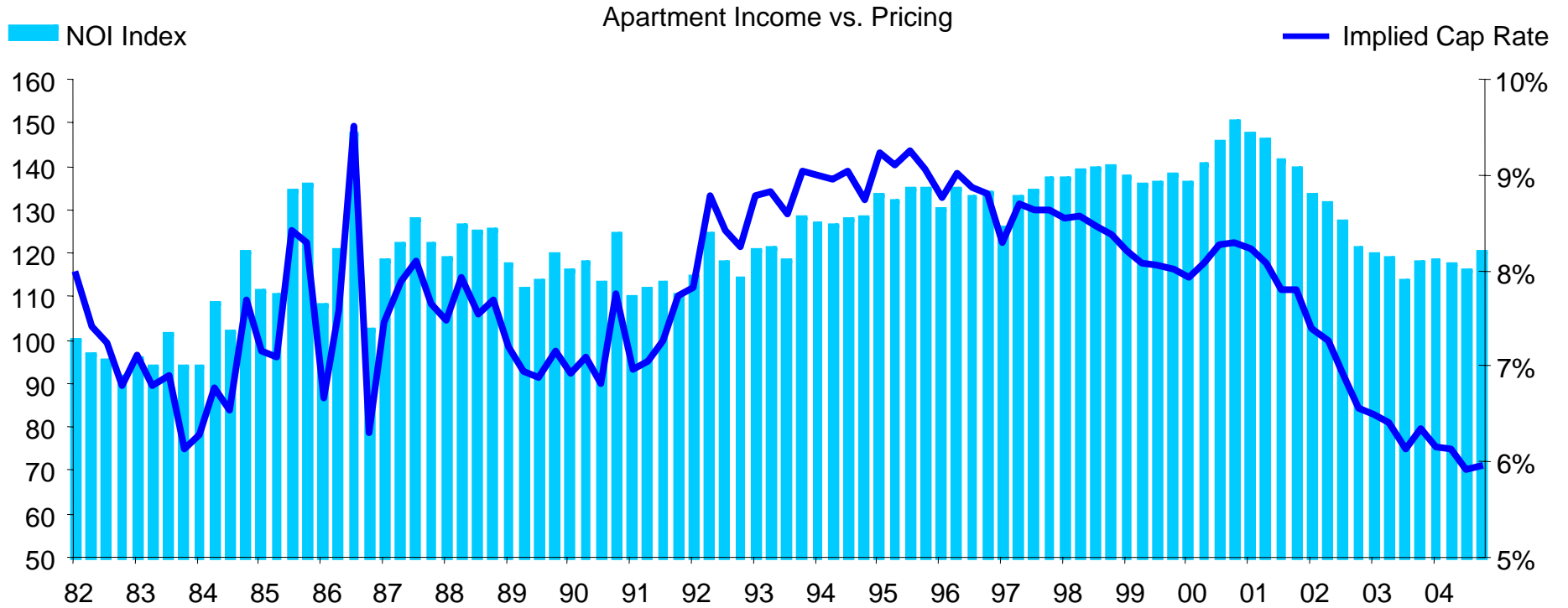


Echo Boom to Drive Apartment Demand Long Term



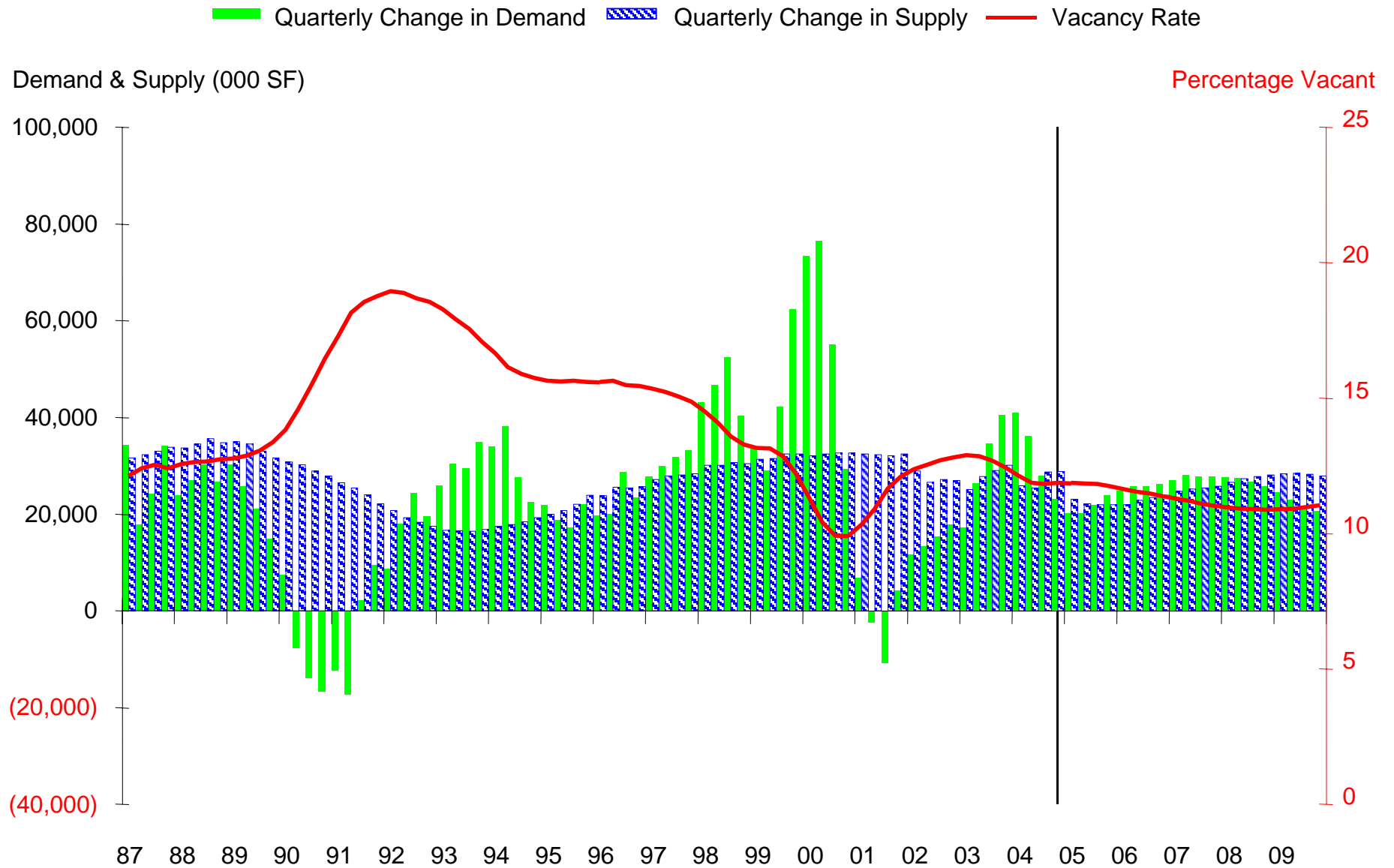
Sources: U.S. Census Bureau; Economy.com; PPR

Apartment Income vs. Pricing



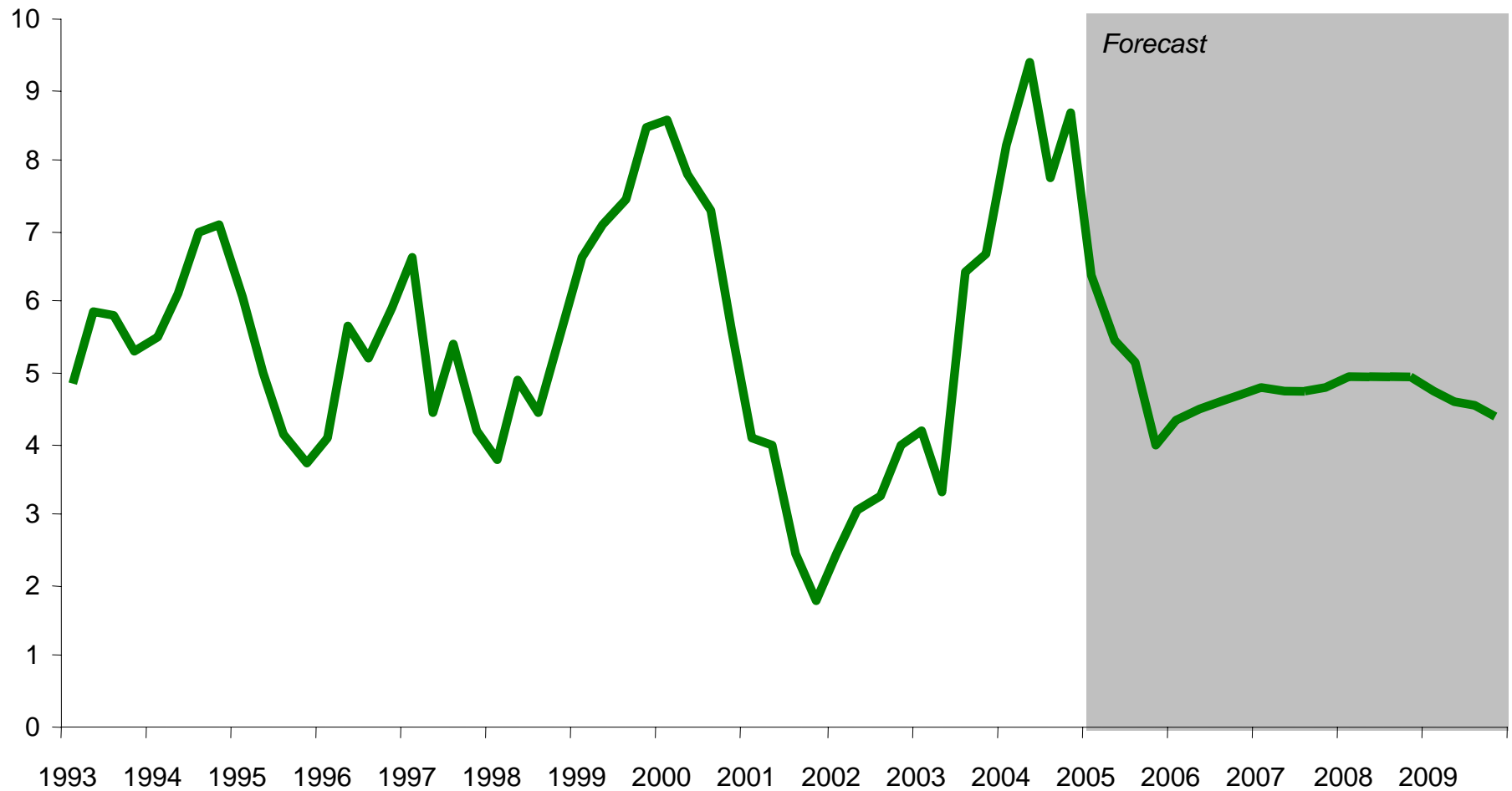
Sources: NCREIF; PPR

PPR54 Retail Market Fundamentals



Retail Sales, Ex Auto

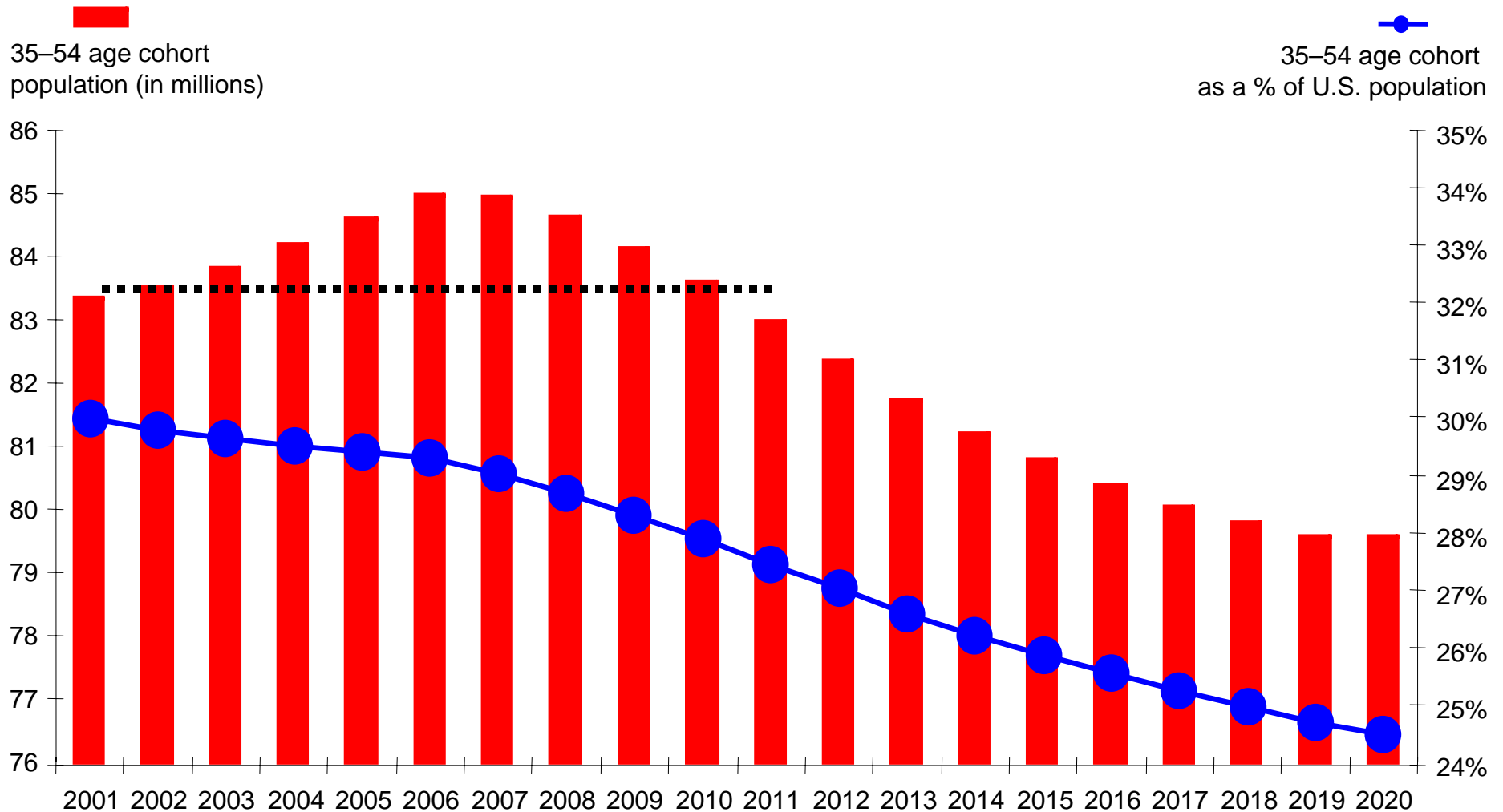
% Change Year Ago



Source: Bureau of Census; Economy.com

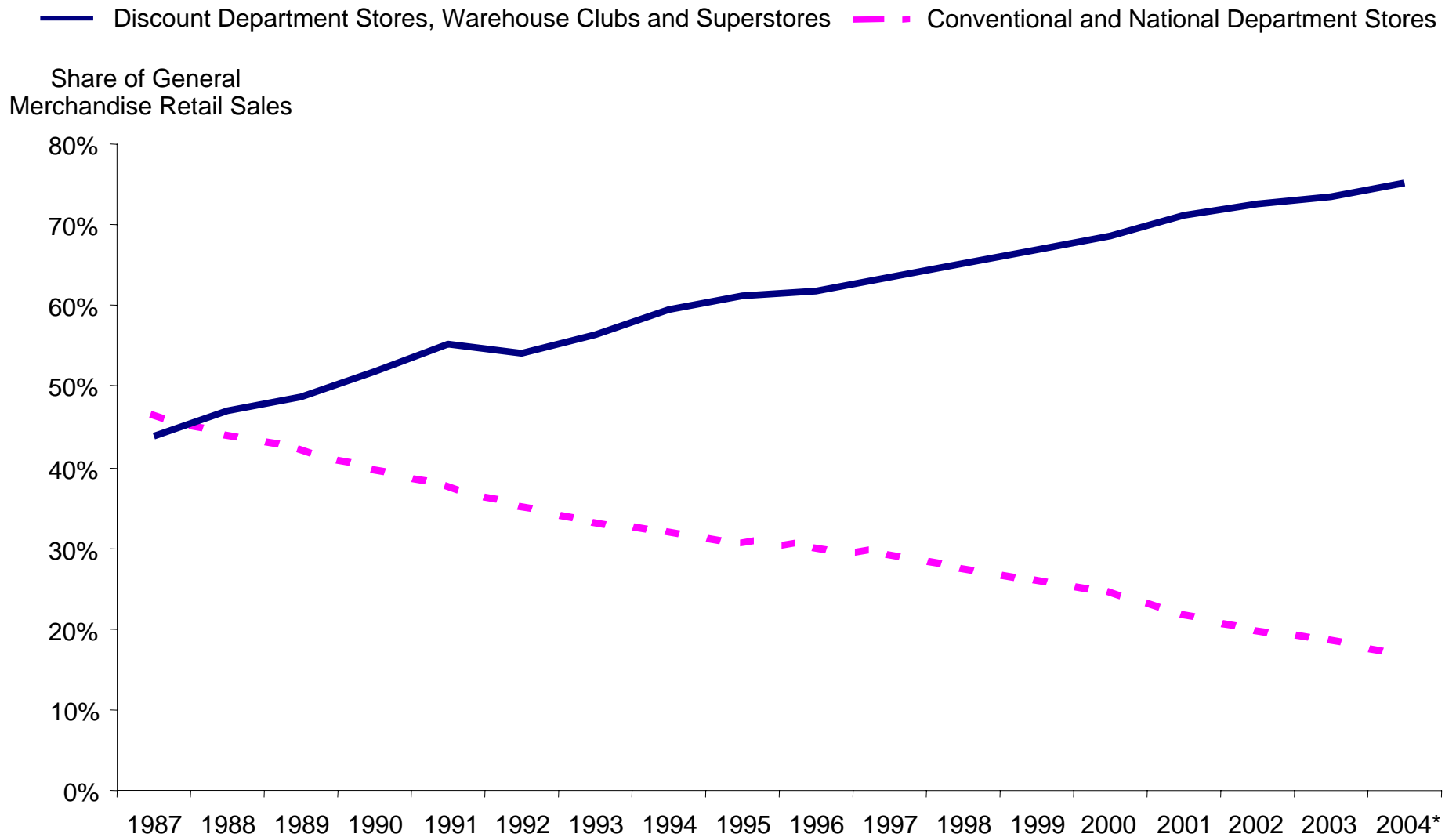
There's a Reason Why Those Boomers Just Keep Spending... Volume

Baby Boomers Will Control the Big Earning/Big Spending Age Cohort (35–54) for Several More Years Before Generation X Takes Over



Sources: U.S. Census Bureau; PPR

Discounters Dominating General Retail Sales

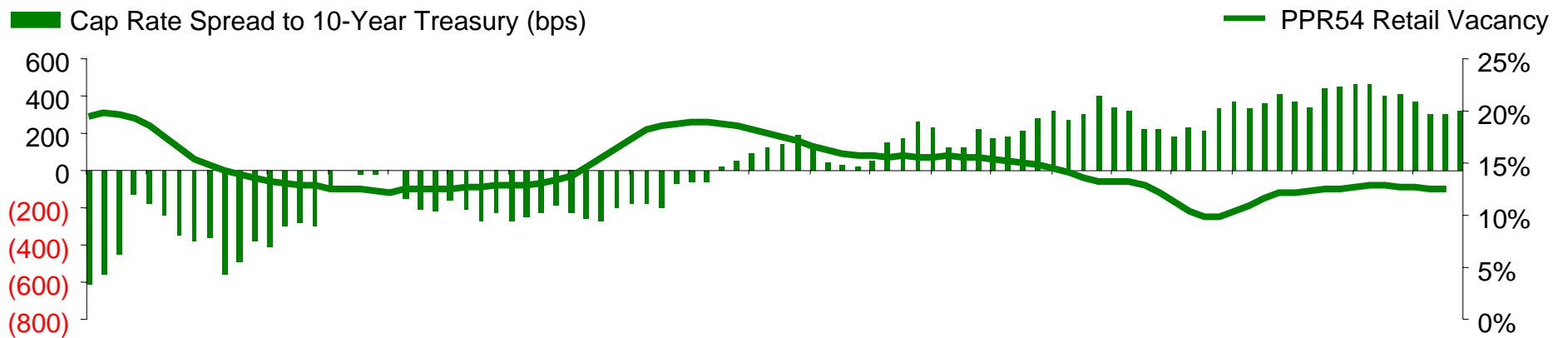
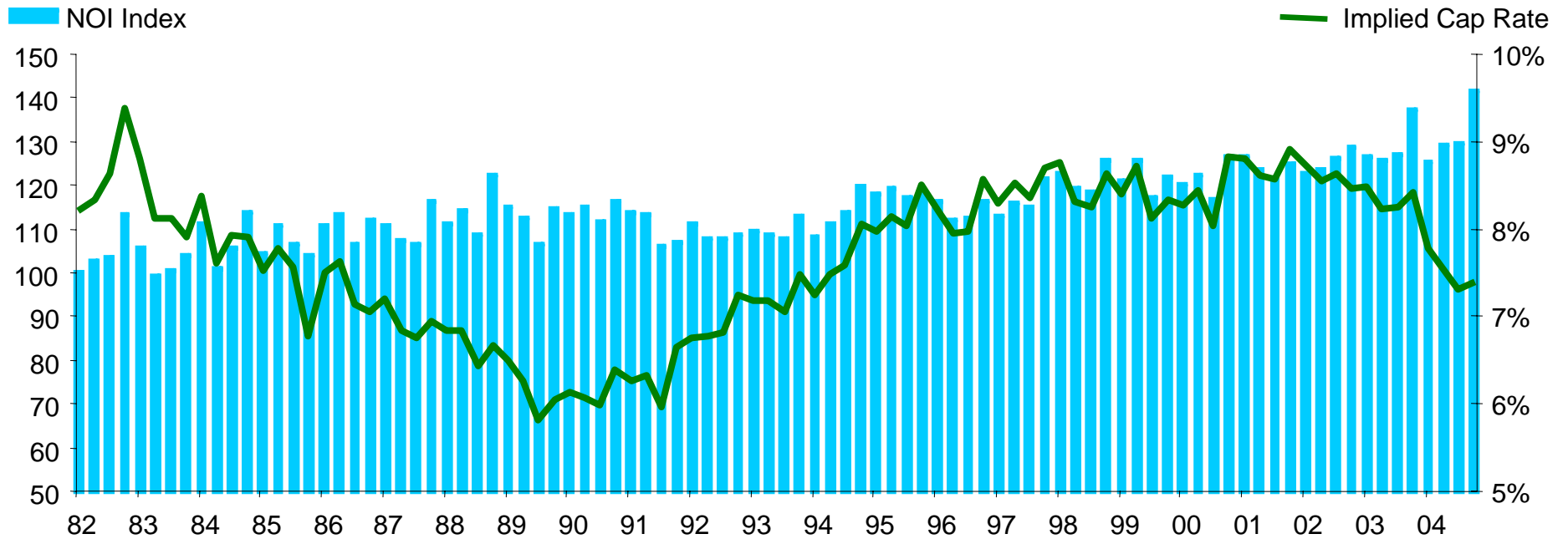


* YTD October 2004

Sources: Bureau of Census; PPR

Retail Income vs. Pricing

Retail Income vs. Pricing



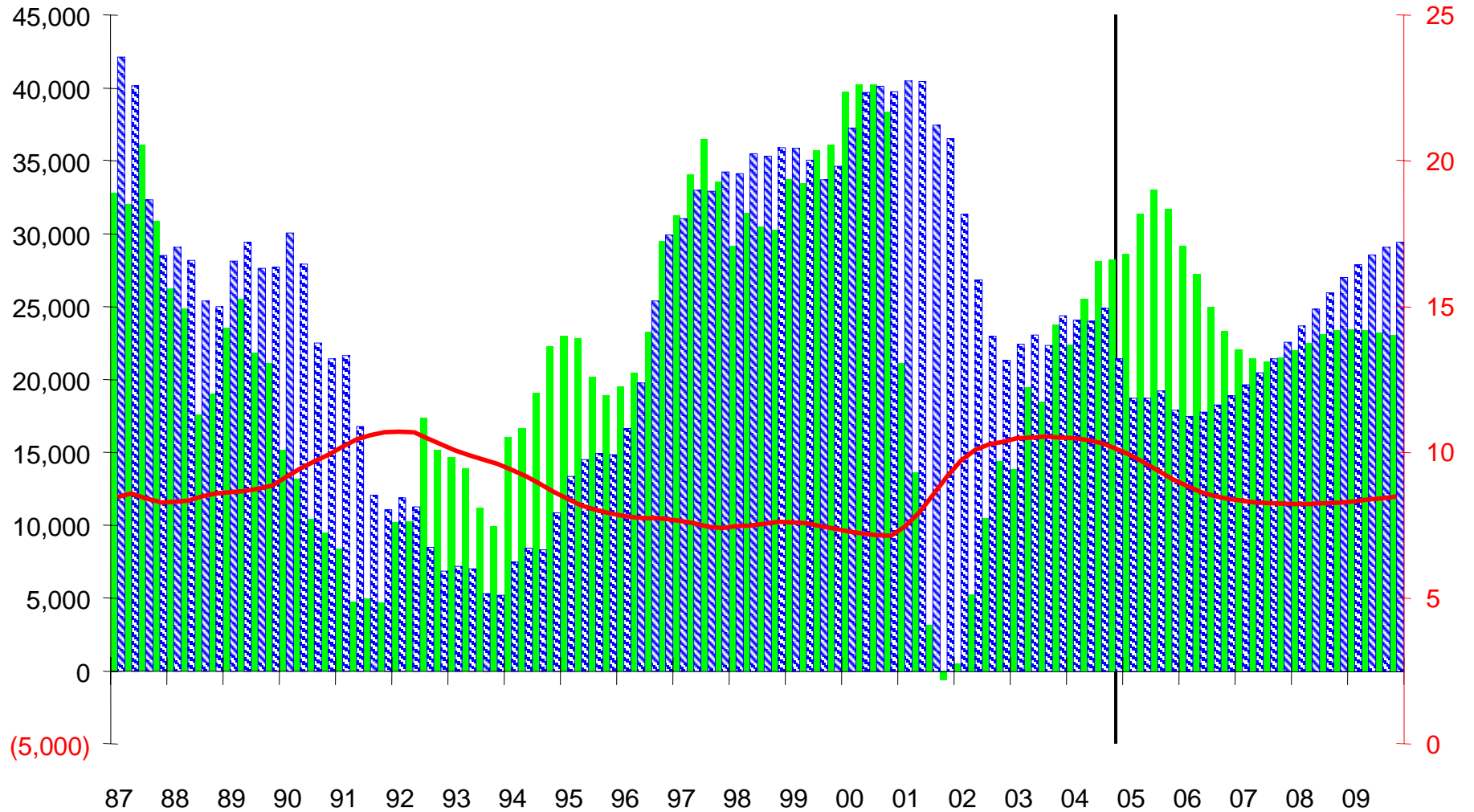
Sources: NCREIF; PPR

PPR54 Warehouse Market Fundamentals

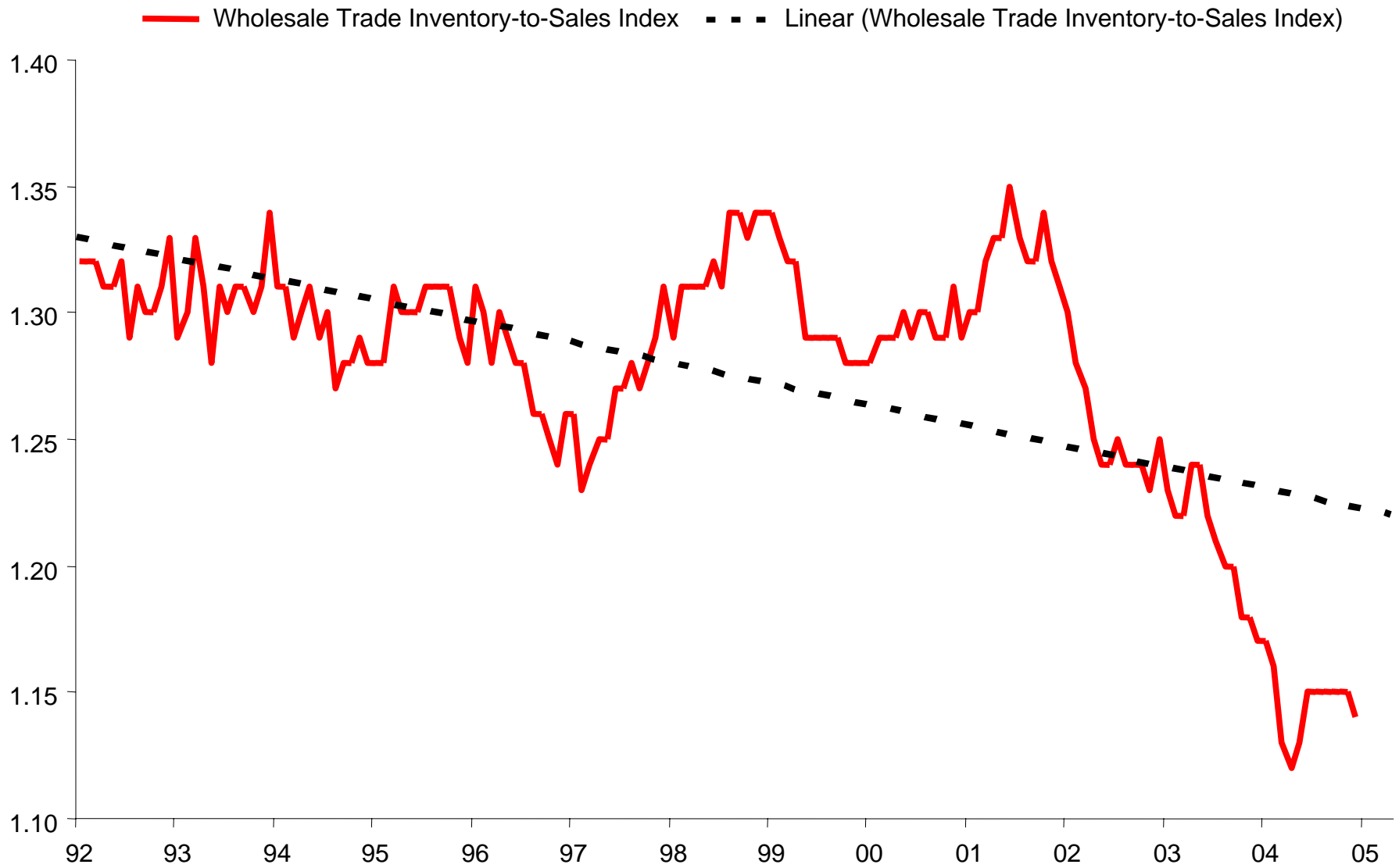
■ Quarterly Change in Demand
 ▨ Quarterly Change in Supply
 — Vacancy Rate

Demand & Supply (000 SF)

Percentage Vacant

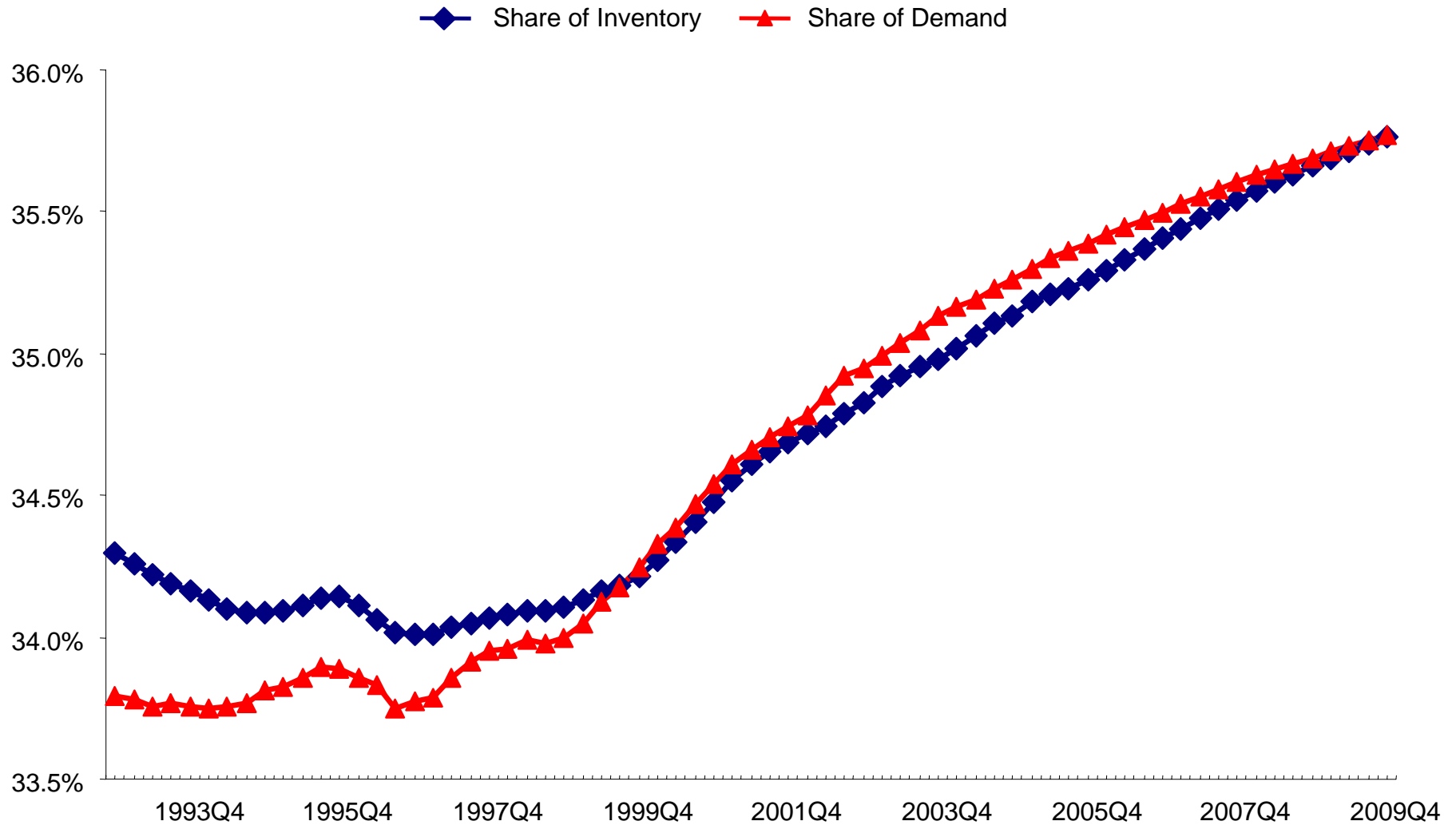


Inventory to Sales Ratio Suggests Pent-up Demand



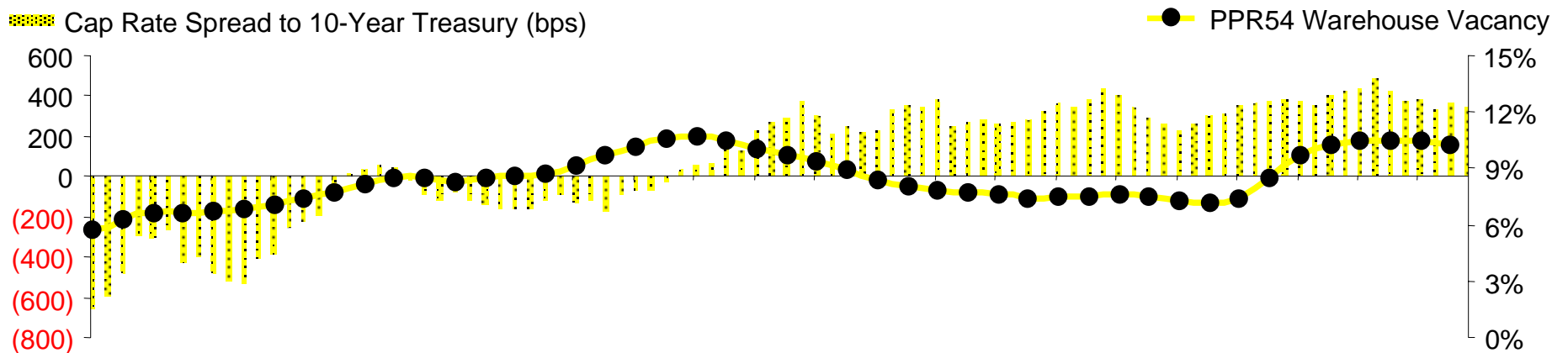
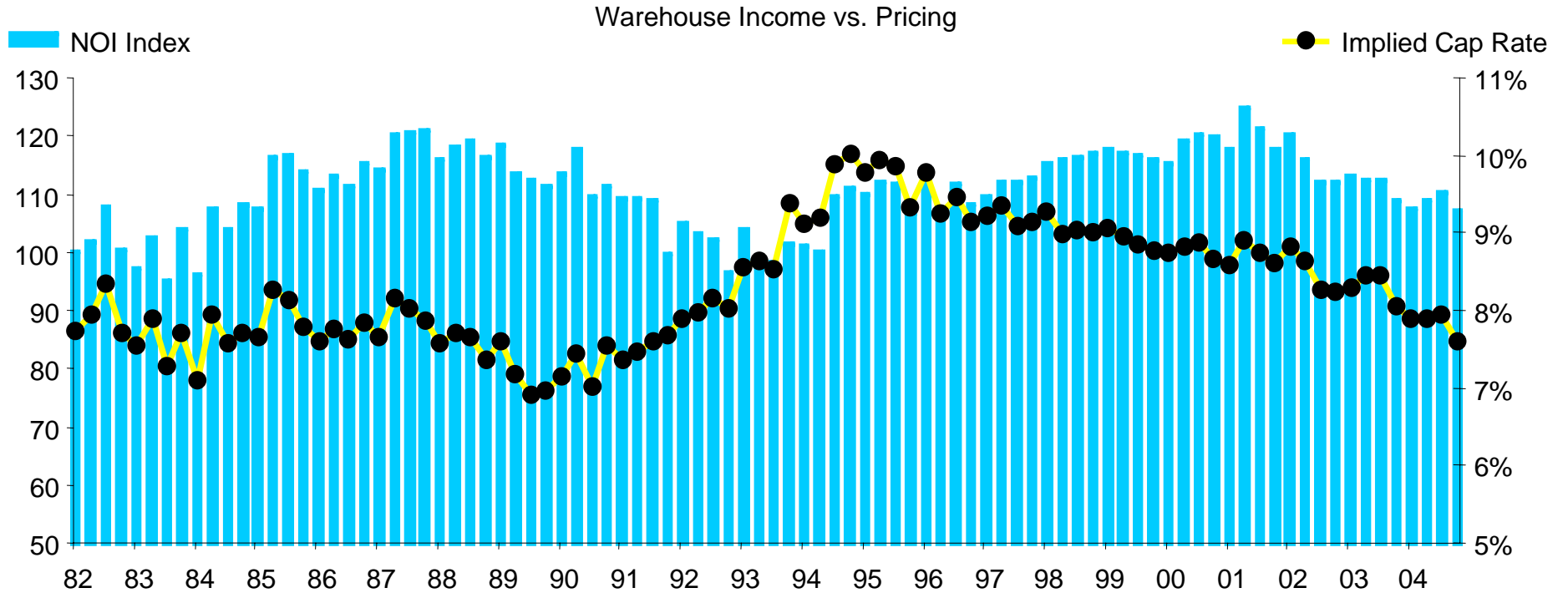
Sources: Economy.com; U.S. Census Bureau

Super-Regional Distribution Hubs Dominate Demand...



Share includes Atlanta, Chicago, Dallas, Inland Empire, Los Angeles, and Northern New Jersey as a percent of the PPR54

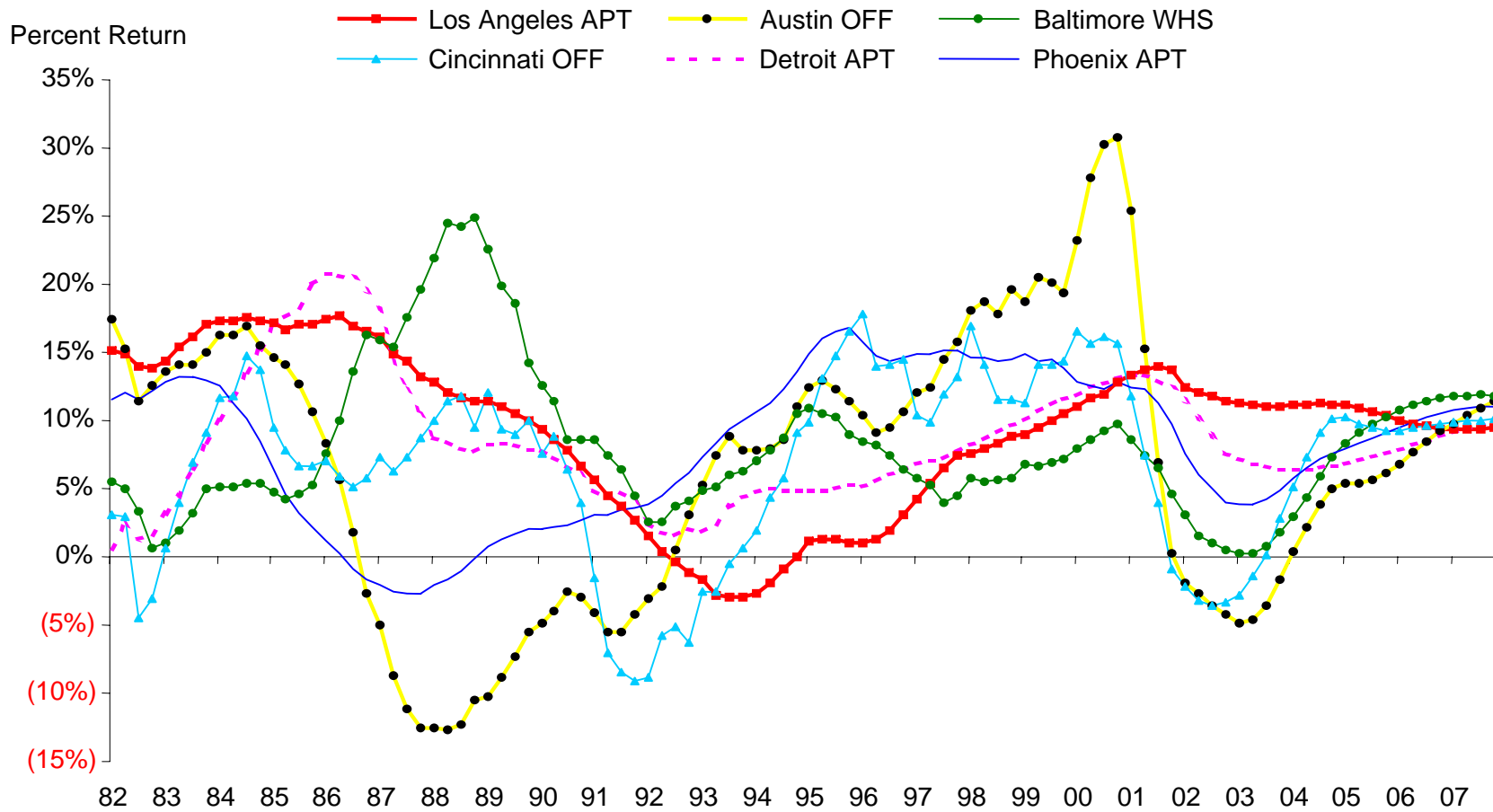
Warehouse Income vs. Pricing



Sources: NCREIF; PPR

The Derived Market Return

Returns by City and Property Type

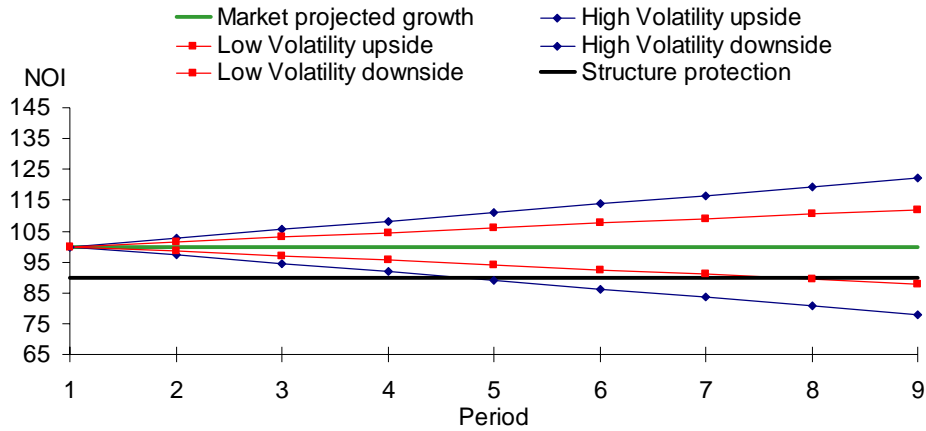


The Process: Model "Top Down," Validate/Challenge "Bottom Up."

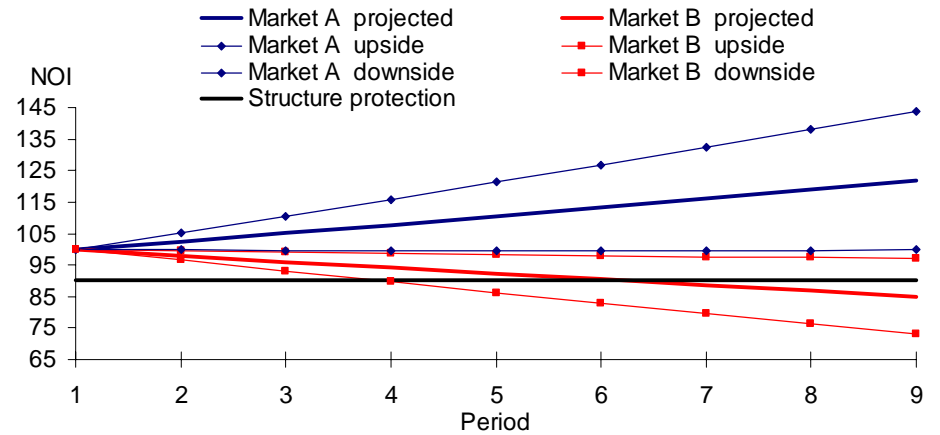
AND: Get LOADS of Feedback From Our Clients!!!

Three Key Issues that Impact Risk

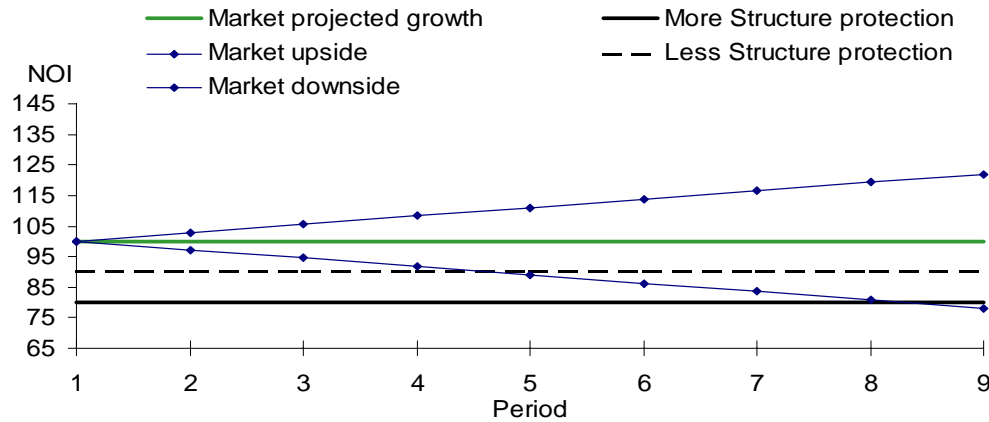
Volatility



Expected Growth



Structure Protection

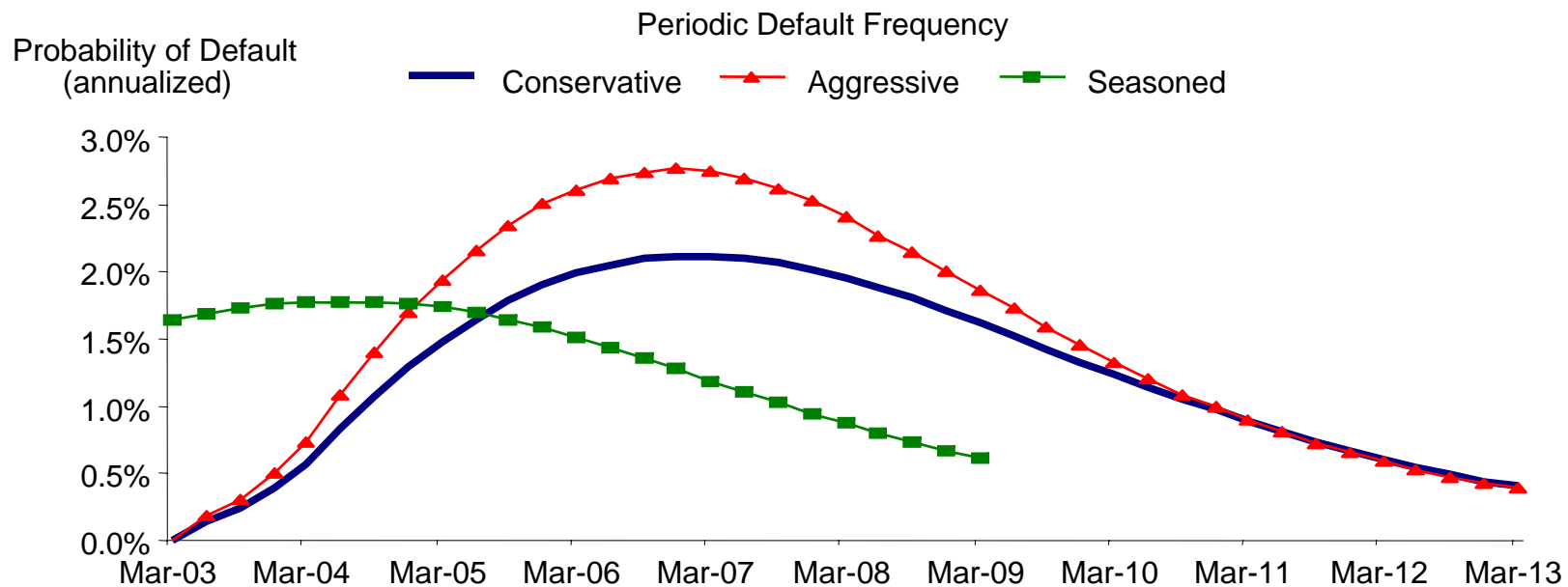


Quantifying CRE Mortgage Credit Risk

A fixed-rate, 10-Year Bullet with:

- a **Conservative** Structure — 75% LTV, 1.3 DSCR, originated 1Q03
- an **Aggressive** Structure — 85% LTV, 1.2 DSCR, originated 1Q03
- a Conservative Structure — 75% LTV, 1.3 DSCR, originated four years prior (**seasoned**)

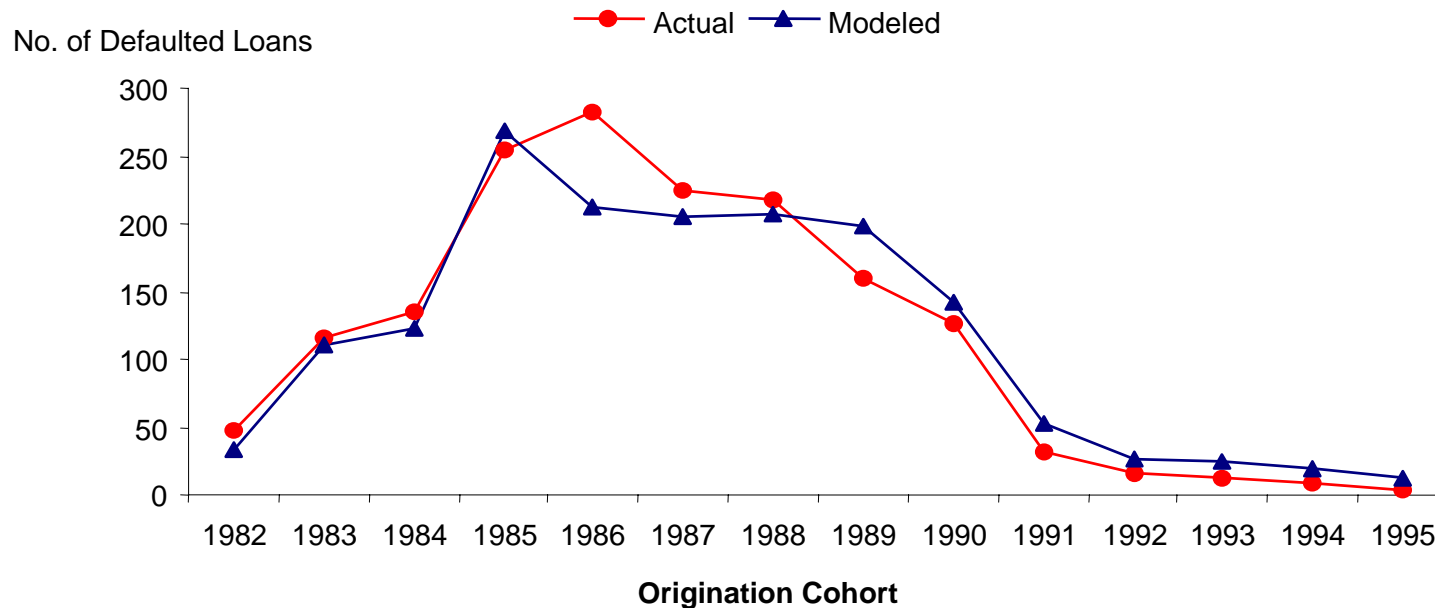
Will all exhibit large differences in level and timing of risk exposure



BUT, each result also differs by market and property type

PPR Model Benchmarking: Probability of Default and Loss Given Default

Portfolio Averages	Snyderman	PPR
Frequency of Default	17.20%	17.20%
Severity of Loss	34.00%	33.00%
Overall Loss	5.86%	5.69%

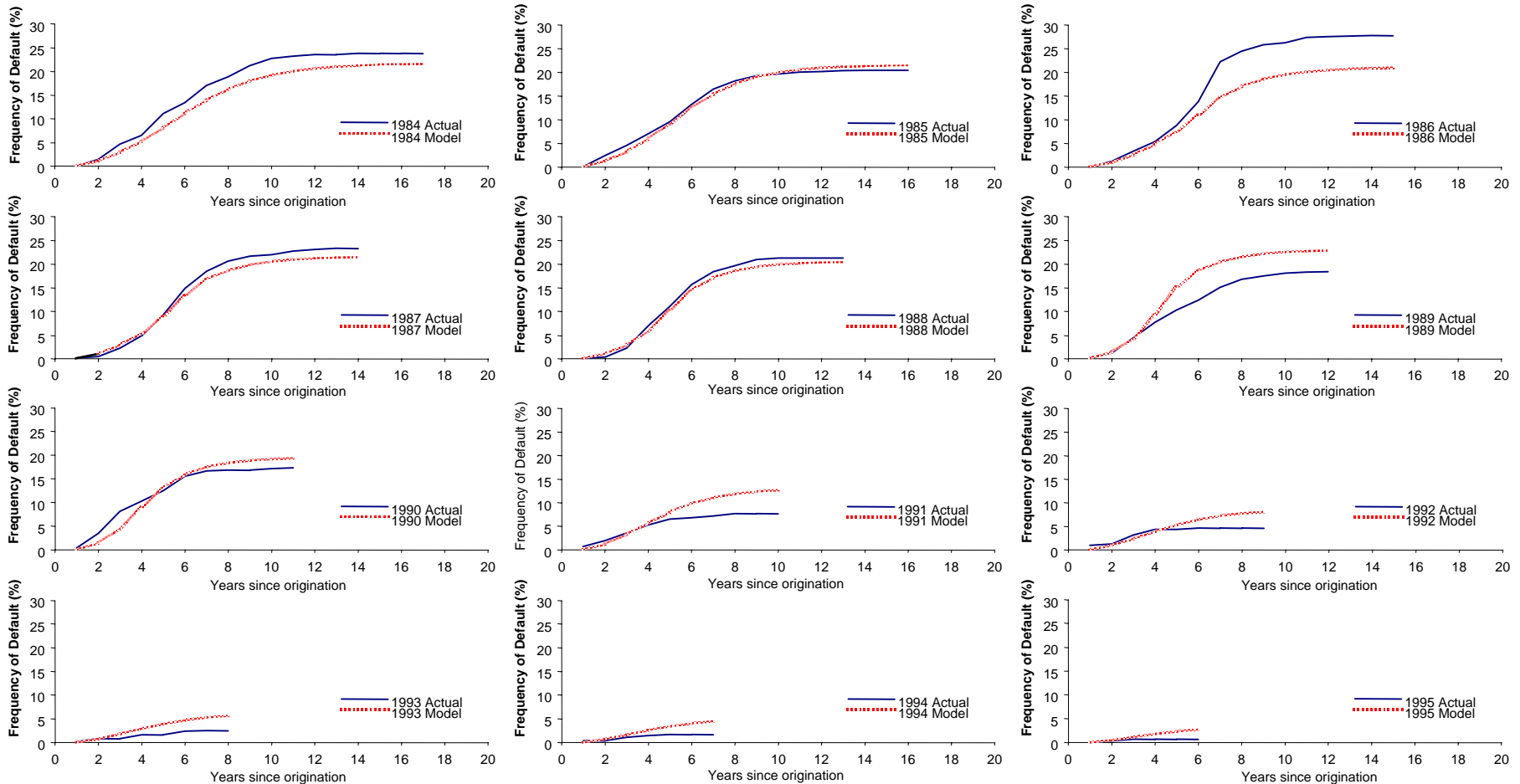


● Origination cohorts **97%** correlated

Calibrating Results: Cumulative Probability of Default

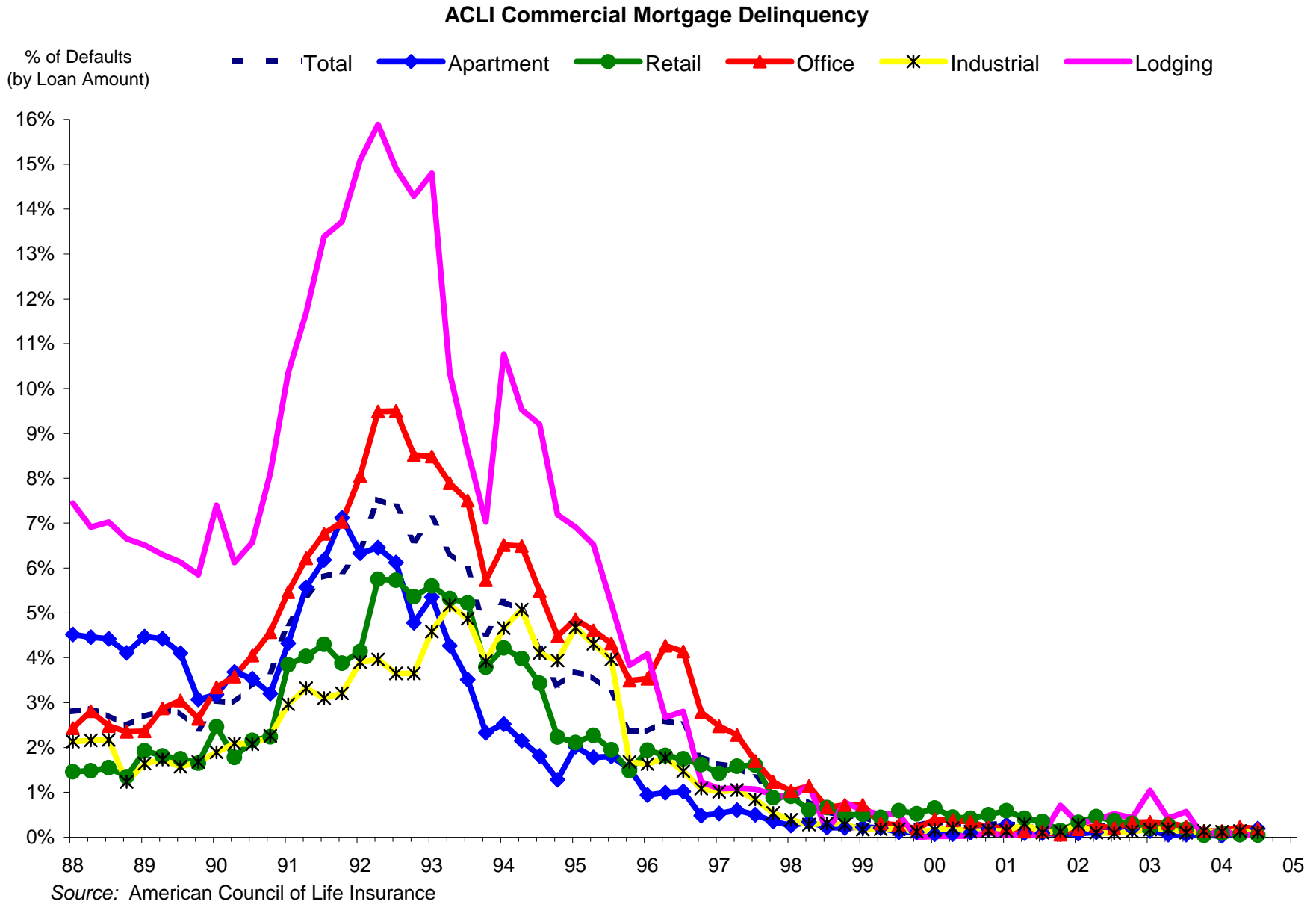
Results extremely encouraging

- very tight across most origination cohorts,
- especially strong correspondence during loan's initial years



Factors effects from: 1) loan seasoning, 2) survival rate, and 3) economic conditions

Mortgage Delinquencies Still Holding Their Ground



CMBS Whole Loan Spreads



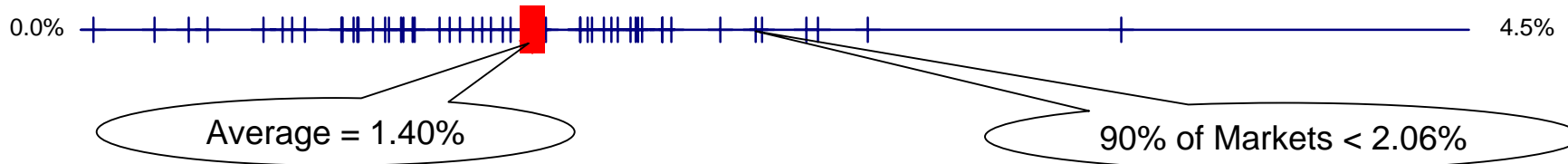
Source: PPR; Lehman Live

Lifetime Default Expectations by Property Type — *Base Case*

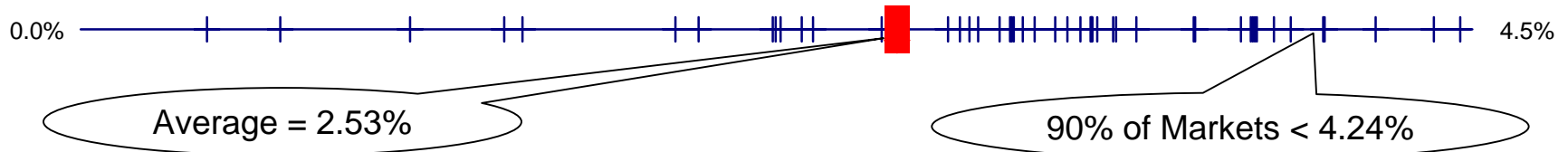
2004 Q3

75 % LTV 1.30 DSC 10 Year Bullet 25 Year Amortization Unseasoned

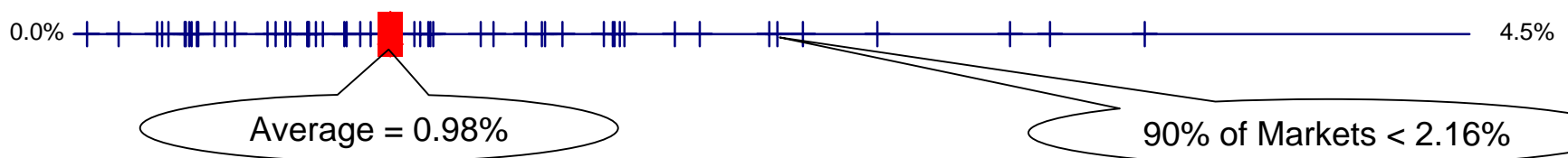
Apartment Markets' Lifetime Expected Loss Average = 140 bp 90% Markets < 206 bp



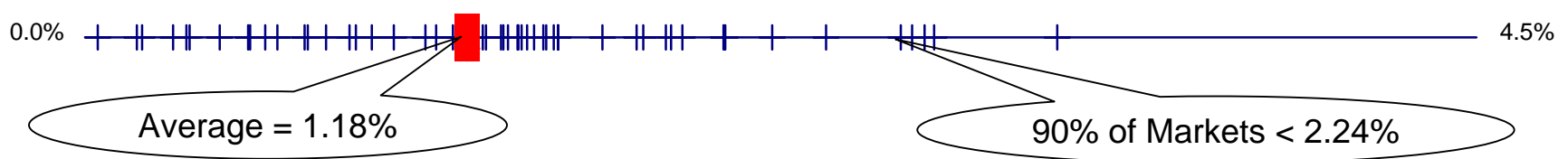
Office Markets' Lifetime Expected Loss Average = 253 bp 90% Markets < 424 bp



Retail Markets' Lifetime Expected Loss Average = 98 bp 90% Markets < 216 bp



Warehouse Markets' Lifetime Expected Loss Average = 118 bp 90% Markets < 224 bp



Lifetime Default Expectations by Property Type — *Base Case*

2004 Q3

75 % LTV

1.30 DSC

10 Year Bullet

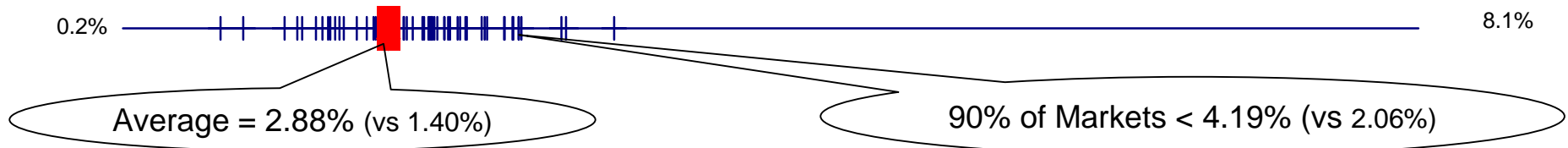
25 Year Amortization

Unseasoned

Apartment Markets' Lifetime Expected Loss

Average = 288 bp

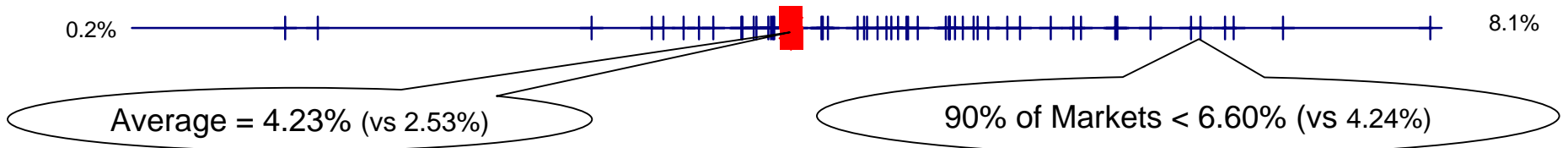
90% Markets < 419 bp



Office Markets' Lifetime Expected Loss

Average = 423 bp

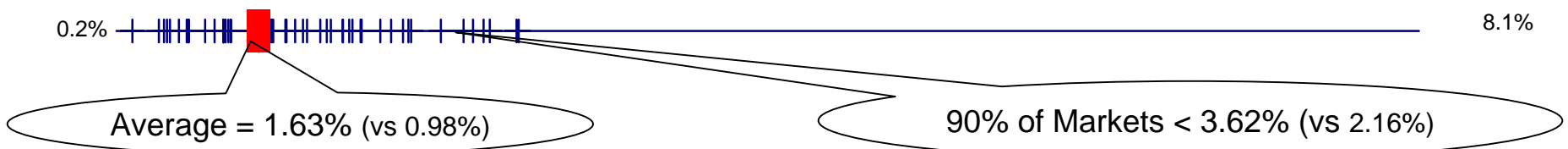
90% Markets < 660 bp



Retail Markets' Lifetime Expected Loss

Average = 163 bp

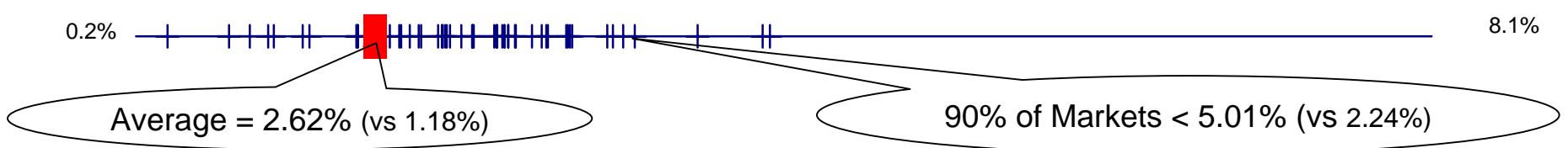
90% Markets < 362 bp



Warehouse Markets' Lifetime Expected Loss

Average = 262 bp

90% Markets < 501 bp



Summary

- U.S. Economy is on a self-sustaining recovery
- Commercial Real Estate Fundamentals are improving
 - ✓ Fastest for some office markets, most worries for multifamily
 - ✓ Long term demographic trends bear watching
 - ✓ New England, San Jose and some old economy mid-west markets will be late to the party
- Commercial real estate lending in relatively good shape
 - ✓ Problems expected to increase but remain low by historical standards
 - Median EL only about 25% of Snyderman average loss (5%-6,25%)
 - Median EL only about 15% of Snyderman worst cohort (9%-12%)
 - High probability that overall losses will be below 25 basis points
 - Less than 1-2% likelihood losses will exceed Snyderman worst cohort
 - ✓ Even under more severe economic deterioration, problems overall are not expected to exceed 50%–60% of the levels encountered on average during the last downturn
 - ✓ Beware of exposure in:
 - Higher leverage and lower coverage
(20% increase for 80% LTV, 1.25 DSCR vs 70%, 1.3)
 - Originations of 2000 & 2001 (30% increase in annual average)
 - Office collateral and poor tenant credit retail