

# Bay Area Economic and Apartment Market Outlook 2005 - 2006

*Prepared for*

***Certified Commercial Investment  
Members (CCIM)***

*Prepared by*

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***“The-Commercial-Group”*** ***Hayward State University***

# Introduction

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- U.S. & California Budget Issues
- National Economic Fundamentals
- Technology/Venture Capital Trends
- Local Business Cycles
- California
- Demographics
- Employment/Inflation
- Housing Market
- Apartment Market
- Commercial Market
- Conclusions: Comparative Advantages and Risks

# Johnson/Souza Group, Inc

- Over 15 years of real estate economic and financial research, and institutional due diligence underwriting. Specializes in apartment and commercial market research, valuation and brokerage services.
- Offering tax deferred vehicles: 1031 Exchanges, Tenants in Common (TIC), Private Annuity Trusts (PAT), etc.; and real estate related investments: partnerships, funds, REITs, etc.

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# Real Estate Capital Markets in a Social, Cultural and Economic Context

## Interdisciplinary/Cross-Sectional Approach to Real Estate Capital Market Analysis:

- Philosophical Systems (Ethics/Morality)
- Legal Systems (Rule of Law and Contract Enforcement)
- Political Systems (Democratic/Authoritarian)
- Economic Systems (Capitalism/Socialism)
- Financial Systems (Capital Markets)

# Economic Environment and Forecast

# Economic Environment 2005

- **National Economy** 
  - Economic growth accelerated in 2003 - 2004 to average 4.2% per year, compared to 2.4% in 2003, expected to slow to 3.5% in 2005, barring any major shocks such as stock-bond market declines from rising short/long-term interest rates caused by massive government funding (crowding out) of federal-state-local budget deficits
  - Commercial construction peaked in 2001; bottomed in 2004 at higher levels compared to historical cycles; and projected to rise through 2009 as high capital flows persist
  - Tech sector reached first cyclical peak in 2004, moved from recovery-to-growth phase, reflecting rising demand (prices) and business investment in semiconductors and IT services and equipment; however, industry slowed in second half of 2004, revenues expected to continue to rise in 2005

# Economic Risks 2005-2006

## Global

- Terrorist attacks, military buildups
- Aggression for natural resources (Oil Shocks \$55-\$60)
- Mass migrations (Immigration)
- Rising gap between rich and poor nations (Poverty)
- Currency devaluations (deflation), trade wars
- Mounting sovereign debt
- Environmental catastrophe-degradation

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## United States

- Massive federal (war/entitlements), state and local debt
- Currency devaluation (inflation), rising interest rates
- Healthcare crisis (underinsured-none), rising costs
- Affordable housing crisis, rising urban homelessness
- Slow job growth (manufacturing sector), trade deficits

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## California

- Continued budget deficits, low credit ratings
- Continued cutbacks in social welfare, education, infrastructure spending and state bureaucracy
- Higher fees and taxes at local level
- Affordable housing crisis, rising urban homelessness

# Economic Environment 2005

## Bay Area



- Job losses since 2000 exceeds 350,000 -- driven by tech sector, 32% of wages -- job growth strong upward trend
- High home prices, extremely low affordability
- Rental rate declines bottoming, below inflation growth
- Reduced use of concessions, normal turnover

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## Sacramento



- Weakness in economy from state budget deficits, expenditure reductions-layoffs in gov-tech sectors
- Rapidly rising, but more affordable home prices
- Benefiting from continued firm-population in-migration
- New supply being absorbed, more competitive

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## Southern California



- Diversified economic base, exposure to declining dollar, competition from cheap China imports
- Housing demand in excess of supply, price exposure to rising mortgage interest rates
- Orange County improving; Inland Empire regional job leader

# San Francisco Bay Area

## Business-Market Cycle Overview

- The local economy continues to recover, employment growth (Jobless Recovery), on upward trend.
- Economic growth to accelerate second half 2005 into 2006.
- Commercial construction cycle peak 2002, trough in 2004-2005, growth phase from 2006 through 2009.
- Next business cycle peak 2004 - 2005, next technology-employment cycle peak 2006 - 2008.
- Target submarkets for commercial investment:
  - **Downtown San Francisco, Oakland, and San Jose; I880/I580 Corridors; South San Francisco and Peninsula; and Napa/Solano**

# U.S. Policy Issues

# 2005-2006 Budget

- **\$2.568 trillion budget, 55.4% mandatory (\$1.6 trill.), 36% discretionary (\$922 bill.), 8% interest (\$211 bill.), \$390-to-\$427 billion deficit (3.5% GDP) (House/Senate approval (4/28/05))**
  - Borrows \$170 billion from social security trust fund.
  - \$20 billion cut in domestic programs, \$137 billion in entitlement programs, \$1.4 billion for Amtrak, \$56 bill. education.
  - Does not include \$83 billion for Iraq War; tax cuts (\$1.5 trill. 2011-2015), \$106 billion over five years; social security (\$1.0 trill. 10 years). Cut entitlements by \$35 billion over five years.
  - Increased spending on defense (\$419.5 bill.), up 41% since 2001.
  - \$69 billion (\$10 bill.) cut in Medicaid, California to see \$550 mill. cut in Medicaid, \$4.6 bill. over decade.
  - Elimination of State Criminal Alien Assistance Program, \$120 million Cal.
  - Research-and-Development Programs, \$132 bill, up 45% since 2000.
  - Basic technology research, up 2.4%, Nanotechnology to get \$344 bill
- **Under current system, deficits debt-to-GDP to +50% by 2014**

# Budget Deficits

- **\$7.6 trillion public debt outstanding, \$33 billion in interest.**
  - \$427 billion annual budget deficit, not including \$192 billion for Iraq War 2004 – 2005
  - Administration to cut deficit in half by 2009, under optimistic assumptions for rising tax revenue, excluding cost of Iraq/Afghanistan wars (\$100 billion in 2005)
  - After 2005, will have to pay \$500 billion for permanent tax cuts and \$400 billion for Medicare prescription drug program
  - Budget deficits to total \$5 trillion over next 10 years
  - Foreigners currently own 47% of U.S. government debt (China/Japan)

# Social Security

- 70 year-old retirement system (New Deal FDR) **will be taking in less than it pays by 2018** (Pay-as-you-go) as boomers retire
- System once had 16 taxpaying workers per retiree in 1950, will have two workers per senior by 2030, has 3.3 workers today
- No longer “trust fund” accumulating assets to pay beneficiaries: surpluses have been spent on war, pork-barrel projects, tax relief, etc. Government is now issuing IOUs.
- Percentage of income tax revenues needed to meet payroll tax shortfall on Social Security and Medicare to rise from 3.6% in 2004, to 28.6% in 2020, and 52.7% in 2030
- \$3.7 trillion shortfall over 75 years, dwarfed by Medicare shortfalls, less than projected value of tax cuts

# Social Security

- Adding private accounts similar to 401K programs, to earn higher returns; however, since 1990, defined benefit median annual returns (7.42%), compared to defined contribution median returns of (6.86%) (Watson Wyatt Worldwide)
- Includes cuts in future benefits, would cost \$2 trillion to over 10 years to move system to private accounts, plus borrow money to balance accounts
- Index benefits to price-index from wage-index
- Business to pay from \$19 today to \$30 per participant to fund the Pension Benefit Guaranty Corp., up 58%, may cause small funds to stop providing retirement benefits, deficit doubled to \$23.3 billion in 2004, to introduce more complicated formula to calculate premium
- System will have to be financed through higher payroll taxes on future generations, increased borrowing, lower benefits, lower expenditures, etc.

# Healthcare

- Past 40 years, health care dominated by commercial (private) market, not able to control costs or guarantee universal coverage (market failure).
- System unsustainable-unacceptable, needs government intervention. No risk pooling, buying pools, economies of scale, etc. (Canada, Sweden, France more efficient/cheaper).
- Employees-employers incurring higher costs (premiums/co-payments), up 9.9% per year since 1988. Costs \$10,000 per year for family of four.
- +45 million (16%) do not have health insurance (6.6 mill. California, 780,000 children):
  - 80% working adults.
  - Over 12 month period, 40% unable to see doctor due to cost.
  - 18,000 Americans die prematurely each year.
  - States with highest uninsured: Texas (25%), New Mexico (21%), Louisiana (19%), California (19%), United States (15%).

# War Costs

- **\$80 billion per year, \$192 billion for Iraq War 2004 – 2005**
- **\$1 trillion over 12 years**
- **Increased spending on defense (\$419.5 bill.), up 41% since 2001.**
- 1,740 U.S. Military Deaths since March 2003
- 13,074 U.S. Troops Wounded
- 22,434-to-25,456 est. Iraqi Civilian Deaths (1 million under sanctions), 30%-to-40% unemployment rate, 10 hrs elect. daily
- 163,000 Tot. Coalition Troops (135,000 U.S.), 168k Iraq sec.fcs
- 16,000 est. Insurgents as of May 2005
- 1,000 est. Anti-US Foreign Fighters
- 68 Avg. Daily Attacks against Coalition Troops since Jan. 1, '05
- 484 Car bombings: 2,221 deaths and 5,574 wounded
- 203 Foreign Citizens Kidnapped as of June 15
- 16,000 detainee prison system expansion planned

# War Costs

**“In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex,”**

**“The potential for the disastrous rise of misplaced power exists and will persist. We must never let the weight of this combination endanger our liberties or democratic process.”**

Republican President Dwight D. Eisenhower, Farwell Address, January 17, 1961.

# California Budget

# California Budget

- **2005-2006: Gov. Arnold Schwarzenegger (R)**  
**(Tue.7/5/05)**

- **\$90.1 billion budget, 9.6% increase (Overall budget \$117.5 bill.)**  
**No New Taxes**

- \$2 bill. from one time tax amnesty, \$2 bill from higher tax revenues
- \$525 million from one time bond (tobacco settlement) refinancing
- Assumes \$765 million in sale of pension obligation bonds
- Recognizes \$225 mill property tax revenue
- \$19.6 mill from higher court filing fees
- Took \$49 million from elderly and disabled cost-of-living increases
- To close \$9.1 billion deficit, +\$30 billion in Outstanding Debt; will face \$7.7 billion deficit next year

- Add back \$1.3 billion for transportation funds, \$3 bill to schools, and pay \$1.2 bill vehicle license fees to cities, a year early

**“Political Reality, State Will Continue to Spend More than it Takes In, Creating Ongoing Structural Budget Deficits”**

# California Ballot Initiatives

- **Special Election Nov. 8<sup>th</sup>, 2005**
- Cost \$45 million, 62% do not approve of holding special election
  - Constitutional amendment to allow a panel of retired judges, not legislature, to immediately redraw state legislative boundary lines
  - Limit the growth of state spending and allow the governor under some circumstances make unilateral mid-year budget cuts
  - Extend from two to five years the amount of time public school teachers must wait to achieve tenure

# California Ballot Initiatives

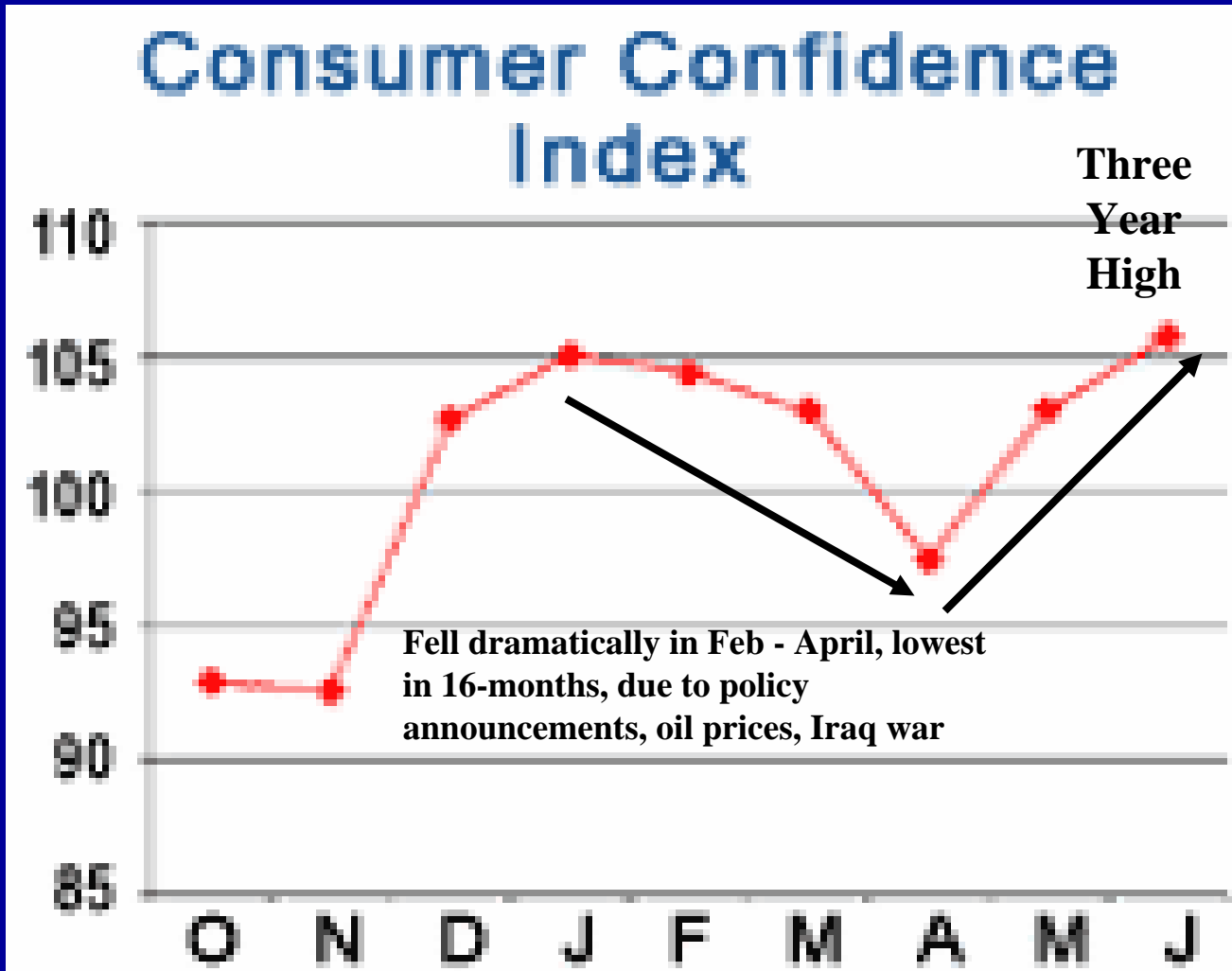
- Other initiatives

- Proposition to force unions to obtain written consent each year from members before using dues for political purposes (defeated in past)
- Require (ban) minors to receive consent from parents or guardians before having an abortion, require doctors to report all abortions
- Constitutional amendment to limit state educational spending to previous year's spending + 3 yr avg. growth rate. Governor can make unilateral cuts
- Prescription drug discounts to poor (vetoed by Governor last year)
- Re-regulation of state's energy industry, under PUC, universal, 20% renewable requirement

**“21% of +\$18 million raised comes from donors outside Californian. National implications, 2006 mid-term elections.”**

# National Economic Fundamentals

# Consumer Confidence



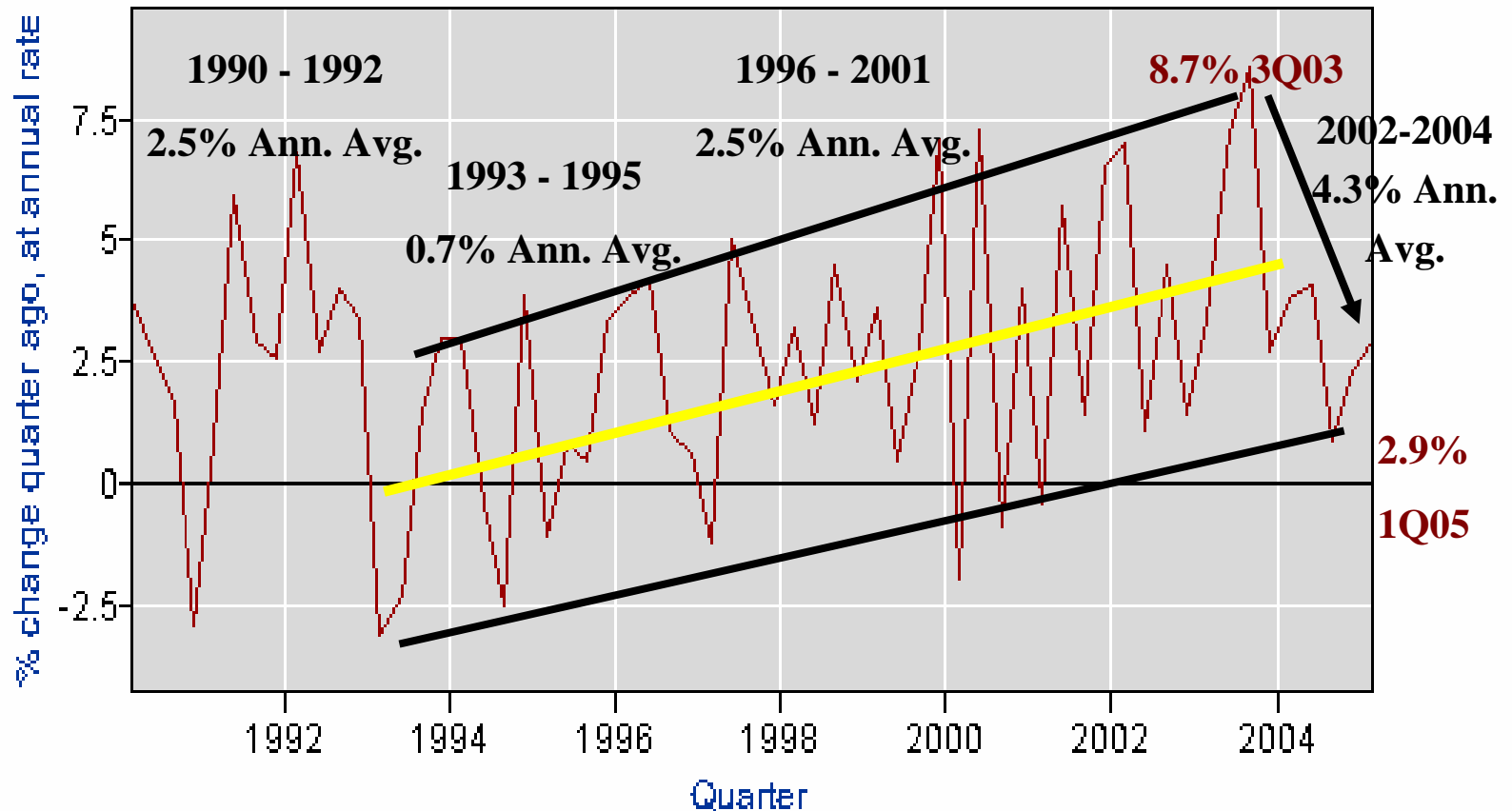
**Improvement in consumer mood suggests business activity and labor market activity to continue to improve over next several months**

# Gross National Product (GDP)



U.S. Bureau of Economic Analysis

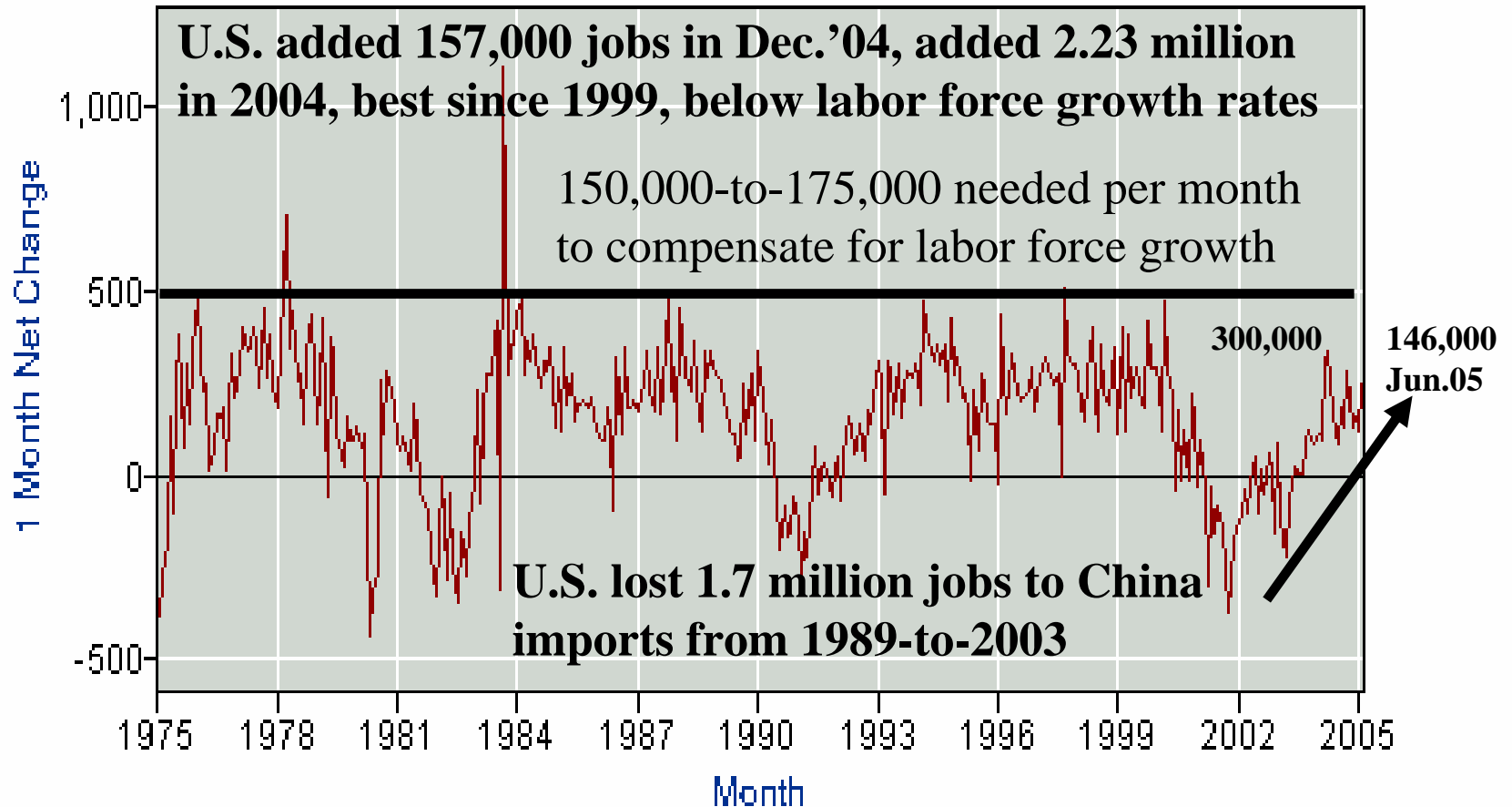
# Non-Farm Productivity (Output Per Hour)



Source: Bureau of Labor Statistics.

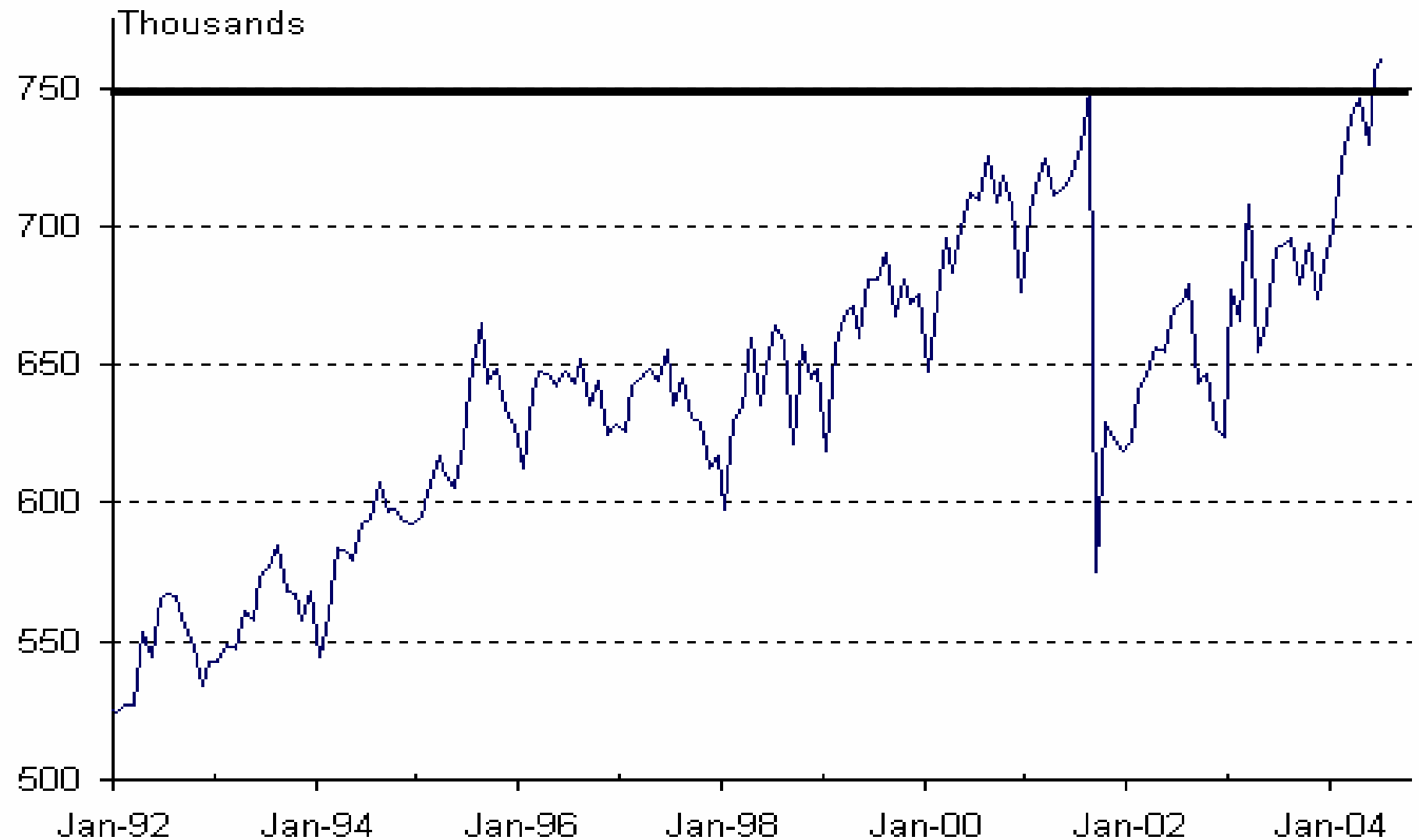
<http://data.bls.gov/>

# Payroll Employment



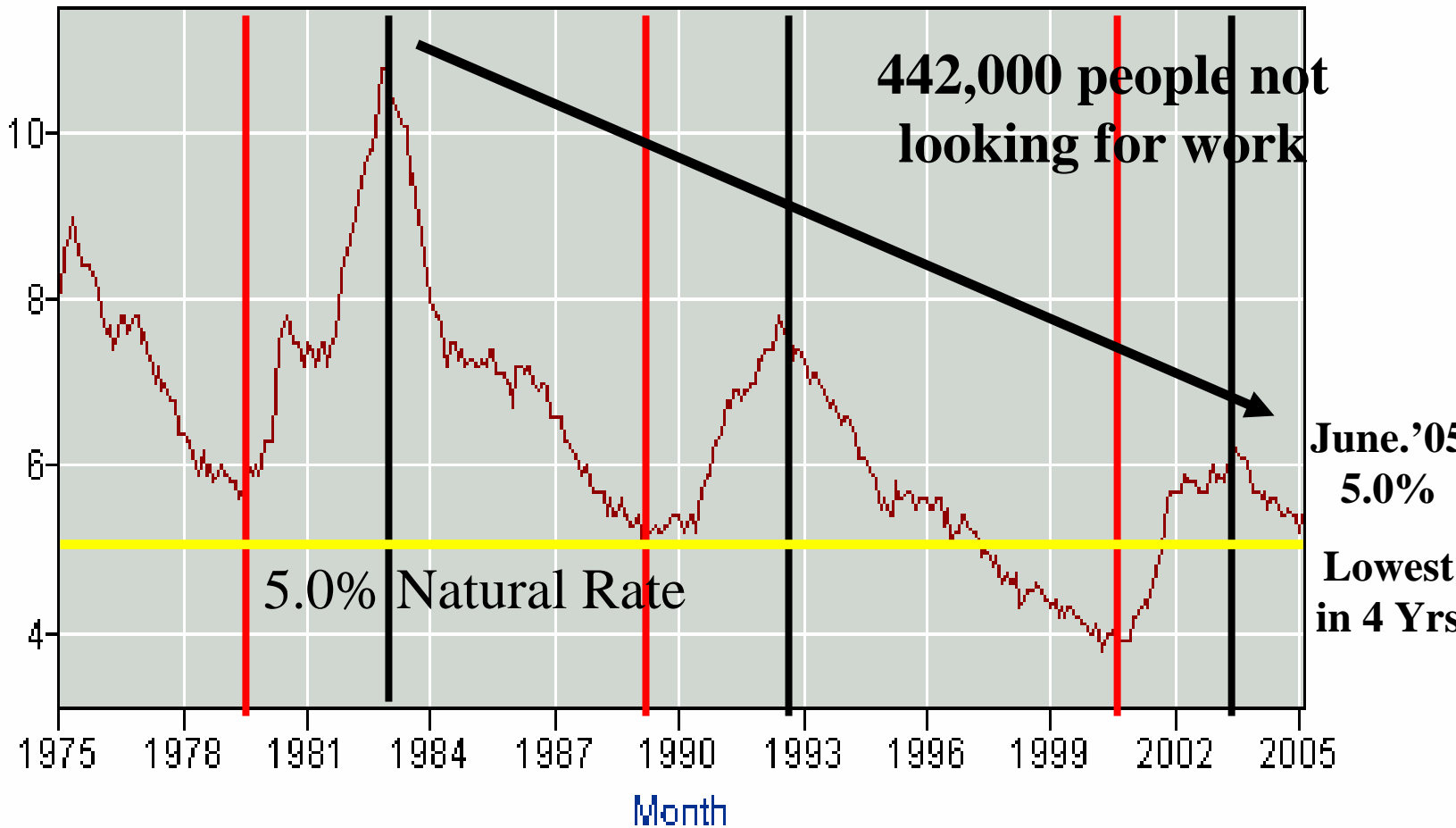
**Note: U.S. lost 2.0 million mfg jobs since 2000, added 96,000 in 2004, weakest rebound in factory employment of any economic recovery on record.**

# Domestic Revenue Aircraft Departures



# U.S. Unemployment Rate

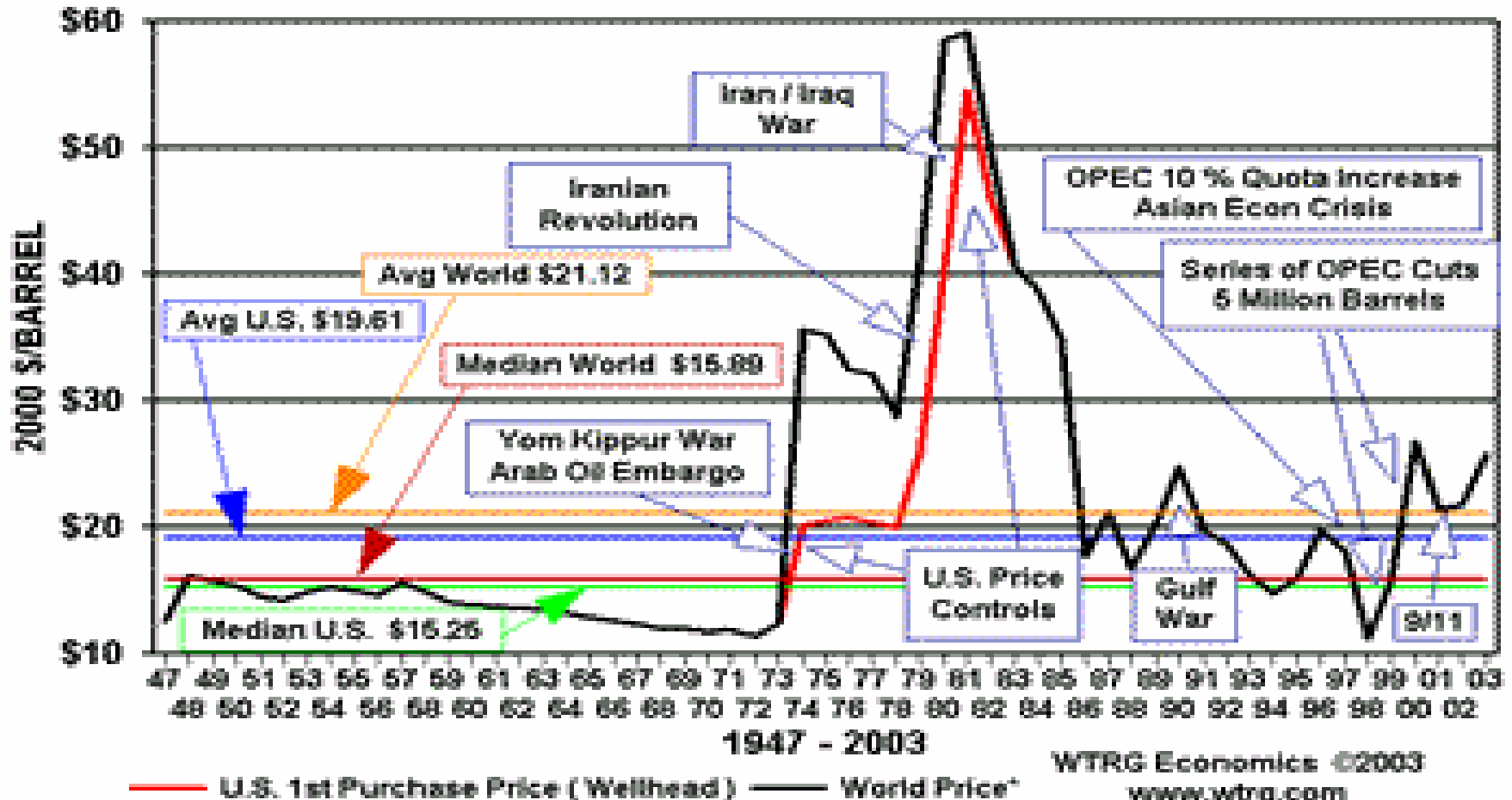
Median length of time to find job, dropped from 10.5-to-9.5 weeks



People are finding jobs, but working more hours, at less income and less benefits (low-wage service jobs).

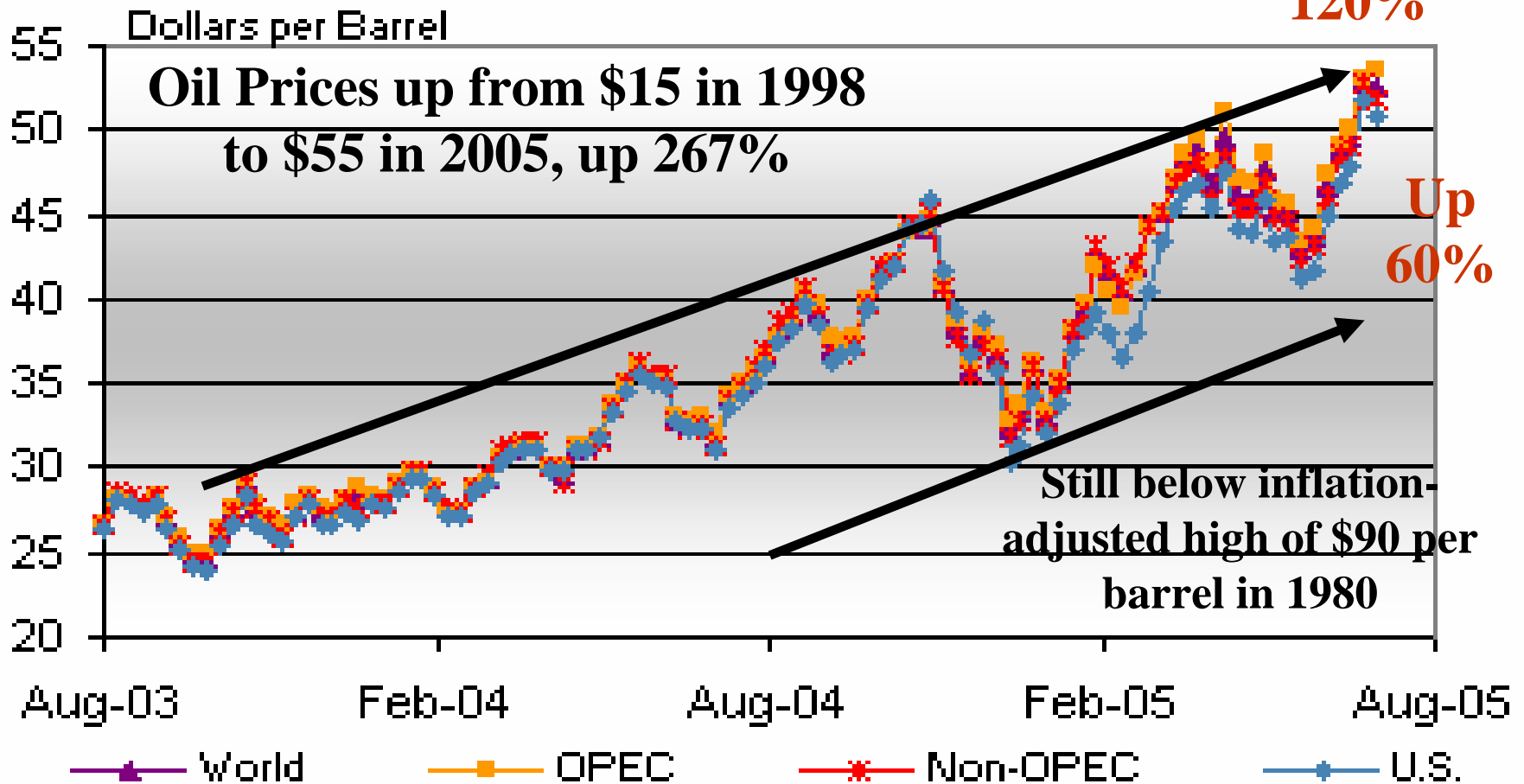
# Inflation Expectations

Crude Oil Prices  
2000 Dollars



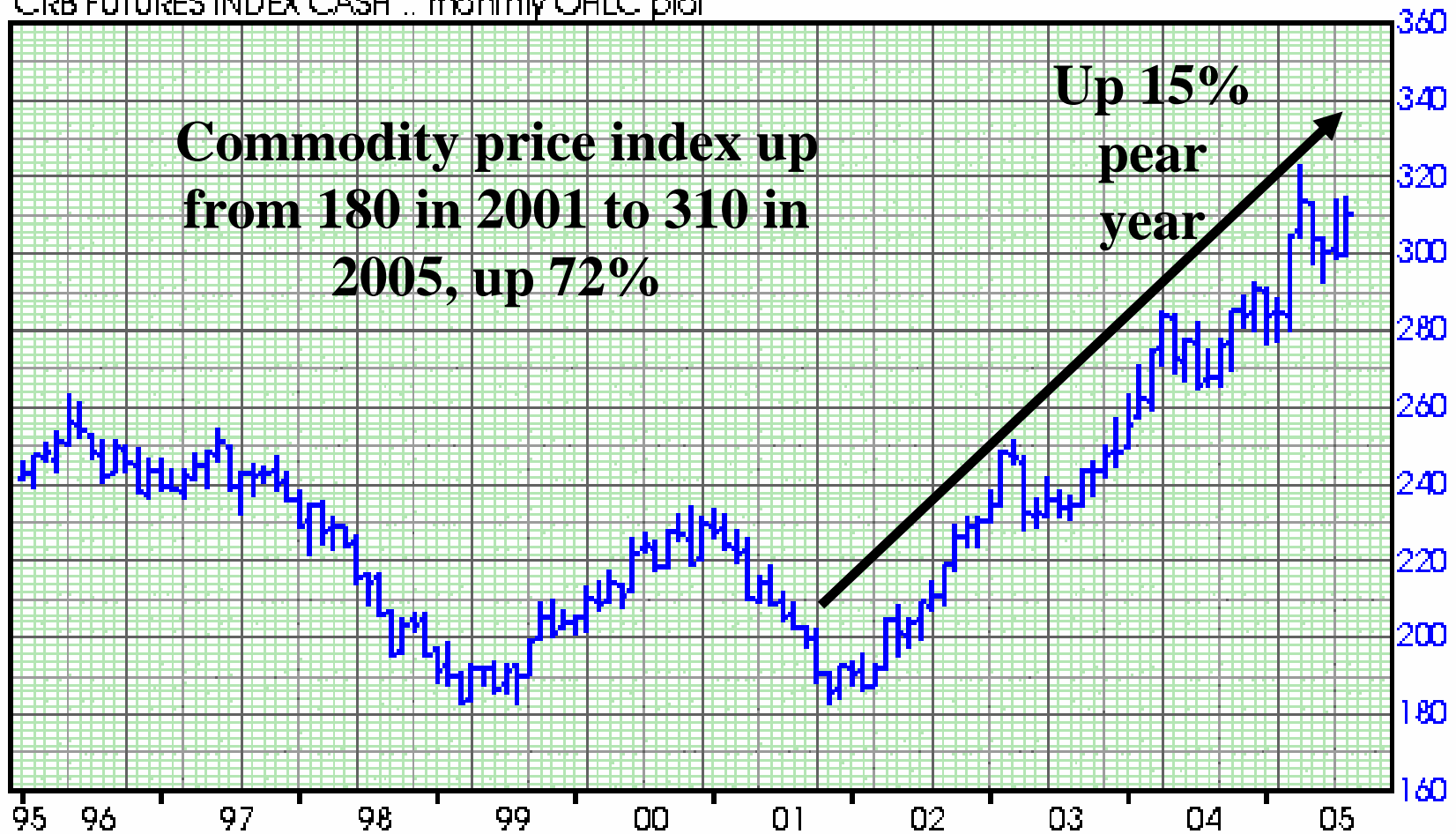
# Inflation Expectations

## Crude Oil Estimated Contract Prices



# Inflation Expectations

CRB FUTURES INDEX CASH .. monthly OHLC plot



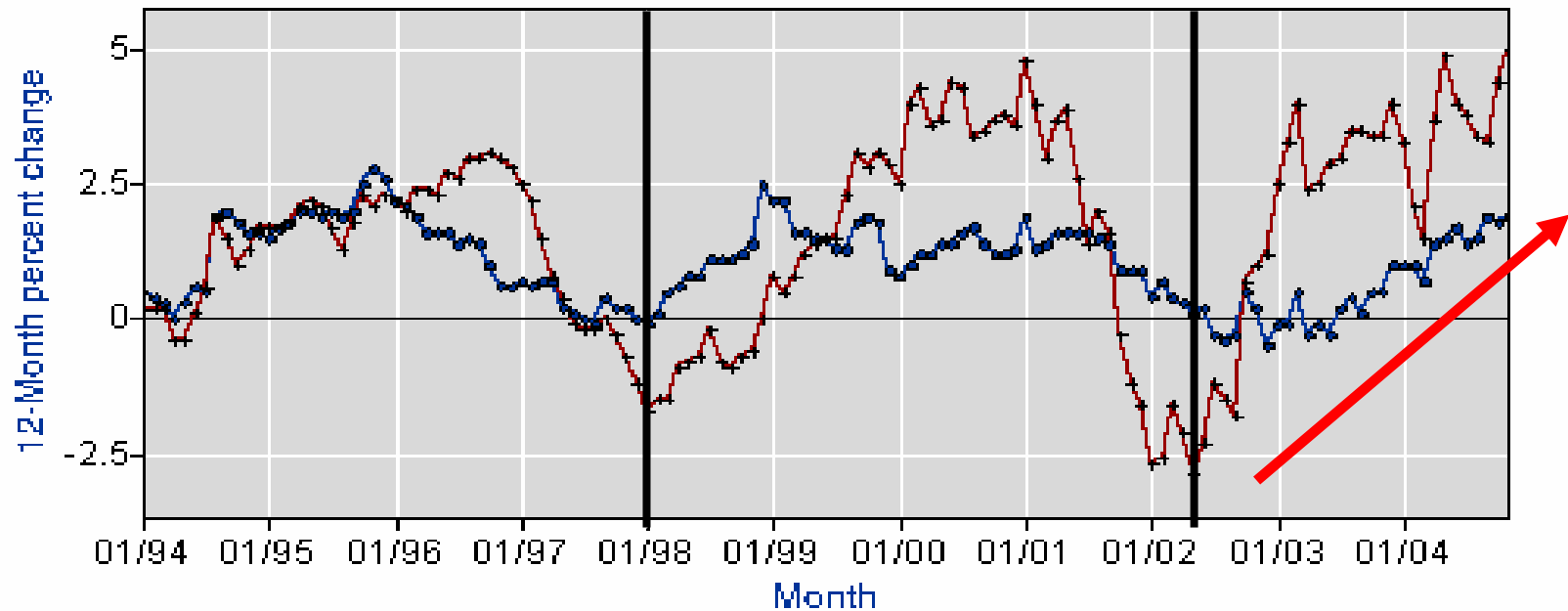
As of 07/01/05

@ [Barchart.com](http://Barchart.com)

# Inflation Expectations

## U.S. Producer Price Index

Producer Price Index for Finished Goods and Finished Goods Less Foods and Energy

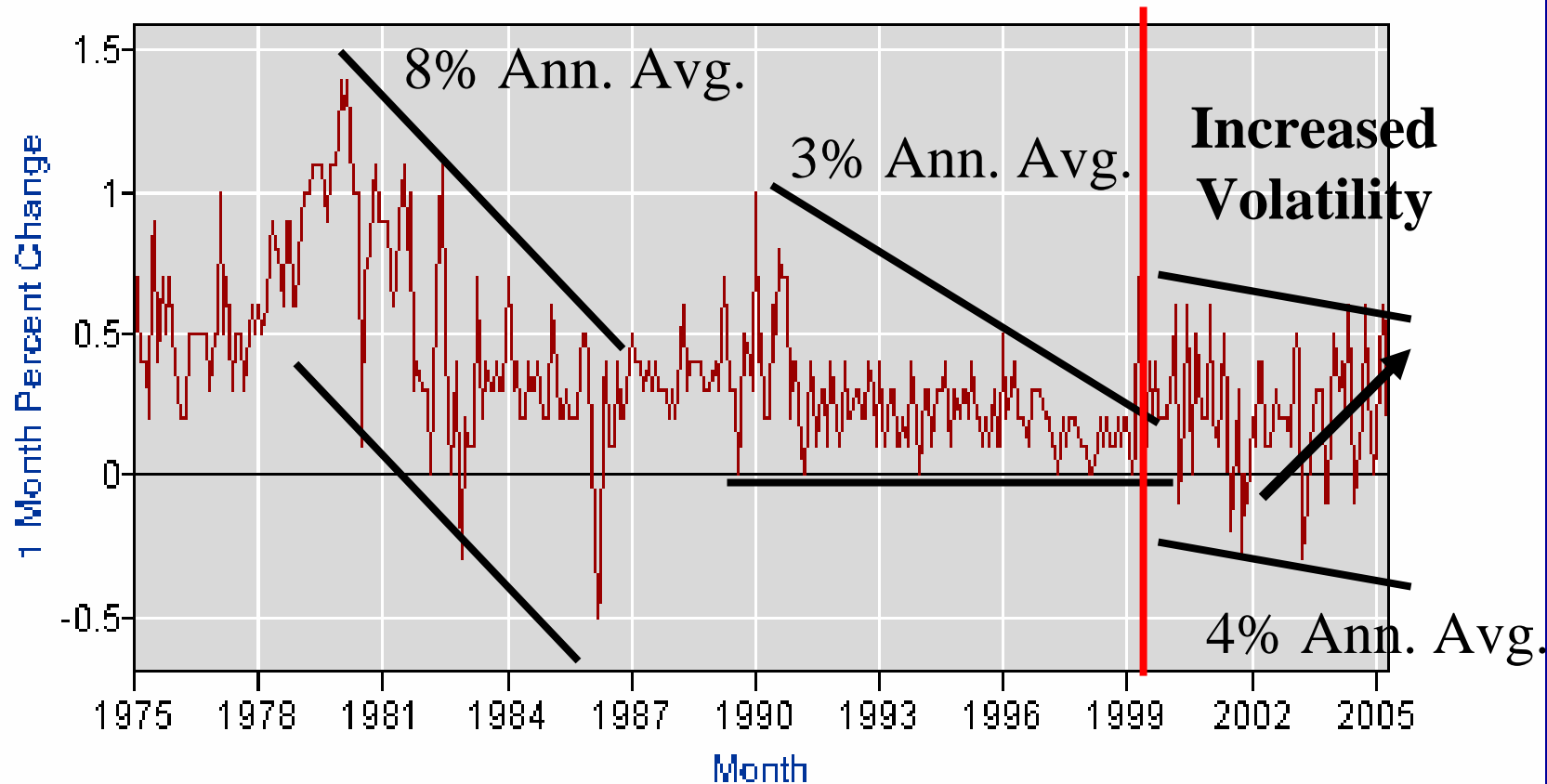


Note: Commodity prices up 75% since 2001, 15% in 2004, 50% from three years ago; spot gold up 57% since 2002 to \$414 troy ounce; in 2004: materials up 16.2%, copper up 34%; healthcare costs up 8% per year since 2000.

■ Finished goods less food and energy  
+ Finished goods

# Inflation Expectations

## U.S. Consumer Price Index



Source: Bureau of Labor Statistics.

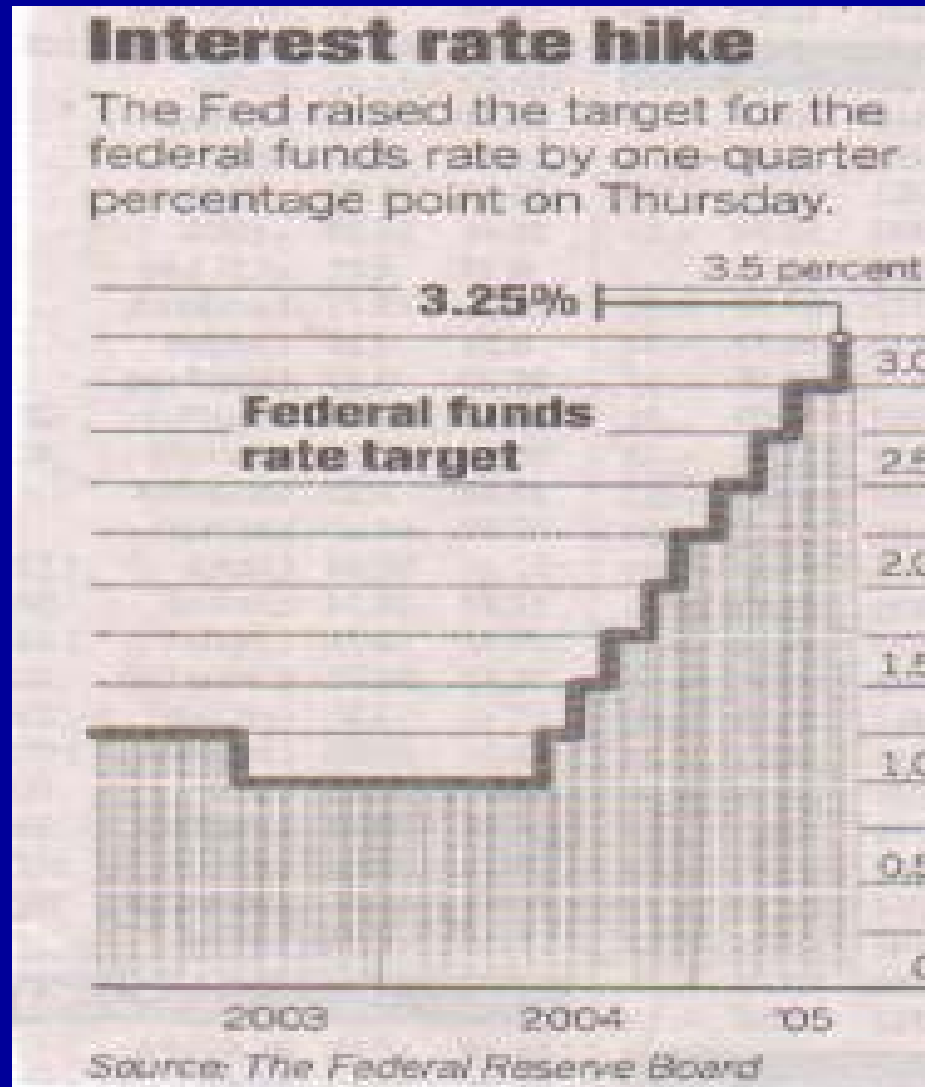
<http://www.bls.gov/home.htm>

# *Regional Economics - Inflation Rates*

	2003	2004	Pt.Ch.	2005f
<b>United States</b>	1.8%	3.8%	0.1	4.3%
<b>Western Region</b>	2.1%	2.3%	0.9	3.6%
<b>SF Bay Area</b>	1.8%	1.2%	1.3	2.9%
<b>Los Angeles</b>	2.6%	3.3%	0.5	4.2%

Source: U.S. Department of Labor Consumer Price Index – All Urban Consumers, Johnson/Souza Group, Inc.

# Federal Funds Interest Rates



# Yield 10-Year Treasury

CBOE 10-YEAR YIELD  
as of 8-Jul-2005

Imputed Mtg. Int. Rt.  $4.11\% + 2\% = 6.11\%$

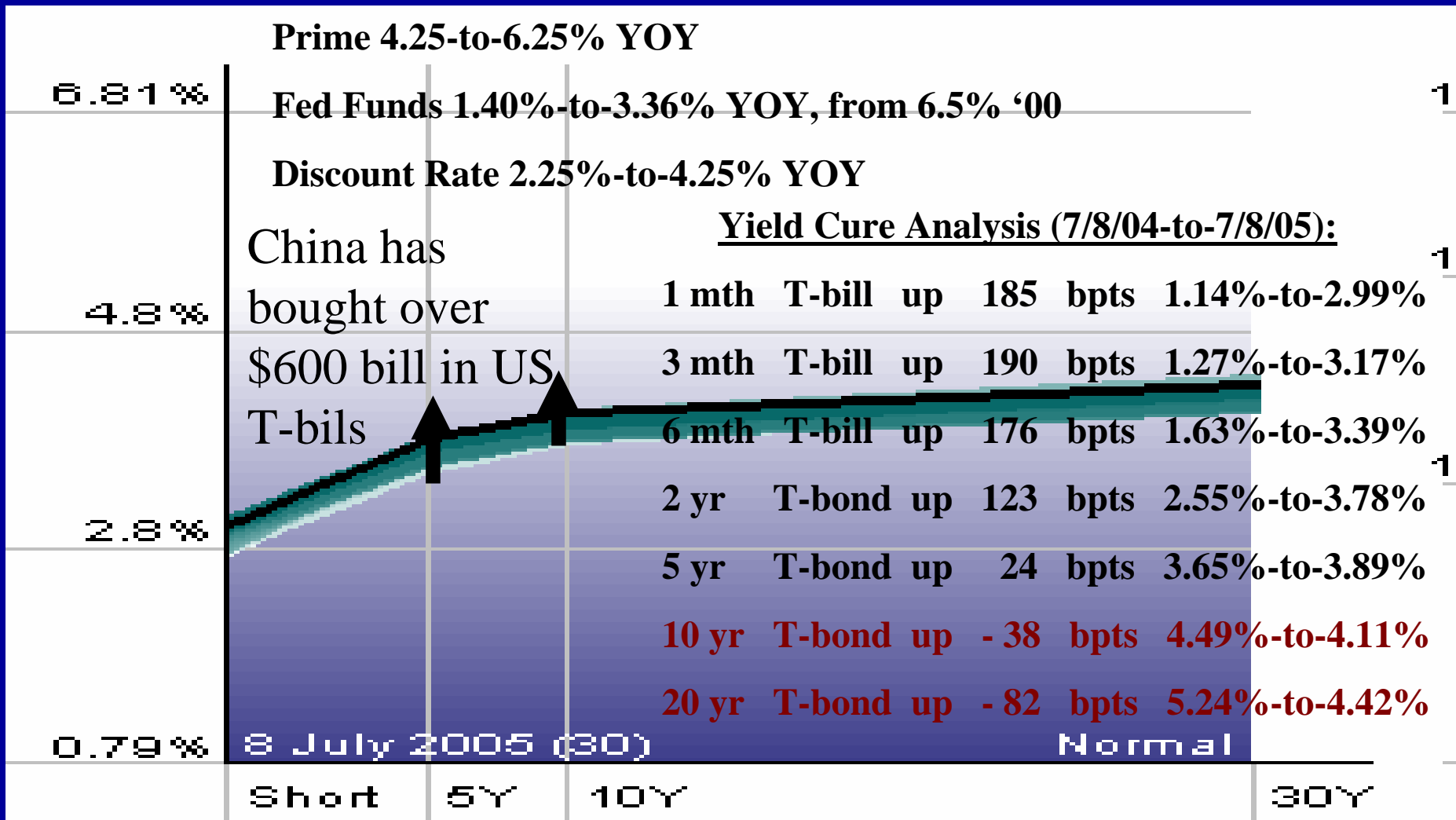


**10-Year Treasury Yield up over 113 basis points since June 03' due to rising inflation expectations, geo-political risk, and government deficit financing**

<http://finance.yahoo.com/>

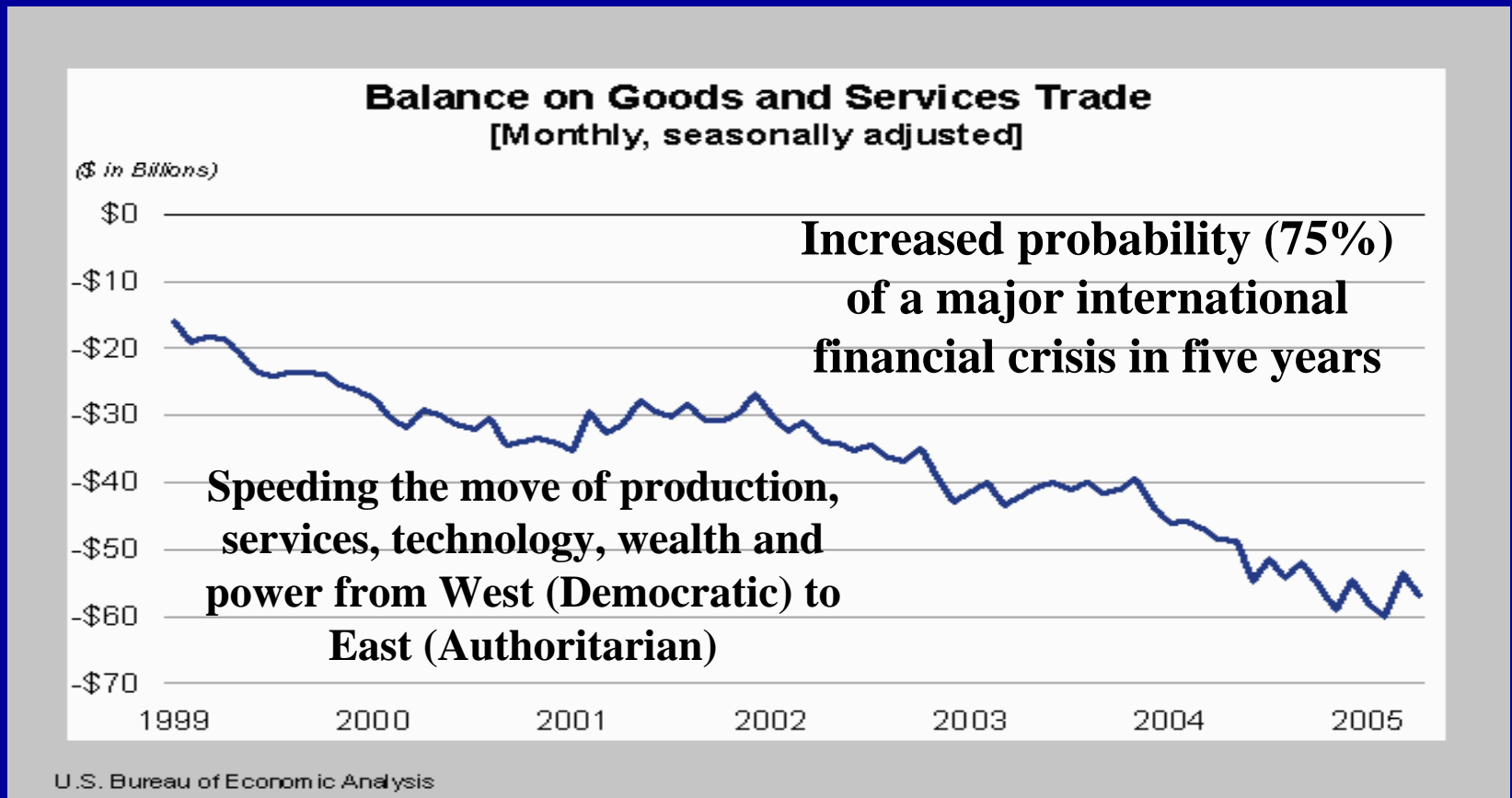
# Yield Curve

Yield Curve rose in 2004 - 2005 due to rising economic activity, consumer-producer inflation expectations (Oil Prices), and government deficits (Crowding out)

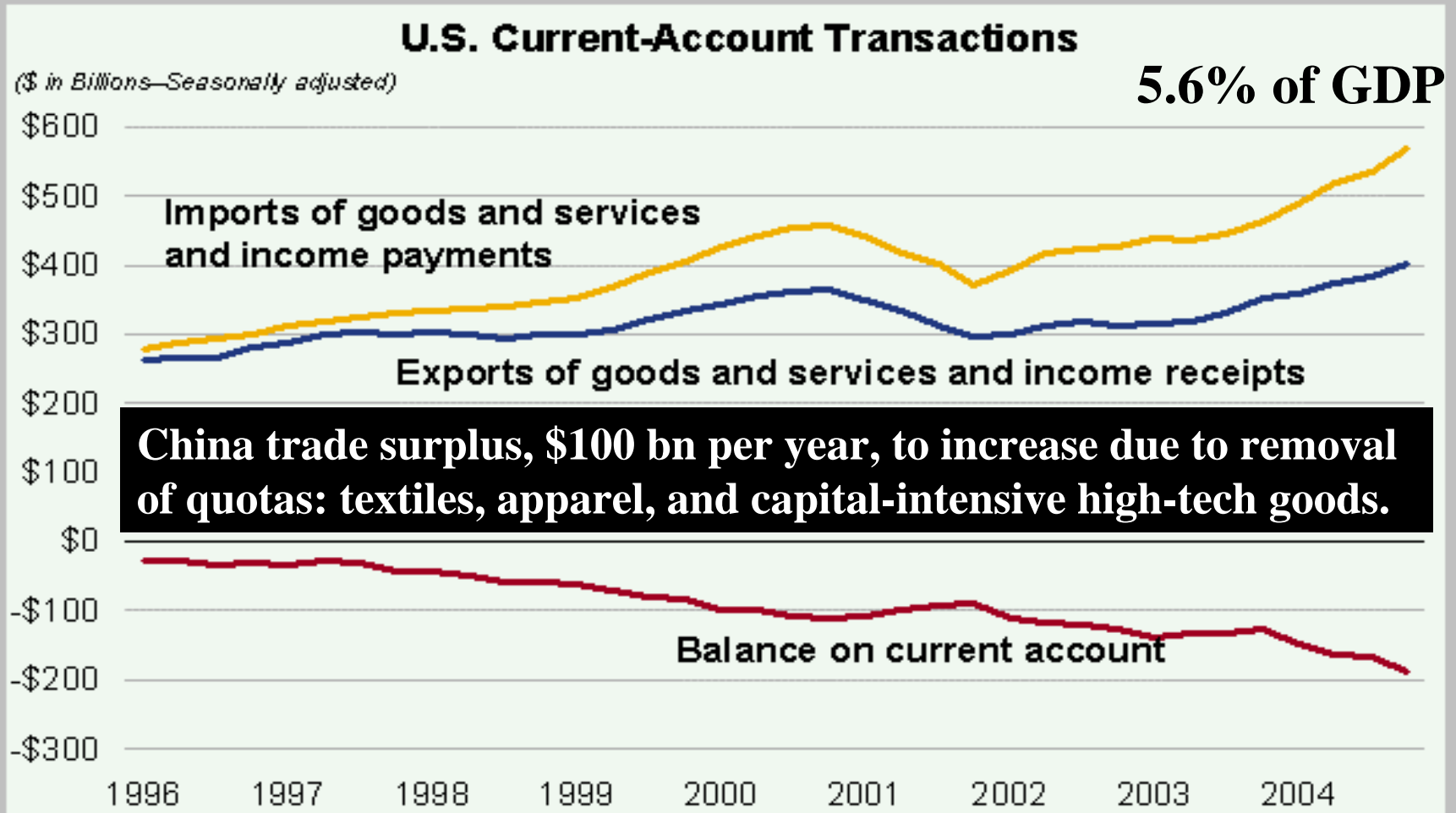


# Balance of Trade

Total exports of \$101 billion and imports of \$162 billion result in a goods and services deficit of roughly \$60 billion.

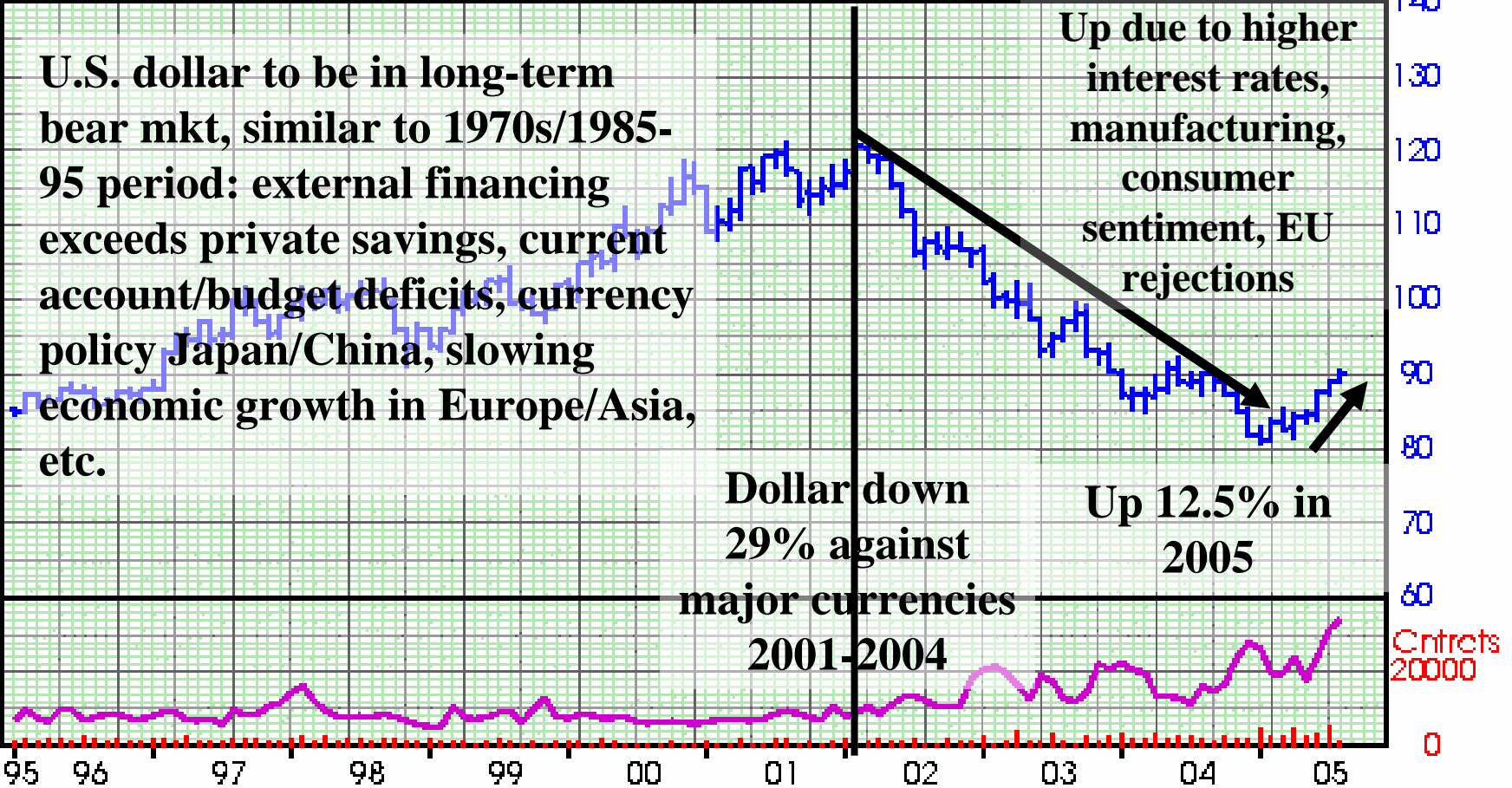


# Current Account Balance



# Foreign Currency

U.S. DOLLAR INDEX NEAREST FUTURES .. monthly OHLC plot

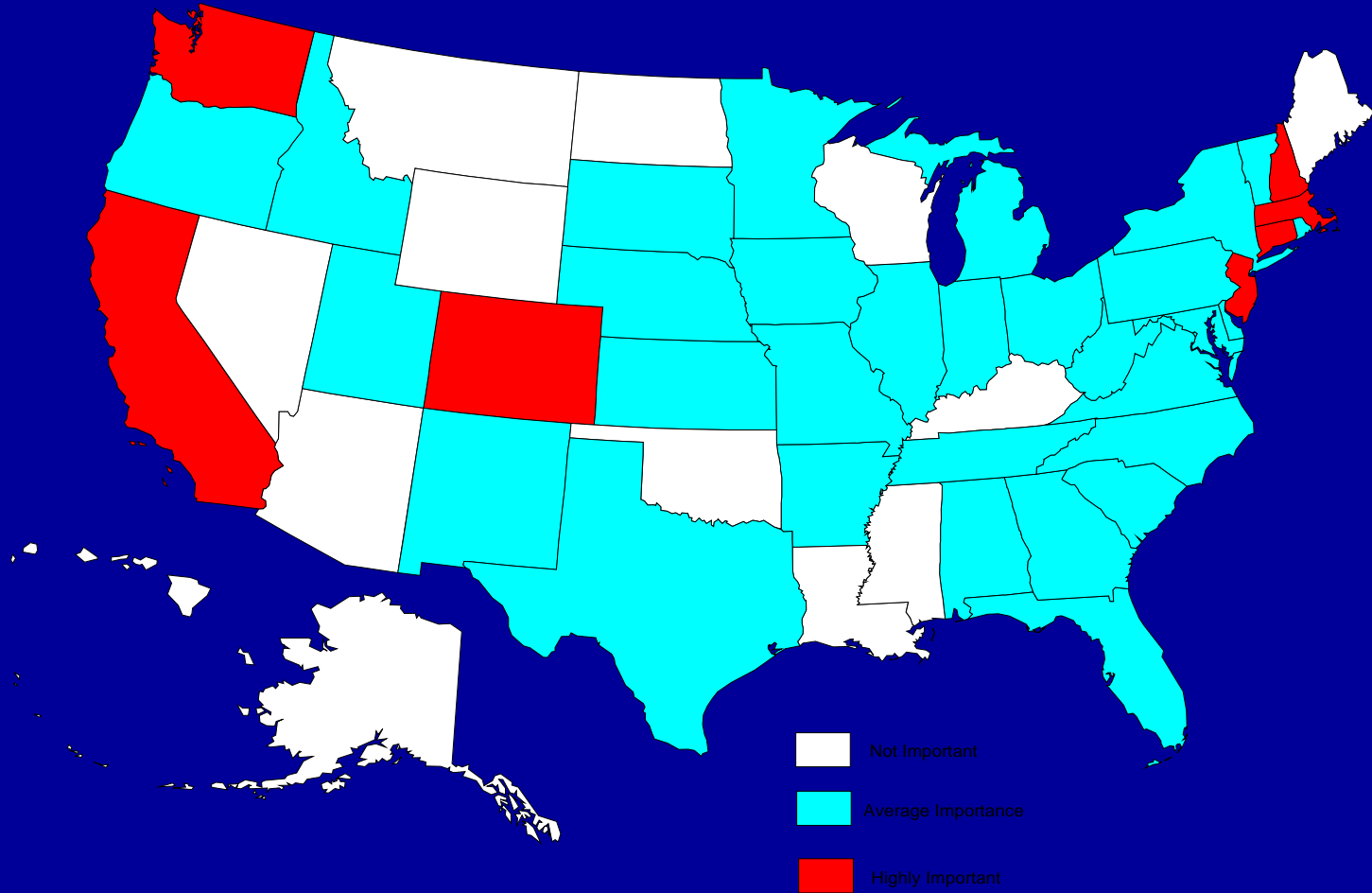


As of 07/01/05

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Technology

# The Importance of IT Industries



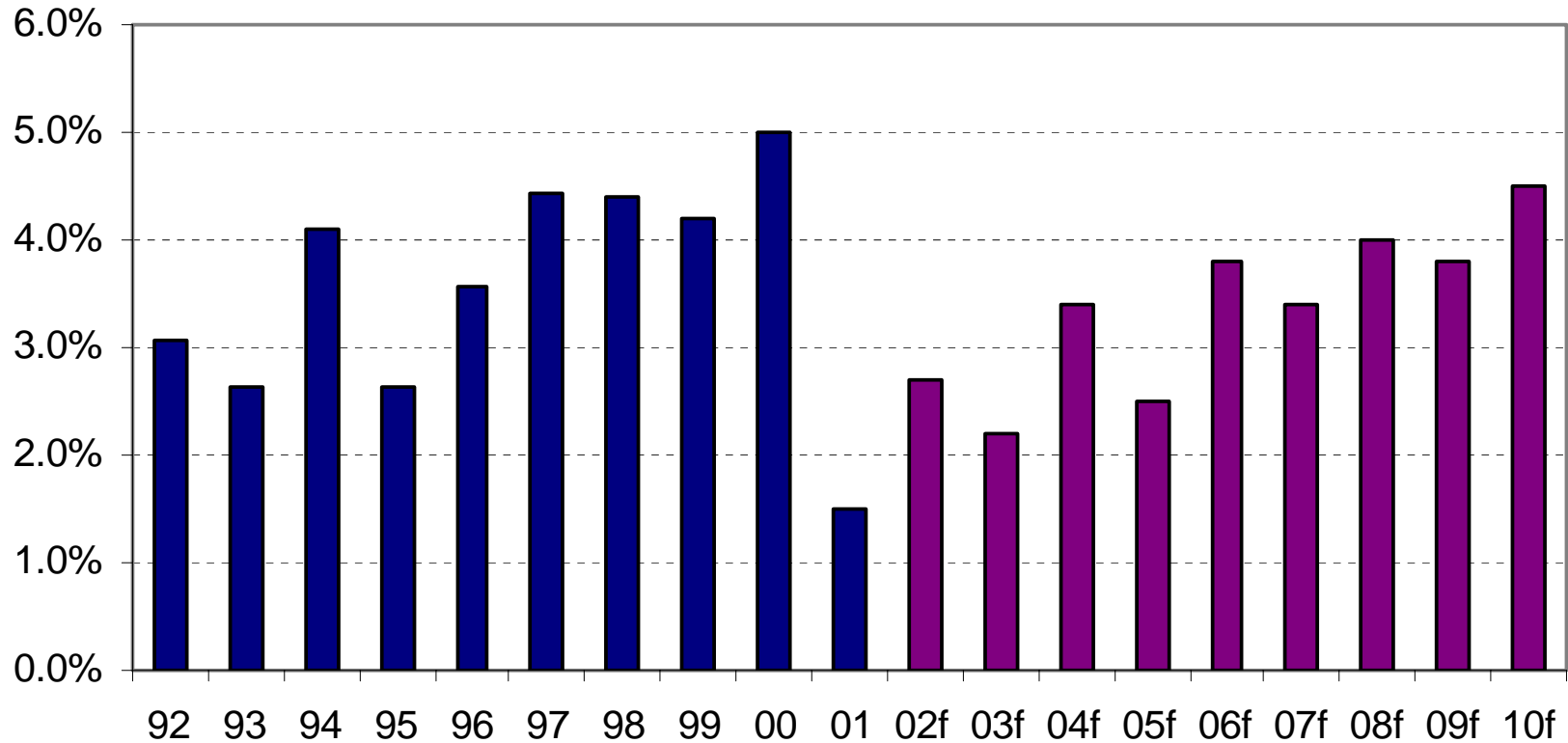
*Note: IT accounts for 10.5% of U.S. Employment*

# Silicon Valley Geography



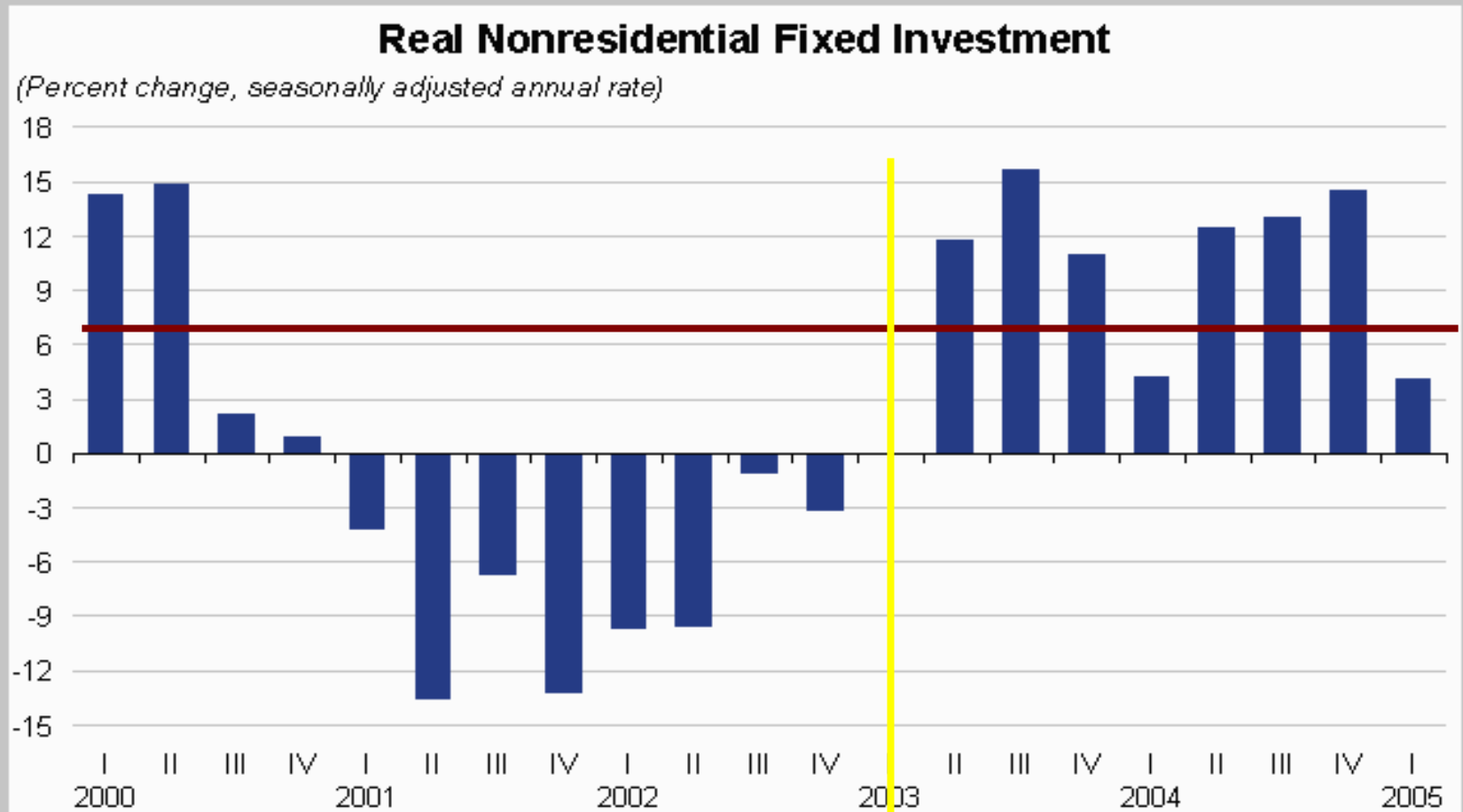
# Technology

**HIGH-TECH GROSS DOMESTIC PRODUCT GROWTH  
(From 1992 to 2010)**



Source: Milken Institute and BRE Properties Research Department.

# Non-Residential Fixed Investment

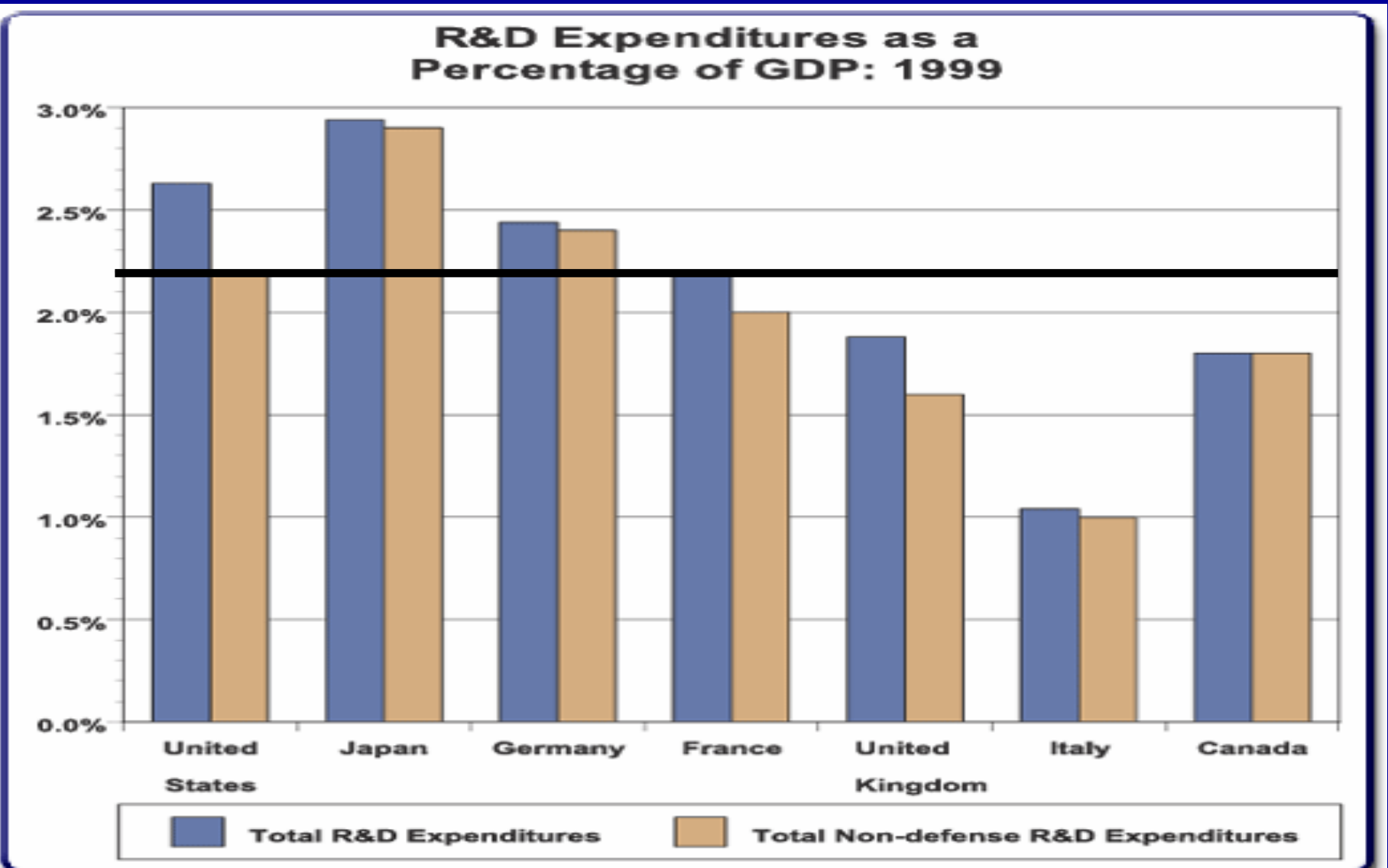


U.S. Bureau of Economic Analysis

<http://www.whitehouse.gov/fsbr/output.html>

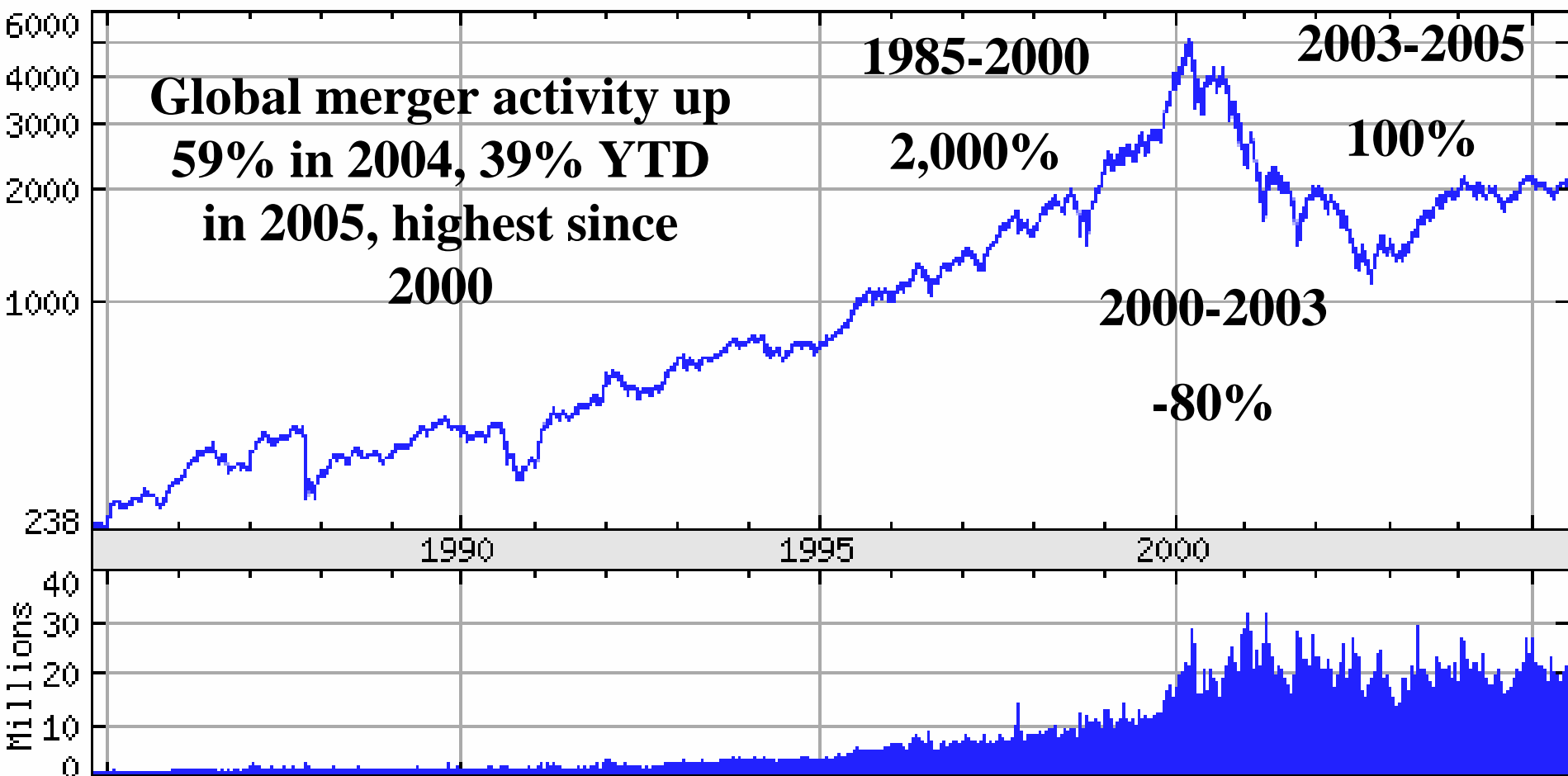
<http://www.bea.gov/briefrm/nonresfi.htm>

# R&D Expenditures



# Technology

NAS/NMS COMPOSITE (NASDAQ STOCK)  
as of 8-Jul-2005



# Technology

- In 2005, demand for worldwide business process outsourcing (BPO) up 8% to \$133.7 billion, expected to surge.
  - Customer service-support contact outsourcing to grow 45.2% through 2007, 80% of projects to fail, 60% to encounter customer defections-hidden costs, outweighing cost savings.
  - Can achieve 25%-to-30% cost savings.
  - Attrition rates up to 70%-to-80%, compared to 19%-to-25% in-house.
  - Offshore call centers represent only 2% of market, to 5% in 2007.
  - 70% of top 15 Indian owned BPOs to merged, acquired marginalised.
- In 2005, global PC shipments to grow 9%, from 11.6% in 2004.
  - Mobile PC shipments up 17.4%, desk-based PCs only 6.1%.
- In 2005, IT budgets to increase 2.5% to \$57 billion: security, intelligence, mobile, deployment-integration, ERP, storage, CRM.

Sources: Gartner Research and the Semiconductor Industry Association.

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Sources: Gartner Research and the Semiconductor Industry Association.

# Technology

- In 2005, capital equipment spending -15%, +61% in 2004, to 37% growth in 2008.
  - Semiconductor capital spending from -12.8% to +37.7%.
  - Wafer fab from -17.3% to 39.9%.
  - Packaging and assembly equipment from -22.3% to 41.3% in 2007.
  - Automated test equipment from 3.3% to 41.4%.
- In Feb. 05, worldwide microchip sales total \$18.1 billion, down 2% mth, up 15.8% Year-Over-Year (YOY).
  - YOU personal computers and wireless handsets up 11% YOY.
  - DRAMs up 36% YOY.
  - Application-specific circuits (wireless) up 53% Y-O-Y.
  - From 3Q04 to 1Q05, excess semi-conductor inventory down 56%.
- In 1Q05, worldwide PC shipments up 10% YOY to \$50.4 million units, below avg. growth of 20% for last ten quarters.

Sources: Gartner Research and the Semiconductor Industry Association.

# *Technology*

- In 2004, worldwide semiconductor revenue up 23.4% to \$219.9 billion: Intel (+12.6%), Samsung (+48.9%), TI (+31.1%).
- In 2004, worldwide IT services revenue grew 6.7% to \$607.9 billion, but only 2.2% in real terms.
- In 2004, worldwide semiconductor manufacturing equipment revenue up 64% to \$37.6 billion:
  - Applied Materials (+96.6%), Cannon (+121.5%), Novellus (48.8%), Lam Research (+92.1%).
  - Americas up 17.8%, first positive growth in three years.
  - Asia/Pacific up +108%, 50% of all purchases: Japan (+48.4%)
  - Europe (+22.8%).

Sources: Gartner Research and the Semiconductor Industry Association.

# *Technology*

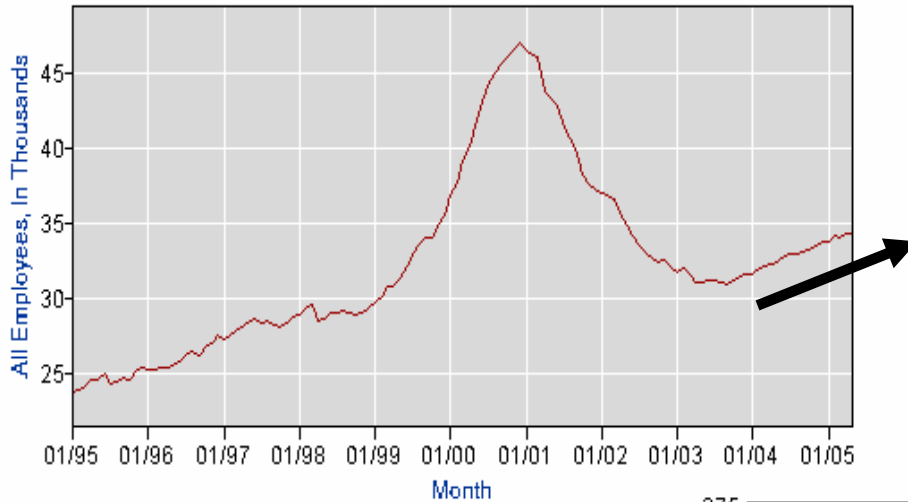
- In 2004, worldwide mobile phone sales up 30.0% to 674 million units, shipments up 12%; PDA shipments up 6.6%, revenues up 16.7%, prices up 9.4%.
- In 2004, packaging and assembly equipment (PAE) up 45.9%, market soft since mid-2004.
  - Automated test equipment up 58.5% YOY to \$4.8 billion, up 3.1% in 2005.
- In 2004, worldwide ethernet switches revenue up 24% to \$12 billion, shipments up 22% to 189 million: Cisco (+32.2%), Nortel (+14%), HP (39.4%), 3Com (-2.3%).
- In 2Q04, worldwide semiconductor wafer fab utilization rates peaked at 94.3%, and will bottom at 84%-85% in 2005-2006.

Sources: Gartner Research and the Semiconductor Industry Association.

# Silicon Valley - Information/Manufacturing Employment

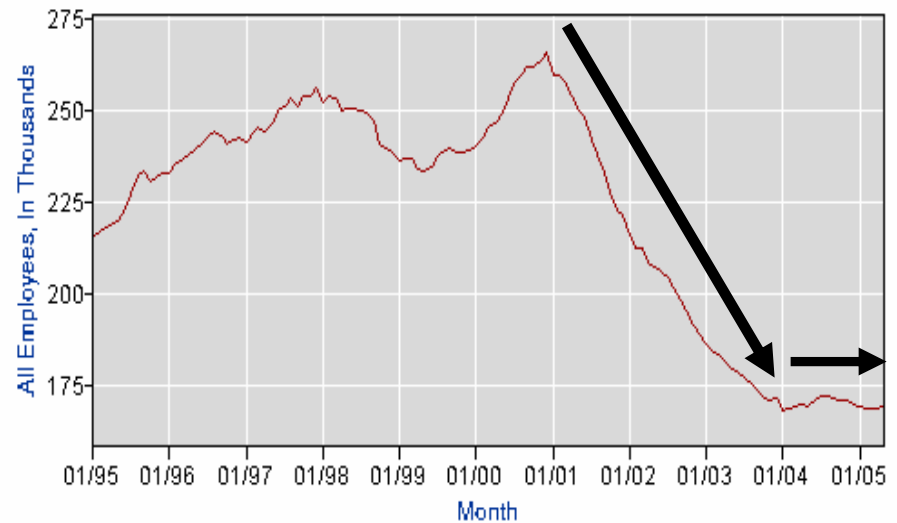
## Information Employment:

Lost 16,000 jobs from Dec 00' -to- April 03', gained 3,200 jobs through May 05'.



## Manufacturing Employment:

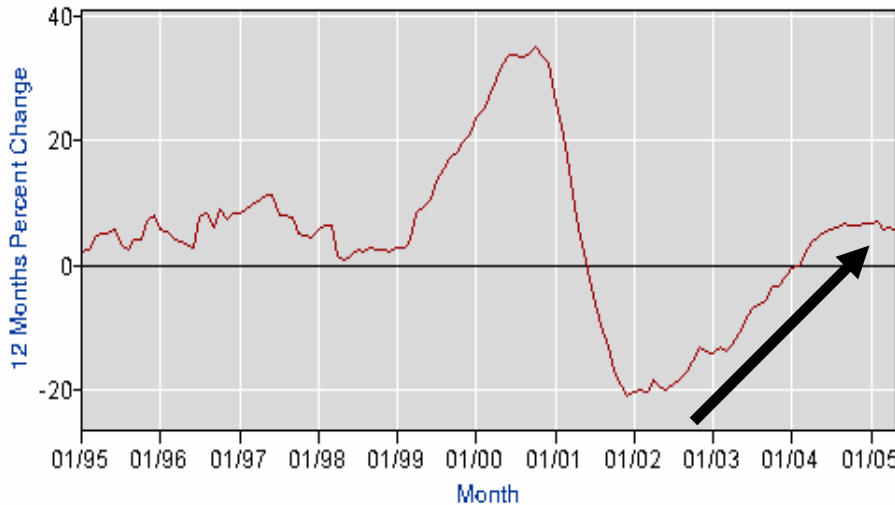
Lost 91,000 jobs since Feb 01'.



# Silicon Valley - Information/Manufacturing Employment

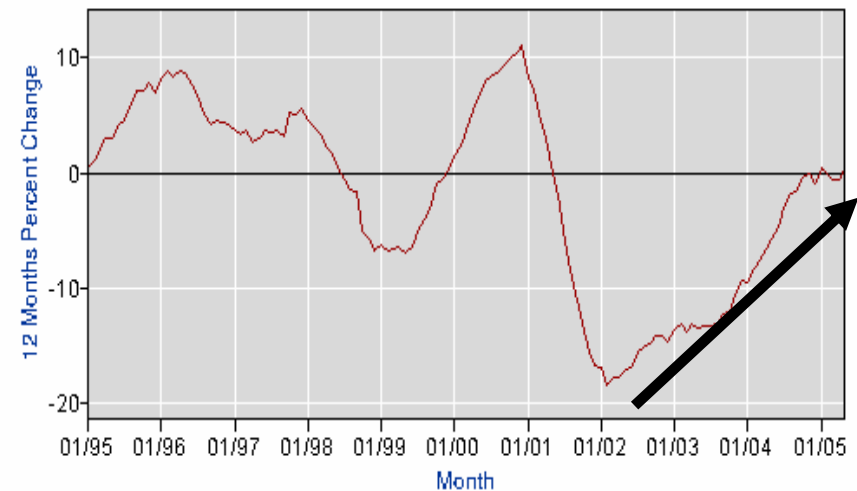
## Information Employment:

YOY growth peaked at 6.6% Dec 04', slowed to 5.5% in May 05'.



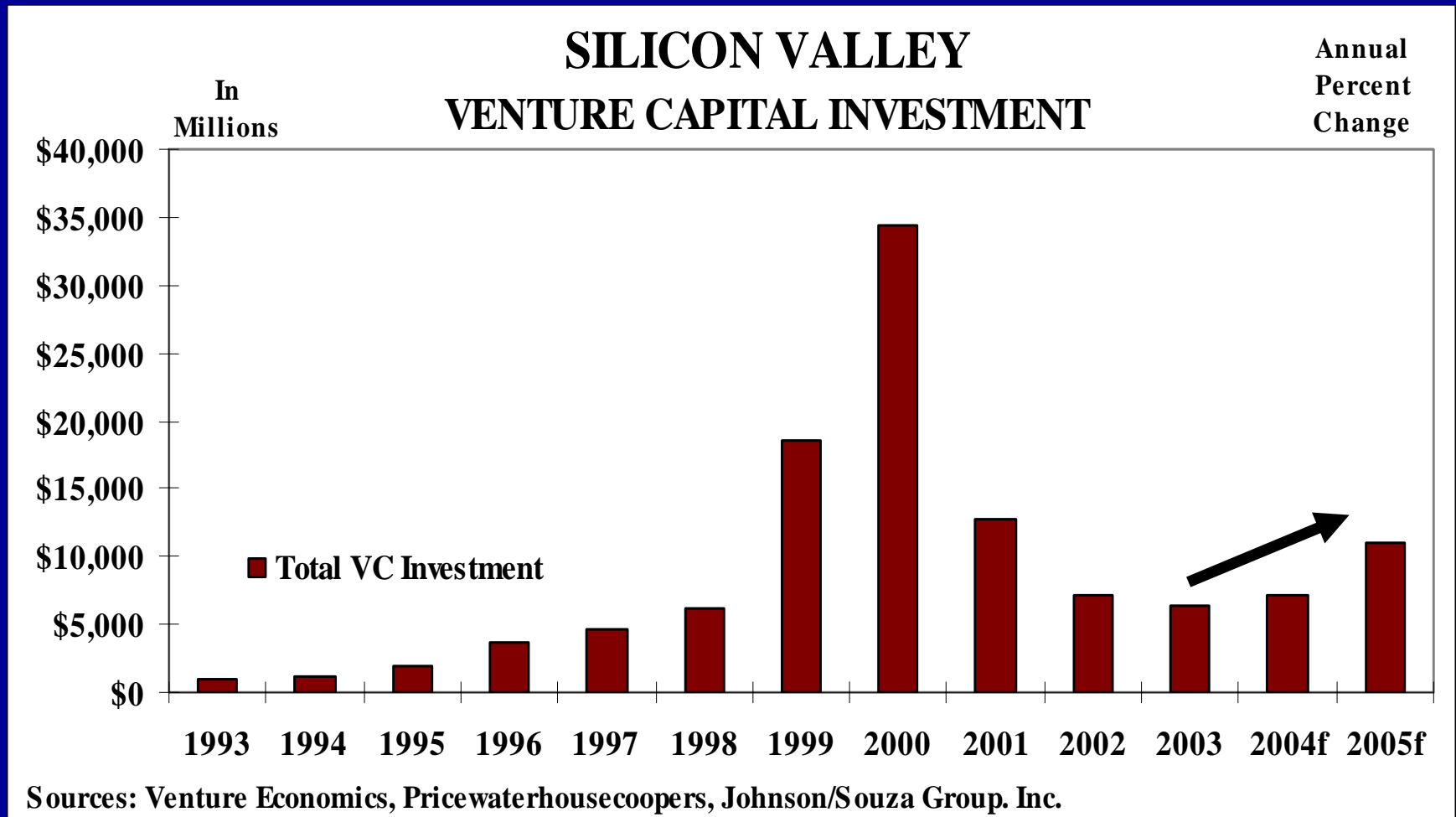
## Manufacturing Employment:

Jan 05', first positive growth rate since May 01'.



# Venture Capital Trends

# Silicon Valley Venture Capital Flows hit bottom 2003, rising stock prices-IPOs drive flows



# Bay Area still captures over 32% of all VC invested in the U.S.

<b>VENTURE CAPITAL INVESTMENT FLOWS</b>			
In Millions (\$M)		<b>Silicon Valley</b>	<b>Annual Change</b>
<b>Year</b>	<b>Silicon Valley</b>	<b>% of US</b>	<b>Silicon Valley</b>
1993	\$887.1	23.7%	NA
1994	\$1,100.3	26.4%	24.0%
1995	\$1,893.9	23.2%	72.1%
1996	\$3,735.7	32.4%	97.2%
1997	\$4,713.8	31.6%	26.2%
1998	\$6,181.4	29.0%	31.1%
1999	\$18,542.9	34.0%	200.0%
2000	\$34,448.4	32.5%	85.8%
2001	\$12,680.8	30.9%	-63.2%
2002	\$7,123.8	33.0%	-43.8%
2003	\$6,296.0	33.2%	-11.6%
2004	\$7,113.0	34.0%	13.0%
2005f	\$11,025.0	35.3%	75.1%

Sources: Venture Economics, PricewaterhouseCoopers, Johnson/Souza Group, Inc.

# *No. Cal. Venture Capital Flows*

	2003	2004	% Ch.
<b>California</b>	<b>\$8.20 bil.</b>	<b>\$9.30 bil.</b>	<b>13.4%</b>
<b>San Jose</b>	<b>\$4.90 bil.</b>	<b>\$5.40 bil.</b>	<b>10.2%</b>
<b>San Francisco</b>	<b>\$1.20 bil.</b>	<b>\$1.50 bil.</b>	<b>25.0%</b>
<b>Sacramento</b>	<b>\$0.08 bil.</b>	<b>\$0.05 bil.</b>	<b>- 37.5%</b>
<b>Silicon Valley*</b>	<b>\$6.30 bil.</b>	<b>\$7.10 bil.</b>	<b>12.7%</b>

\*Accounts for 34% of all VC raised in U.S.

# *So. Cal. Venture Capital Flows*

	2003	2004	% Ch.
<b>Los Angeles</b>	<b>\$0.72 bil.</b>	<b>\$0.70 bil.</b>	<b>- 2.8%</b>
<b>Orange Co.</b>	<b>\$0.36 bil.</b>	<b>\$0.28 bil.</b>	<b>- 22.2%</b>
<b>San Diego</b>	<b>\$0.79 bil.</b>	<b>\$1.20 bil.</b>	<b>51.9%</b>
<b>So. Cal.</b>	<b>\$1.87 bil.</b>	<b>\$2.18 bil.</b>	<b>16.6%</b>
<b>United States</b>	<b>\$18.90 bil.</b>	<b>\$20.90 bil.</b>	<b>10.6%</b>

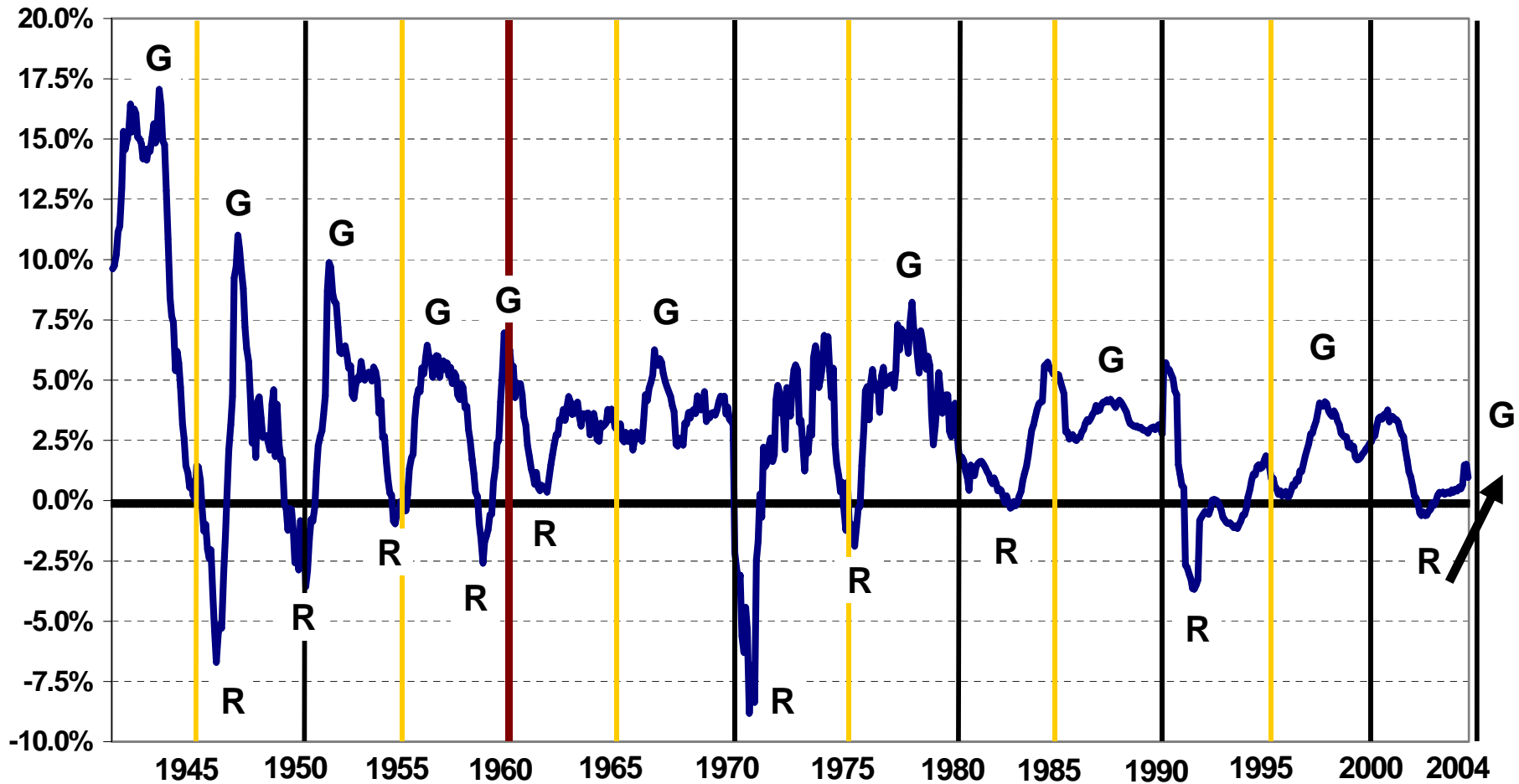
# Business Cycles



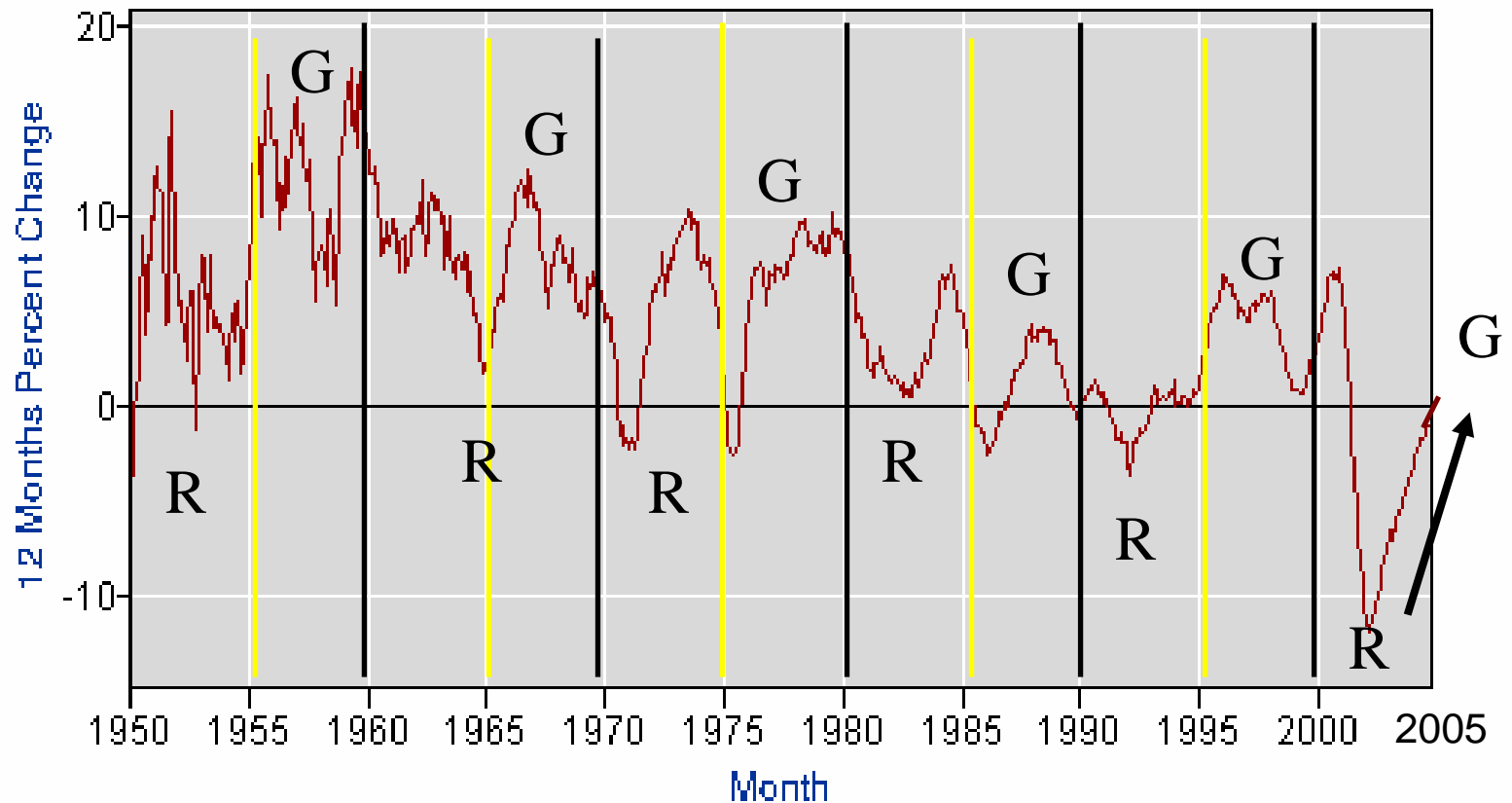
# California

## Employment Growth (YOY)

CALIFORNIA YEAR-OVER-YEAR EMPLOYMENT GROWTH (1941 - 2004)



# San Jose PMSA Non-Farm Employment Growth (YOY)



Source: Department of Labor Statistics.

California

# California: World's 5<sup>th</sup> Largest Economic Power

The Western Region is projected to outperform the nation overall, driven largely by employment and population growth in California.

## Gross State Product

Exceeds \$1.3 trillion

## Employment (14.6 Million)

11% of total U.S. employment today

13% of U.S. employment growth through 2008

Adds 262,000 new jobs per year

## Population (35.8 Million)

12.3% of total U.S. population today

19% of U.S. population growth through 2007

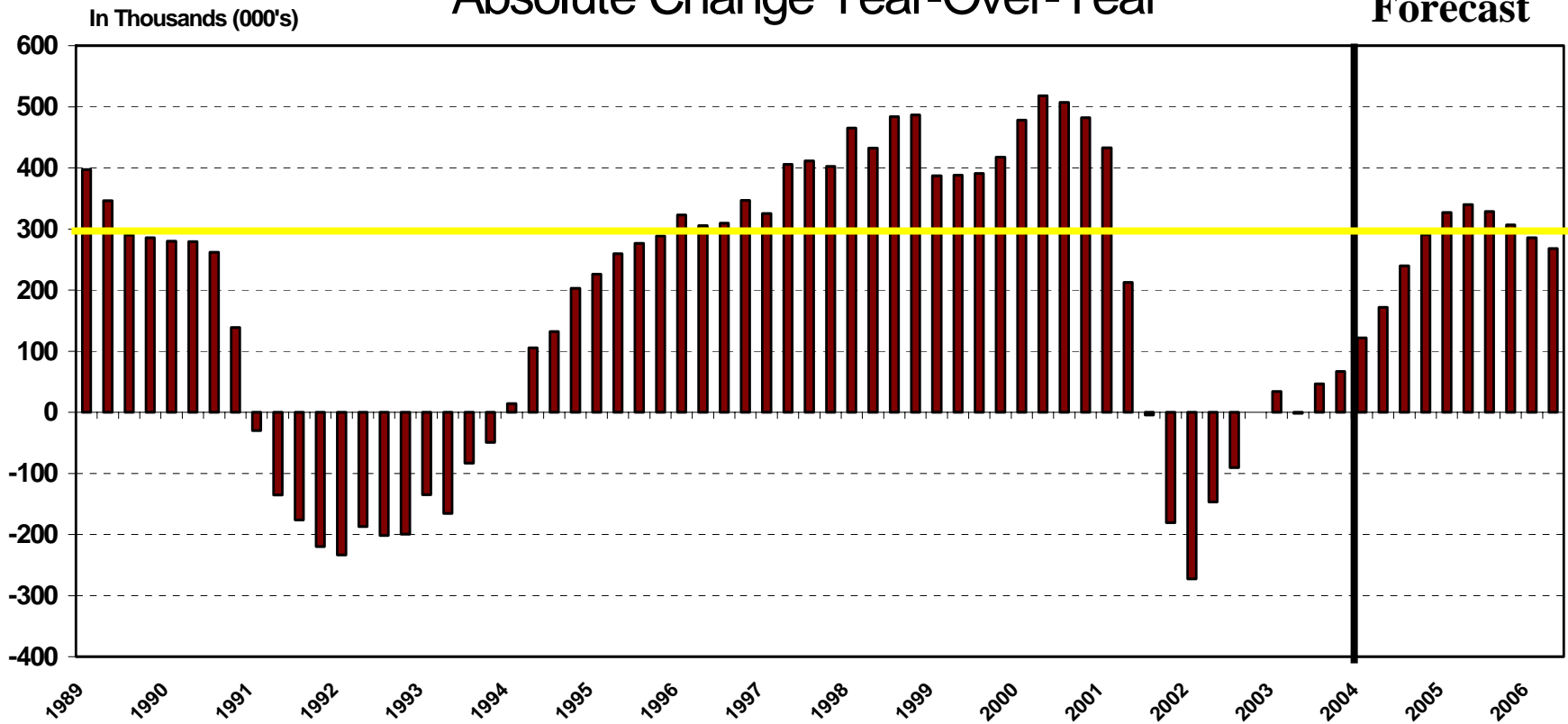
Adds 479,000 people per year

## Venture Capital (\$9.2 bill. 04')

Up 13.6%, 45% of all U.S. Venture Capital depends on 580,000 of students enrolled at University of California & State Colleges for "brain power/human capital investment"

# Non-Farm Employment Growth Trends

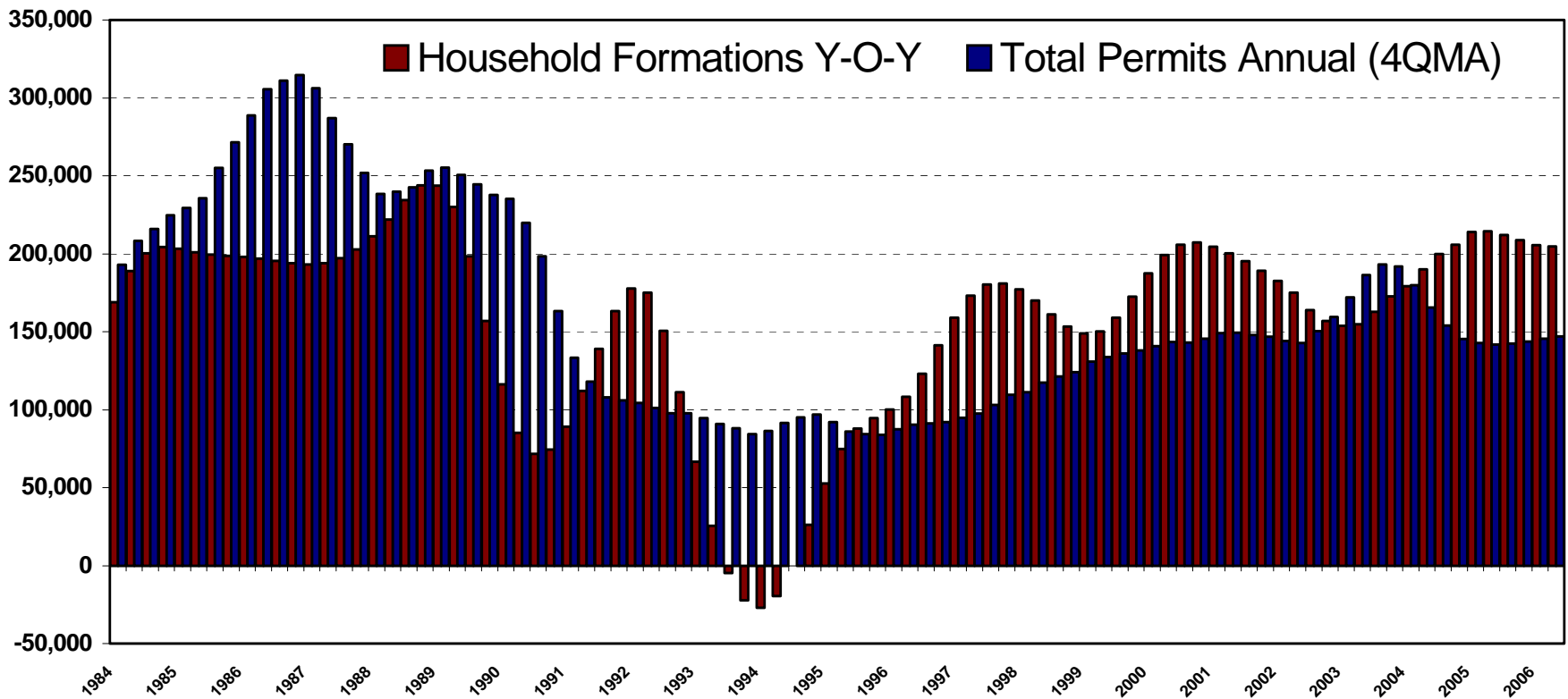
## California Non-Farm Employment Growth Absolute Change Year-Over-Year



Sources: Economy.com and Johnson/Souza Group, Inc.

# Change in HH Formation vs. Change in Total Residential Permits

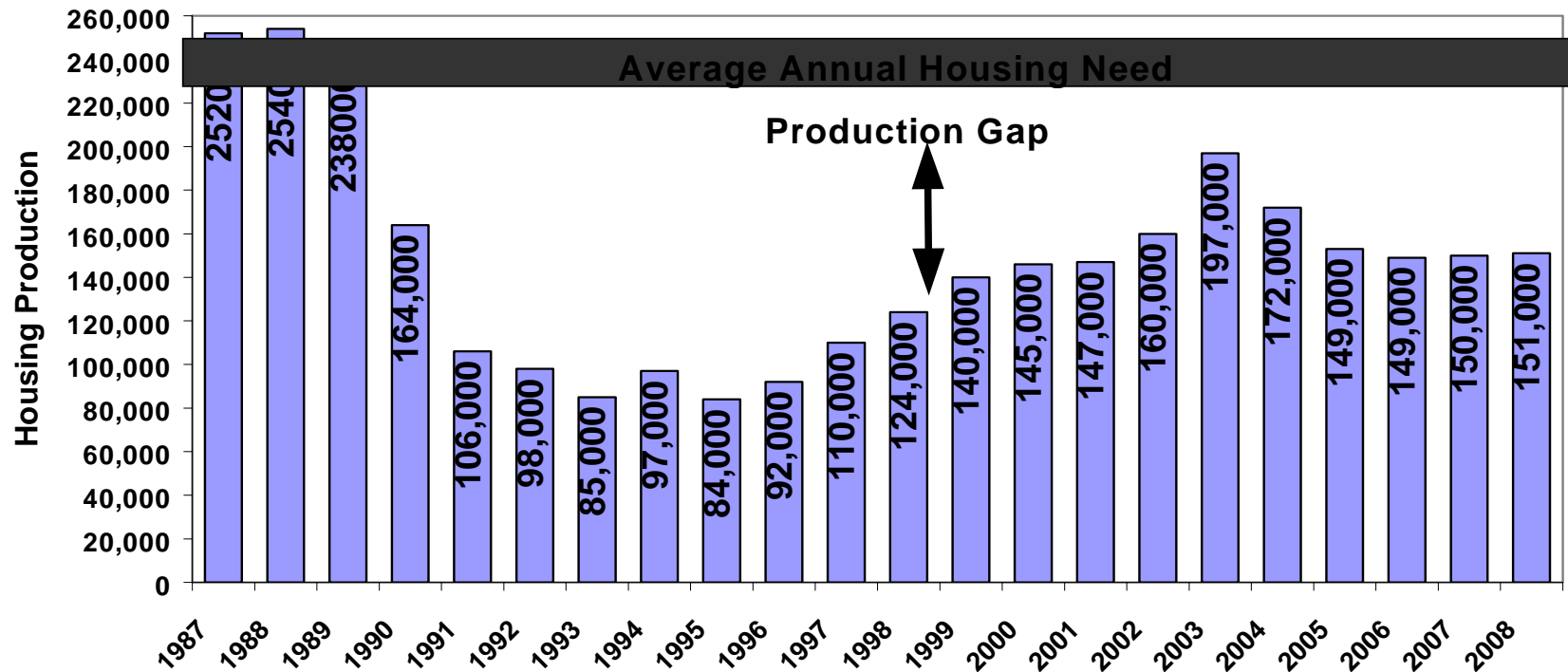
## California Household Formations vs. Total Residential Permits Issued



Sources: Economy.com and Johnson/Souza Group, Inc.

From 2000 through 2005, the accumulated gap between housing production and housing demand is projected to total 370,000 units, averaging 50,000-to-60,000 housing units per year

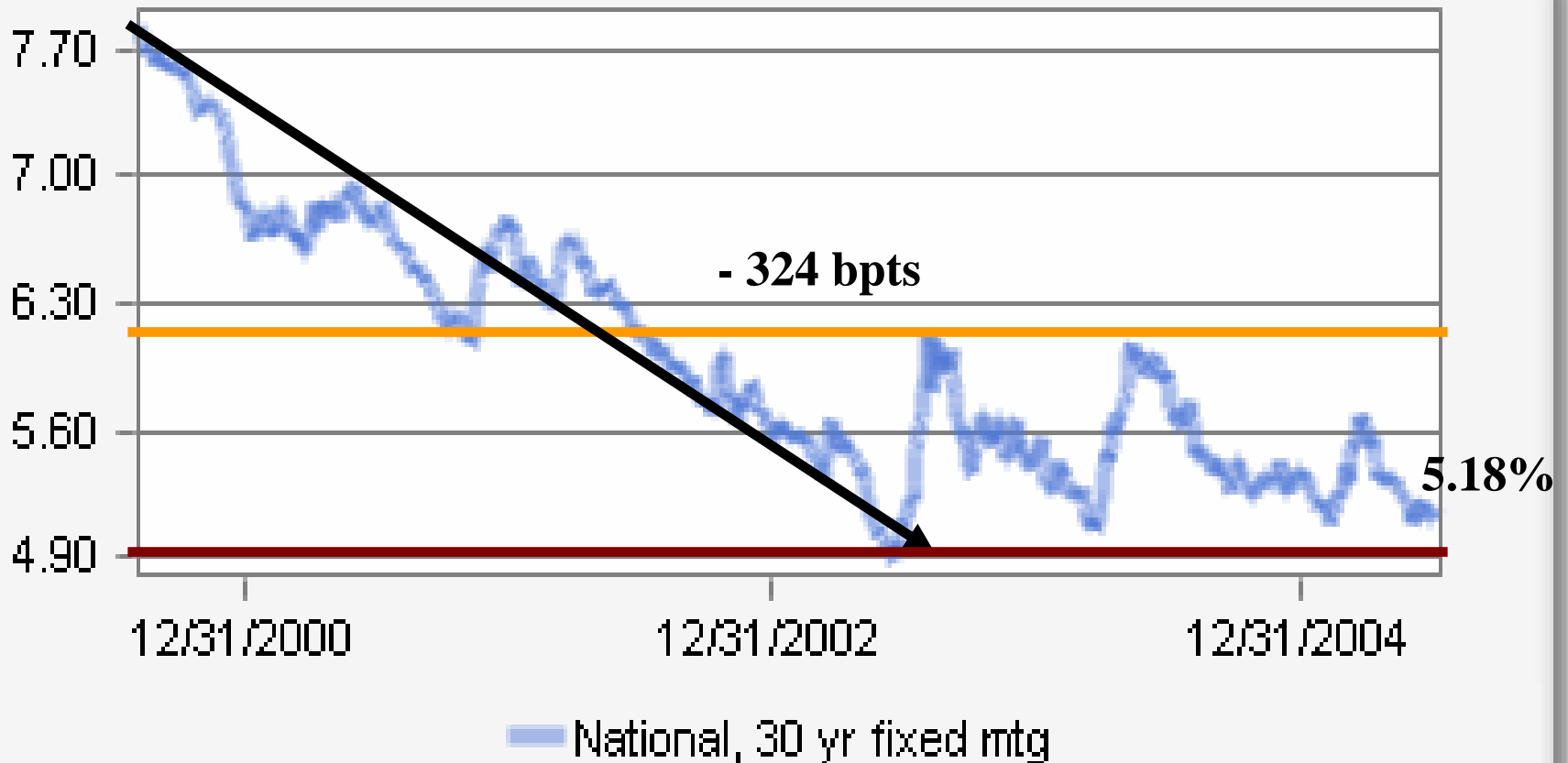
### California Housing Deficit An Average of 230,000 - 250,000 Homes Needed Annually



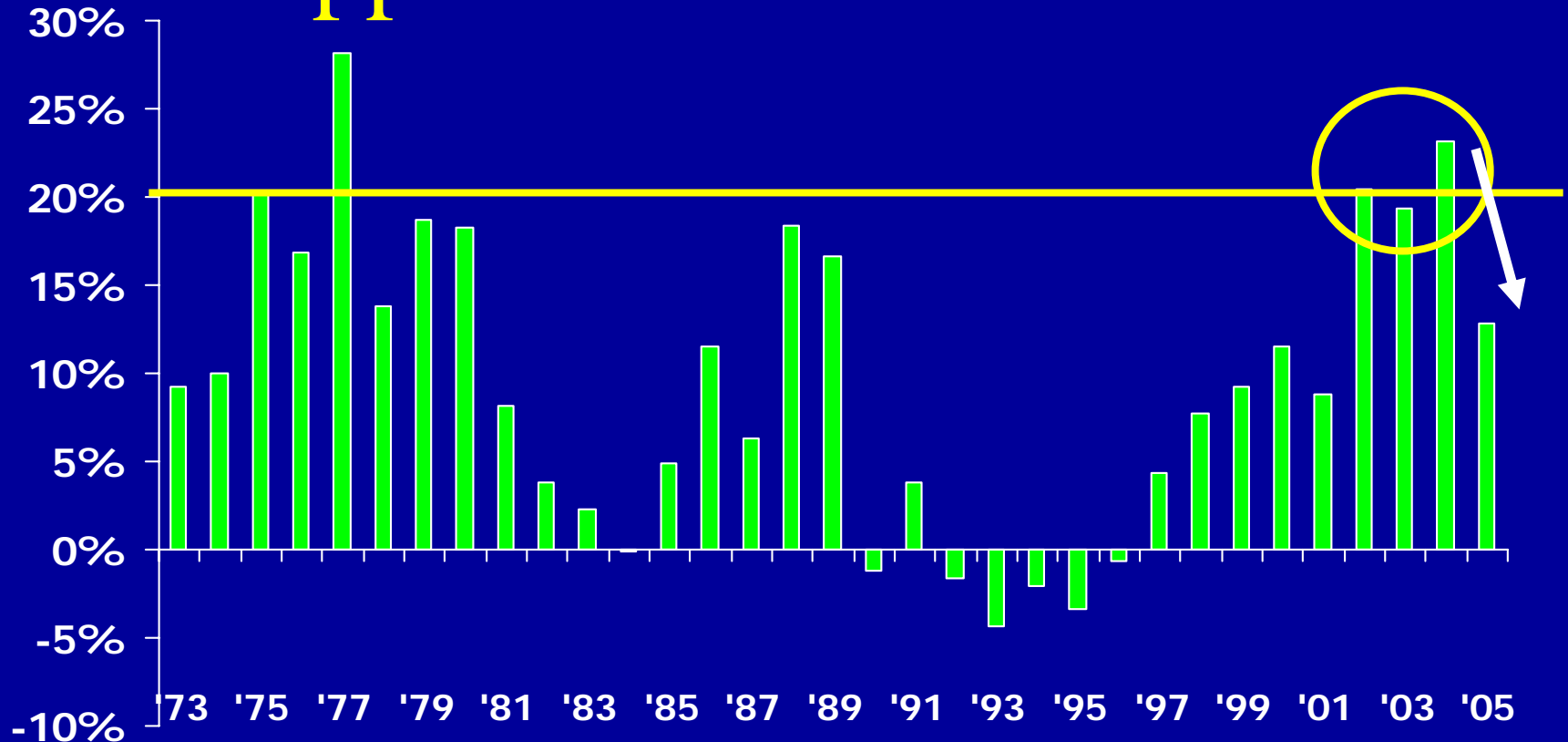
Source: California Department of Finance, Construction Industry Research Board, U.C. Berkeley Department of City and Regional Planning, Economy.com, and Johnson/Souza Group, Inc.

# Residential Mortgage Rates Fixed

Source: Bankrate.com



# Existing Median Home Price Appreciation - California

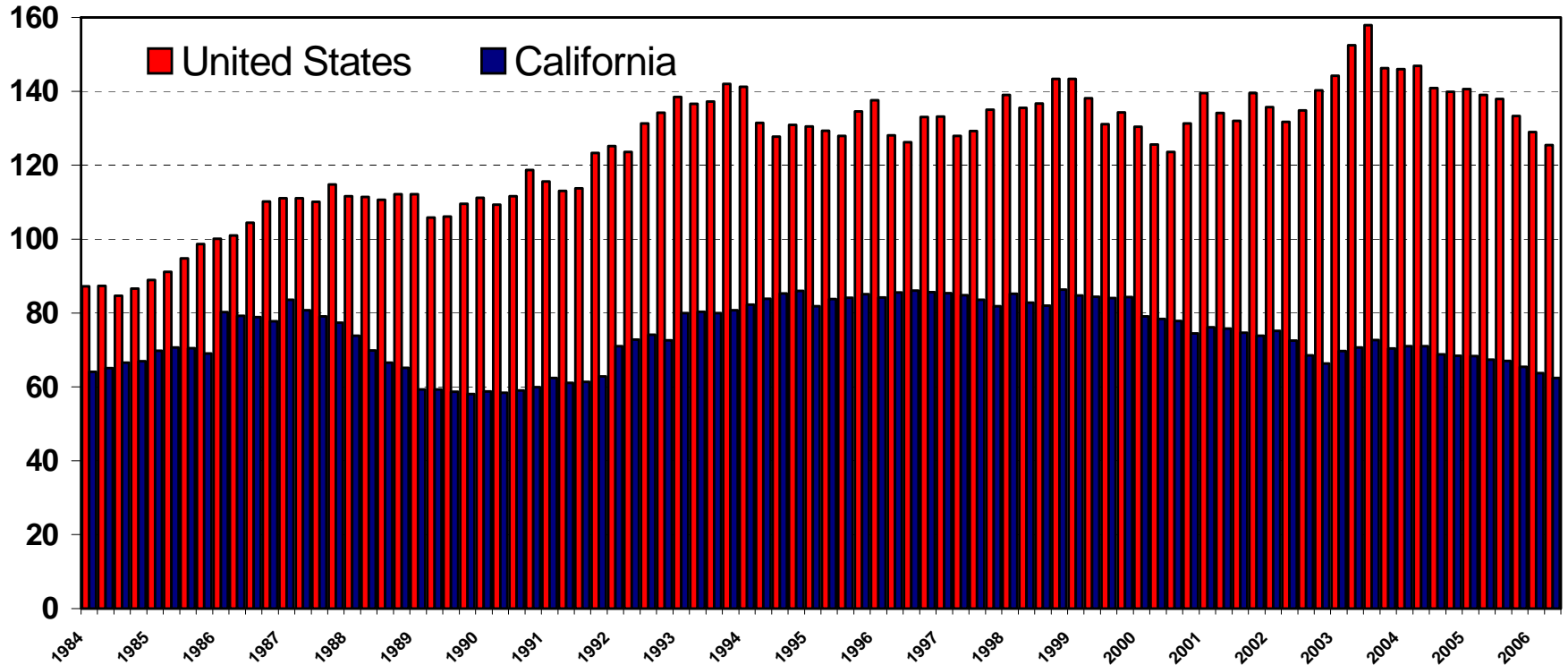


\* '05 appreciation shown as May '04 vs. May '05

Source: California Association of Realtors

# ...creating an ever increasing affordability gap...

United States vs. California Affordability Gap  
Housing Affordability Index (1984 - 2006)



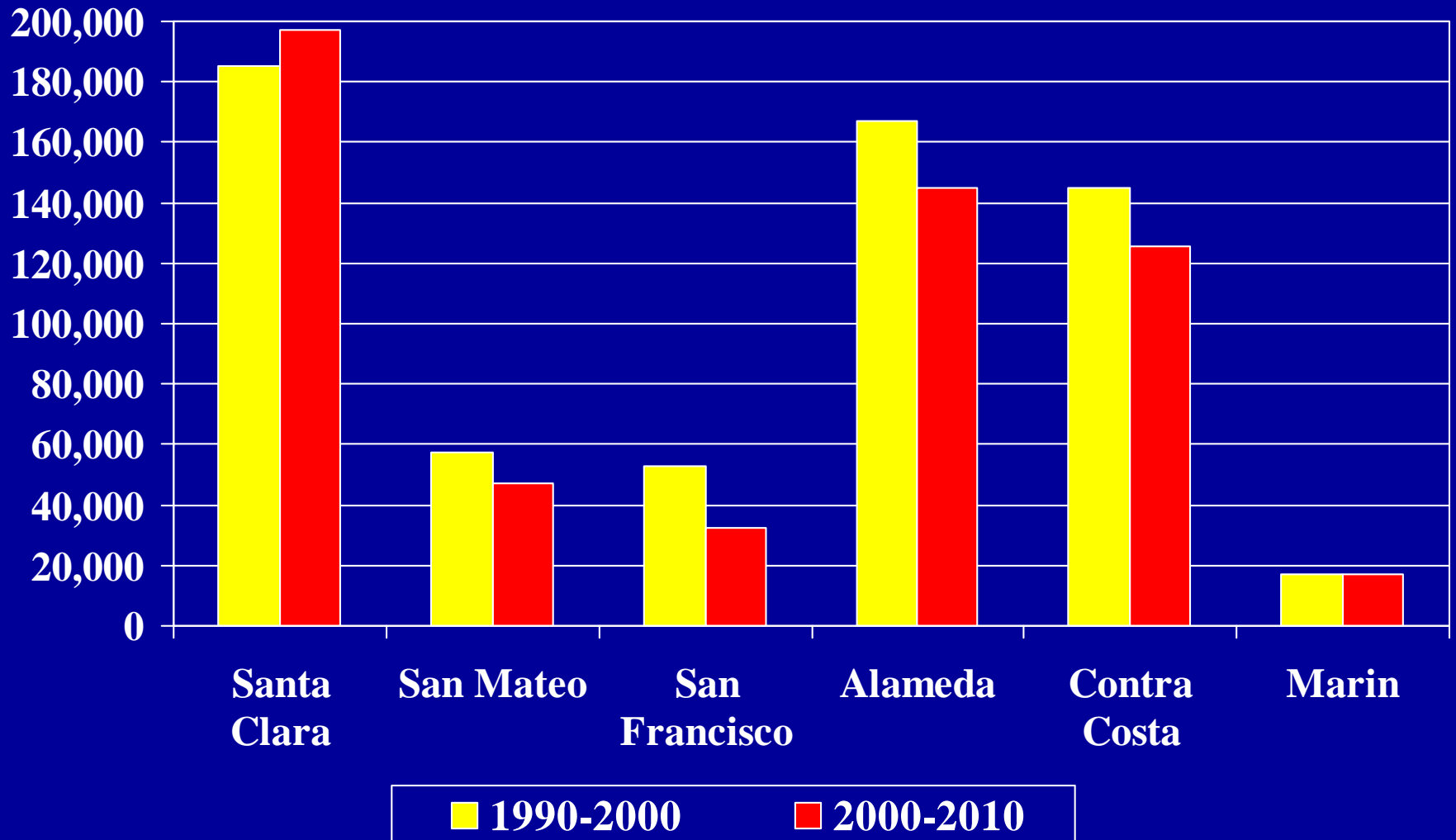
Sources: Economy.com, National Association of Realtors, and Johnson/Souza Group, Inc.

# San Francisco Bay Area

# Demographics

# *Bay Area Demographics*

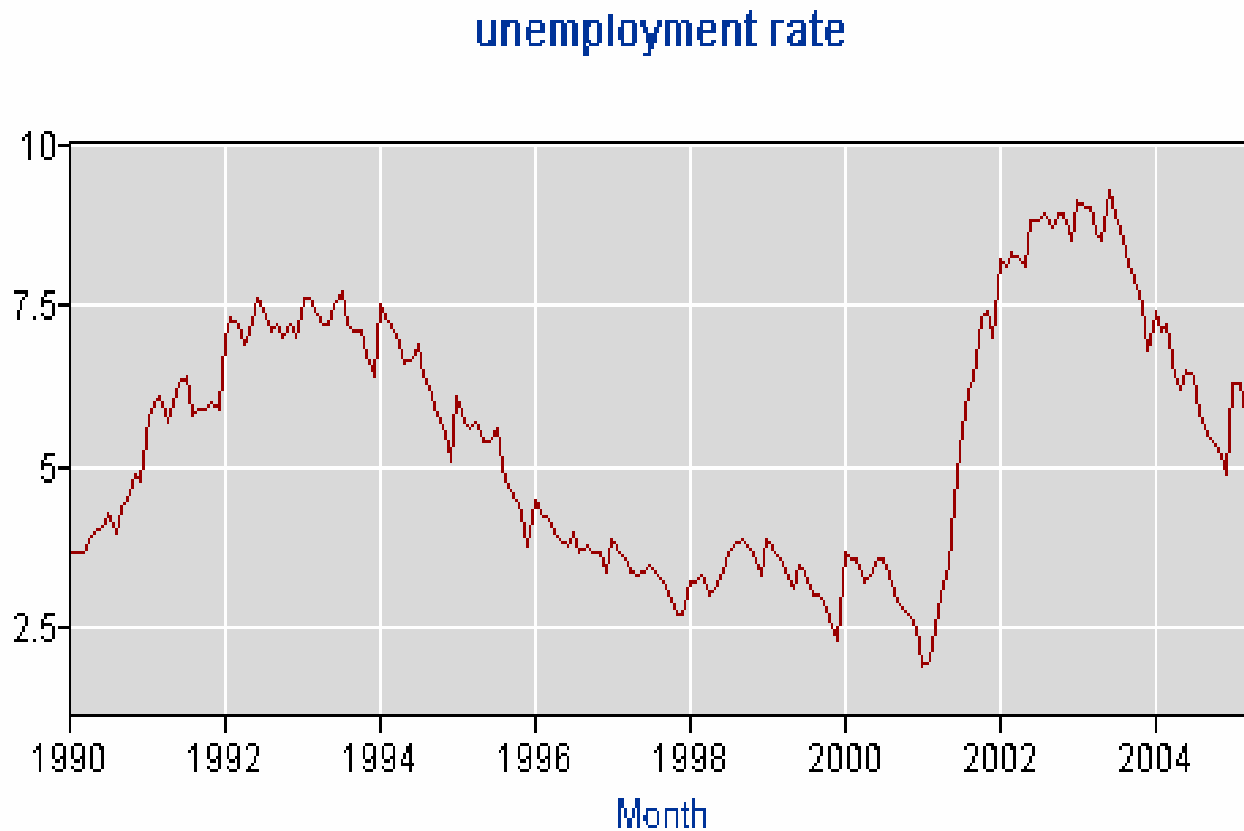
## Population Change by Bay Area Counties



Source: Association of Bay Area Governments, 2001 data.

# Unemployment

# San Jose PMSA Unemployment Rate 1990 – 2005



Source: Bureau of Labor Statistics

# San Francisco PMSA Unemployment Rate 1990 – 2005



Source: Bureau of Labor Statistics

<http://data.bls.gov/PDQ/servlet/SurveyOutputServlet>

# Oakland PMSA Unemployment Rate 1990 – 2005

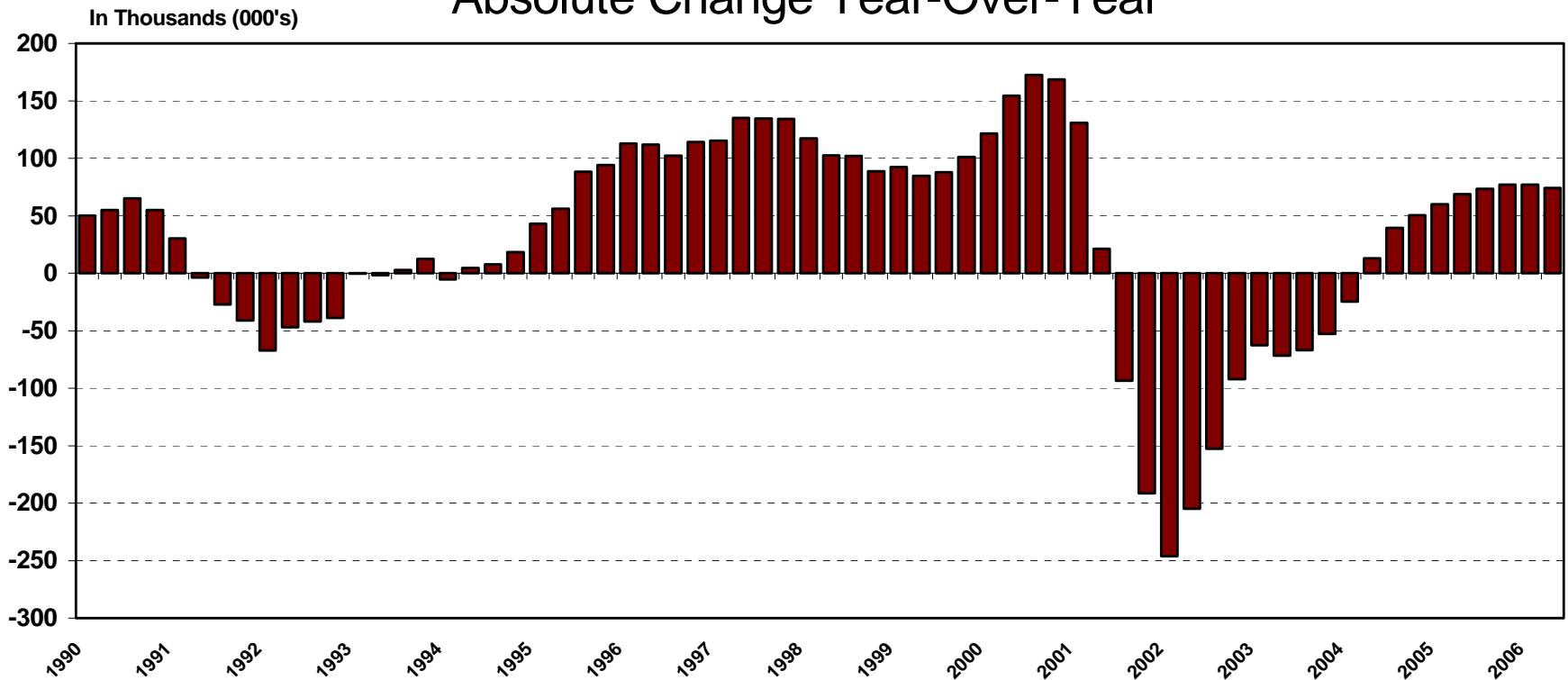


Source: Bureau of Labor Statistics

# Employment

# Bay Area Non-Farm Employment growth turned positive in 4Q04

San Francisco Bay Area Non-Farm Employment Growth  
Absolute Change Year-Over-Year



Sources: Economy.com and Johnson/Souza Group, Inc.

# Northern California Economics

## MSA Year-Over-Year Employment Growth Rates

	May '03-'04	May '04-'05	Pt.Diff.	Ann.Ch. Gain/Loss
<b>San Jose</b>	- 1.4%	- 0.2%	1.2	- 1,500
*1990 – 2000: 2.6%, 23,850				
<b>San Francisco</b>	- 1.6%	0.8%	2.4	7,100
*1990 – 2000: 1.4%, 14,400				
<b>Oakland</b>	- 0.4%	0.8%	1.2	7,900
*1990 – 2000: 1.7%, 16,600				
<b>Sacramento</b>	1.1%	1.4%	0.3	12,200
*1990 – 2000: 2.5%, 15,760				
<b>Western Region</b>	2.0%	2.5%	0.5	792,054
*1990 – 2000: 2.0%, 548,095				

\*Average annual compound growth rate, and average annual absolute change in non-farm employment.

Source: U.S. Department of Labor, Johnson/Souza. **Note: Non-farm employment growth rates are not seasonally adjusted.**

# *Southern California Economics*

## *MSA Year-Over-Year Employment Growth Rates*

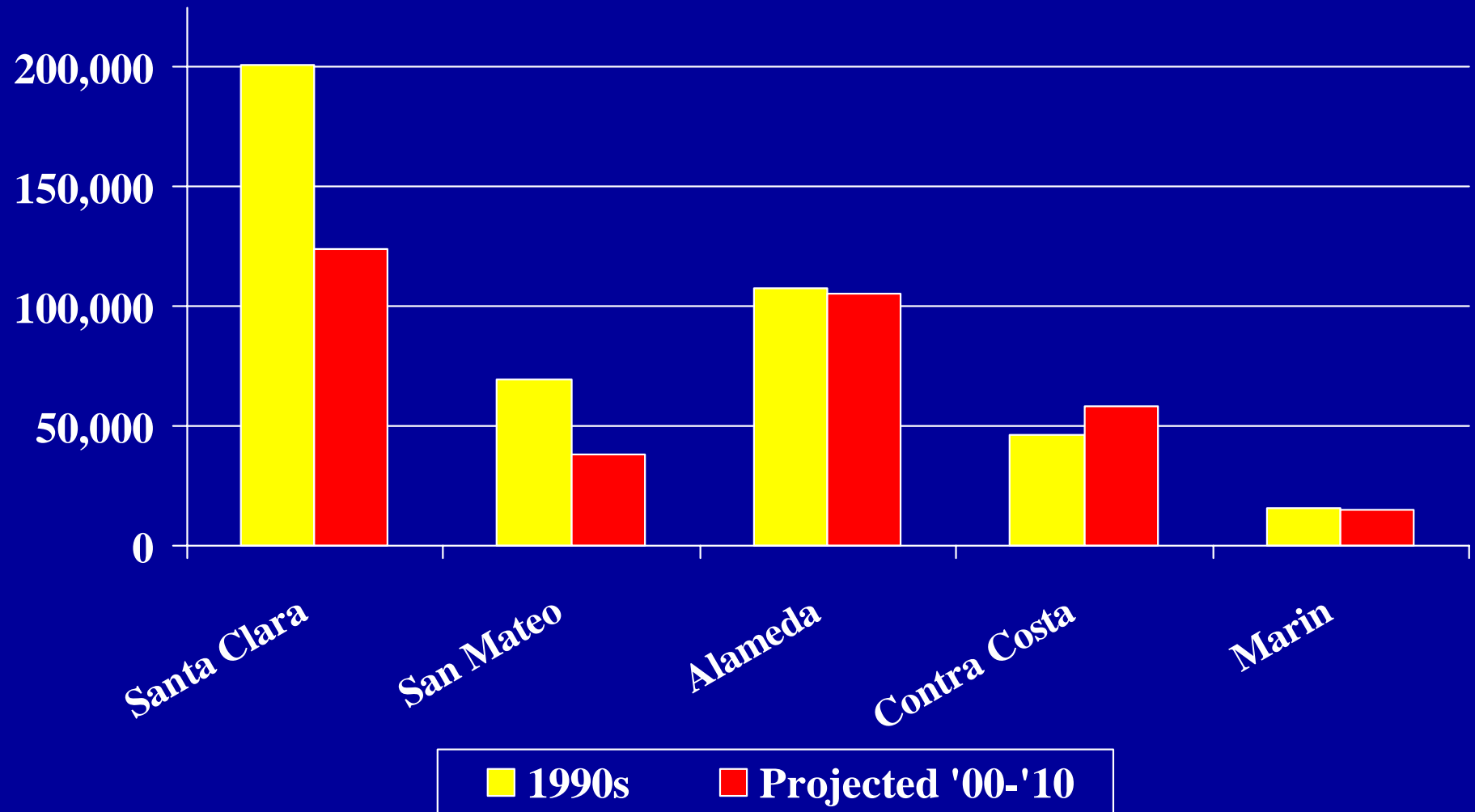
	<b>May '03-'04</b>	<b>May '04-'05</b>	<b>Pt.Diff.</b>	<b>Ann.Ch. Gain/Loss</b>
<b>Los Angeles</b>	<b>0.3%</b>	<b>0.6%</b>	<b>0.3</b>	<b>23,200</b>
<i>*1990 – 2000: 0.0%, 350</i>				
<b>Orange Co.</b>	<b>2.6%</b>	<b>1.4%</b>	<b>- 1.2</b>	<b>19,800</b>
<i>*1990 – 2000: 1.8%, 22,960</i>				
<b>Inland Empire</b>	<b>5.3%</b>	<b>1.6%</b>	<b>- 3.7</b>	<b>18,600</b>
<i>*1990 – 2000: 3.4%, 28,390</i>				
<b>San Diego</b>	<b>1.7%</b>	<b>1.3%</b>	<b>- 0.4</b>	<b>16,200</b>
<i>*1990 – 2000: 2.2%, 23,790</i>				
<b>California*</b>	<b>0.7%</b>	<b>1.8%</b>	<b>1.1</b>	<b>254,500</b>
<i>*1990 – 2000: 1.6%, 216,702</i>				

\*Average annual compound growth rate, and average annual absolute change in non-farm employment.

Source: U.S. Department of Labor, Johnson/Souza. **Note: Non-farm employment growth rates are not seasonally adjusted.**

# *South Bay Economics*

## Absolute Change in Job Growth



Source: Association of Bay Area Governments, Projections 2001.

# Residential Housing Trends

# Residential Housing Trends

Home ownership is out of reach for low-income and white-collar professionals, prices rising faster than incomes

At California median price (\$522,590), monthly payments of \$3,067, would need to earn \$122,700 to qualify for conv. Loan

Prices grew faster in late 1970s, compared to last four years; but faster if inflation adjusted; past five years California up 105%

More buying homes as investments, anticipate continued price appreciation, 23% purchased as investment, 13% vacation

60% of home builders say activity is speculative, could lead to substantial hidden supply, imposing holding requirements

Driven by interest-only, negative amortization, adjustable rate loans (33% national, 60% CA) interest and principle to reset in 3-to-5 years. 1993 – 2004, 10x increase in subprime lending. +80% LTV

# Residential Housing Trends

1997 Tax Act fueling demand (\$250,000 - \$500,000), every 2 yrs

Limited for-sale inventory, land, distance to job centers, government and environmental restrictions

From 1990 to 2005, home sold up from 2.9 mil. To 6.2 mill., up 114%

Months to sell current inventory, 4-to-5 months 1997, 2.8% in CA

CA First time home buyers, 40% 1995, low of 26% in 2005

In 2005, U.S. 4.3% delinquent, 1.23% in foreclosure, very low

From 1978 to 1998, 54 price booms, 21 busts, sticky prices, followed by periods of price stagnation

# Home Prices

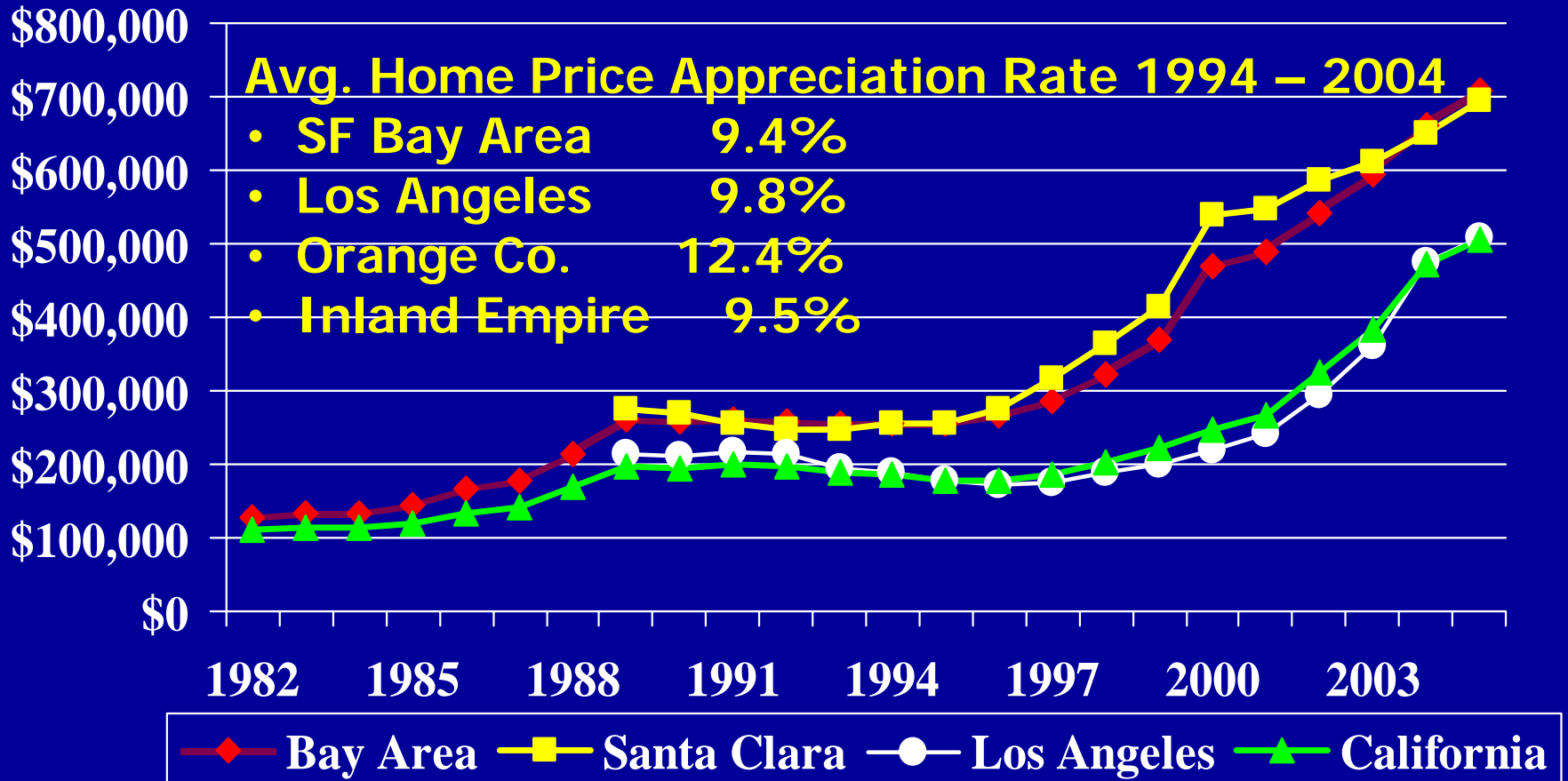
# Housing Market

## *Median Home Prices*

Home Prices	May'04	May'05	Y-O-Y % Ch.
United States	\$172,100	\$188,800	9.7%
West	\$242,000	\$282,900	16.9%
California	\$463,320	\$522,590	12.8%
<b>Bay Area</b>	<b>\$649,240</b>	<b>\$721,730</b>	<b>11.2%</b>
Los Angeles	\$434,790	\$503,450	15.8%
<b>Santa Clara</b>	<b>\$635,200</b>	<b>\$749,000</b>	<b>18.0%</b>
<b>Sacramento</b>	<b>\$306,230</b>	<b>\$379,790</b>	<b>24.0%</b>
Riv.-San. Co.	\$292,060	\$364,700	24.9%
Orange Co	\$662,290	\$704,150	6.3%
San Diego	\$565,030	\$608,300	7.7%

# Housing Market

## Median Home Prices 1982 – 2005

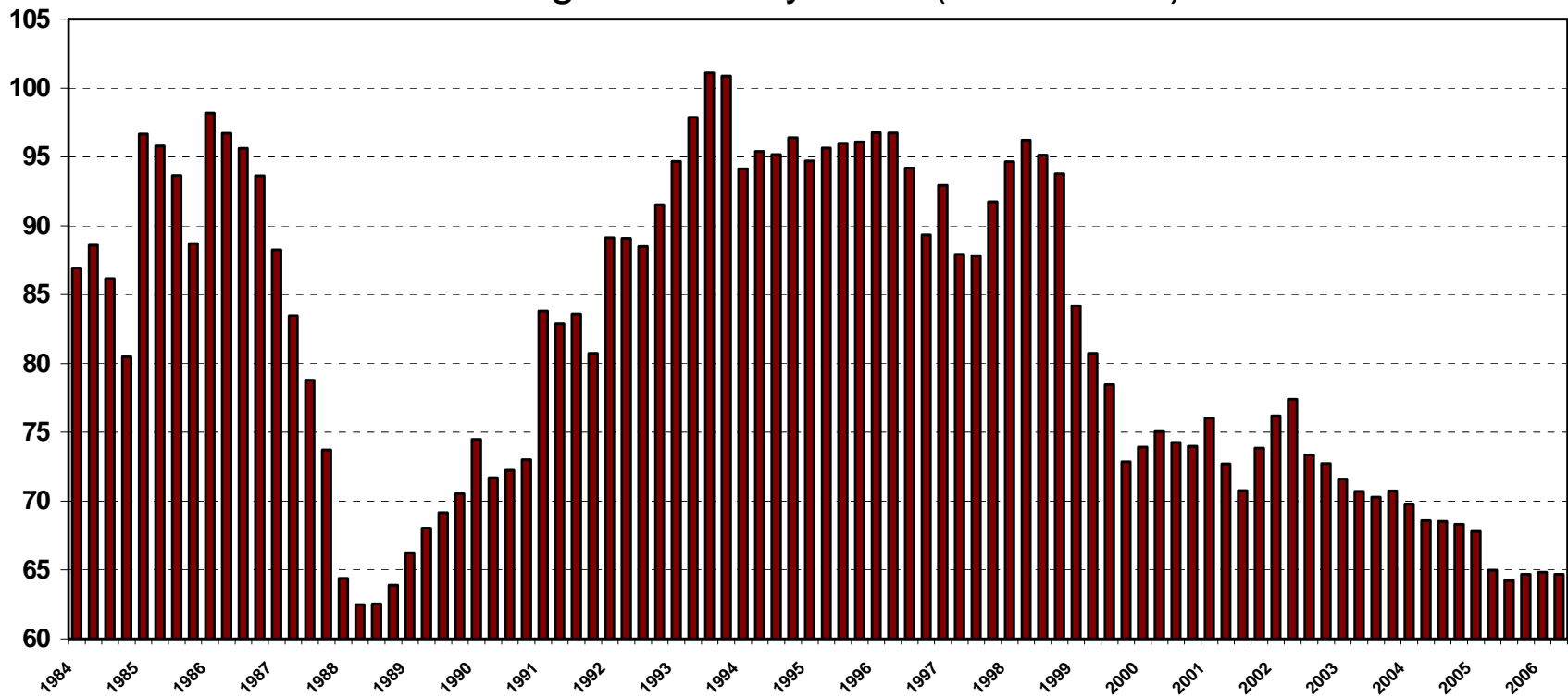


Source: California Association of Realtors, Johnson/Souza Group, Inc., and Economy.com.

# Housing Affordability

# ...high home prices, low affordability...

San Francisco Bay Area  
Housing Affordability Index (1984 - 2006)



Sources: Economy.com, National Association of Realtors, and Johnson/Souza Group, Inc.

# Housing Market

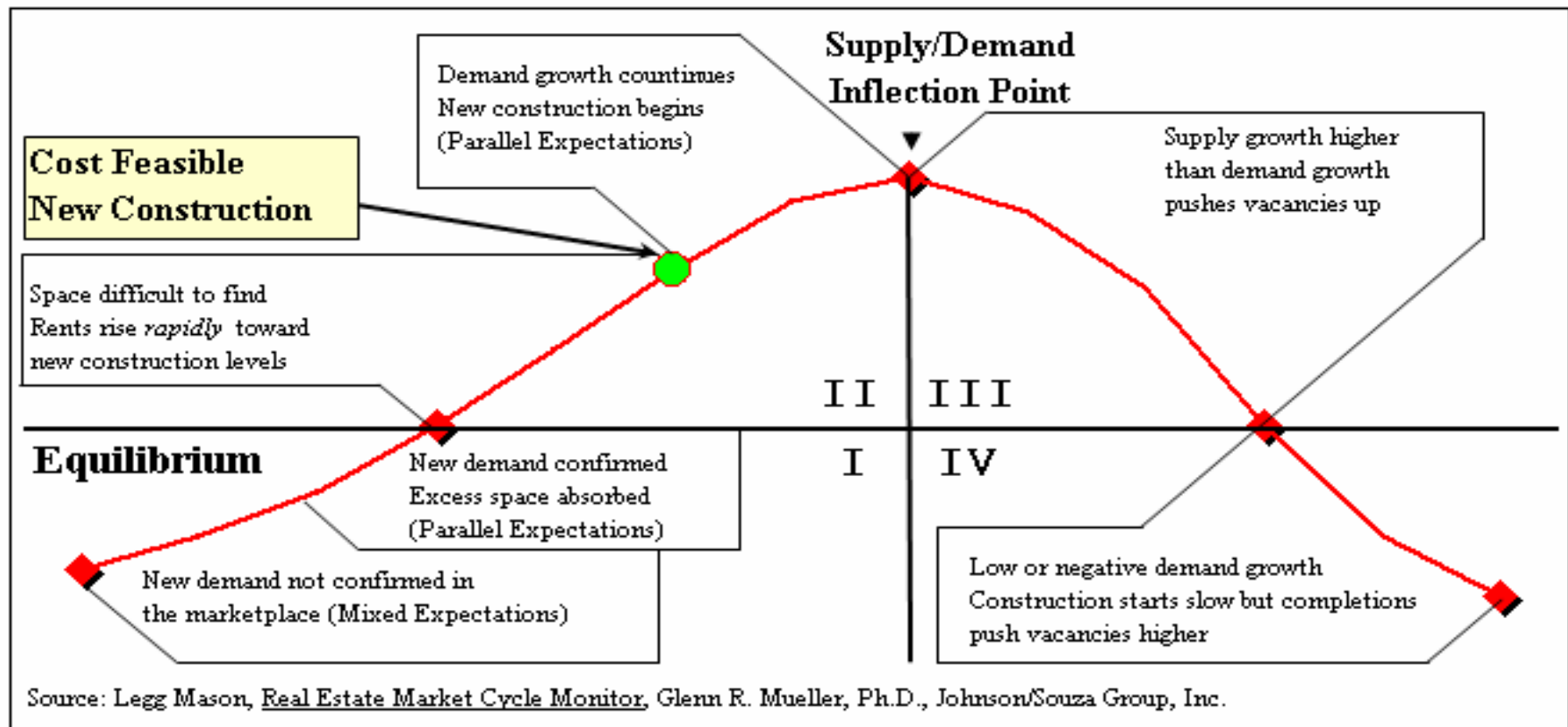
## *Housing Affordability Index*

Affordability	April '04	April '05	Y-O-Y % Ch.
United States	57%	50%	-12.3%
California	20%	17%	-15.0%
<b>SF Bay Area</b>	<b>17%</b>	<b>12%</b>	<b>-29.4%</b>
Los Angeles	20%	16%	-20.0%
<hr/>			
<b>Santa Clara</b>	<b>24%</b>	<b>18%</b>	<b>-25.0%</b>
<b>Sacramento</b>	<b>33%</b>	<b>21%</b>	<b>-36.4%</b>
Riv.-San Co.	28%	20%	-28.6%
Orange Co	13%	11%	-15.4%
San Diego	14%	10%	-28.6%

# Apartment Market

# Applications - Real Estate Cycle Theory

## Market Cycle Characteristics

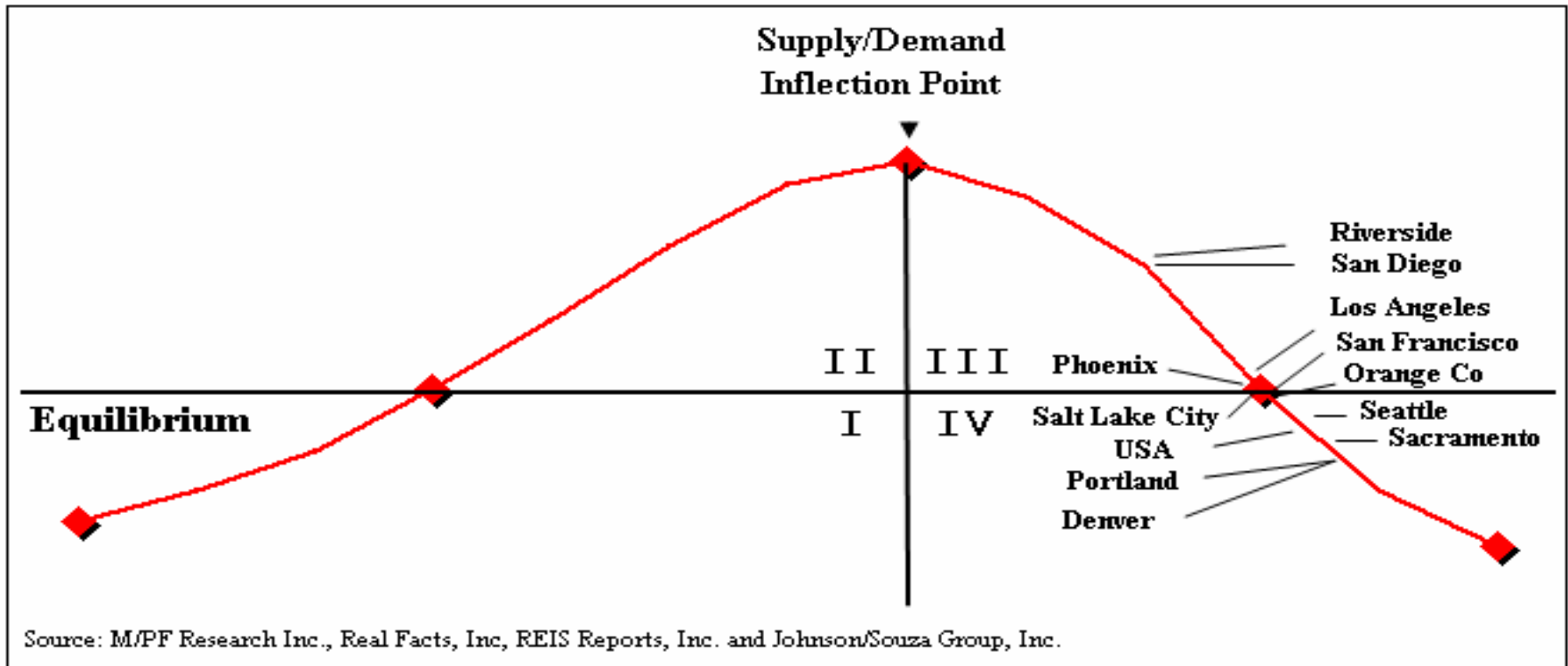


I - Recovery  
II - Expansion

III - Hypersupply  
IV - Recession

# Applications - Real Estate Cycle Theory

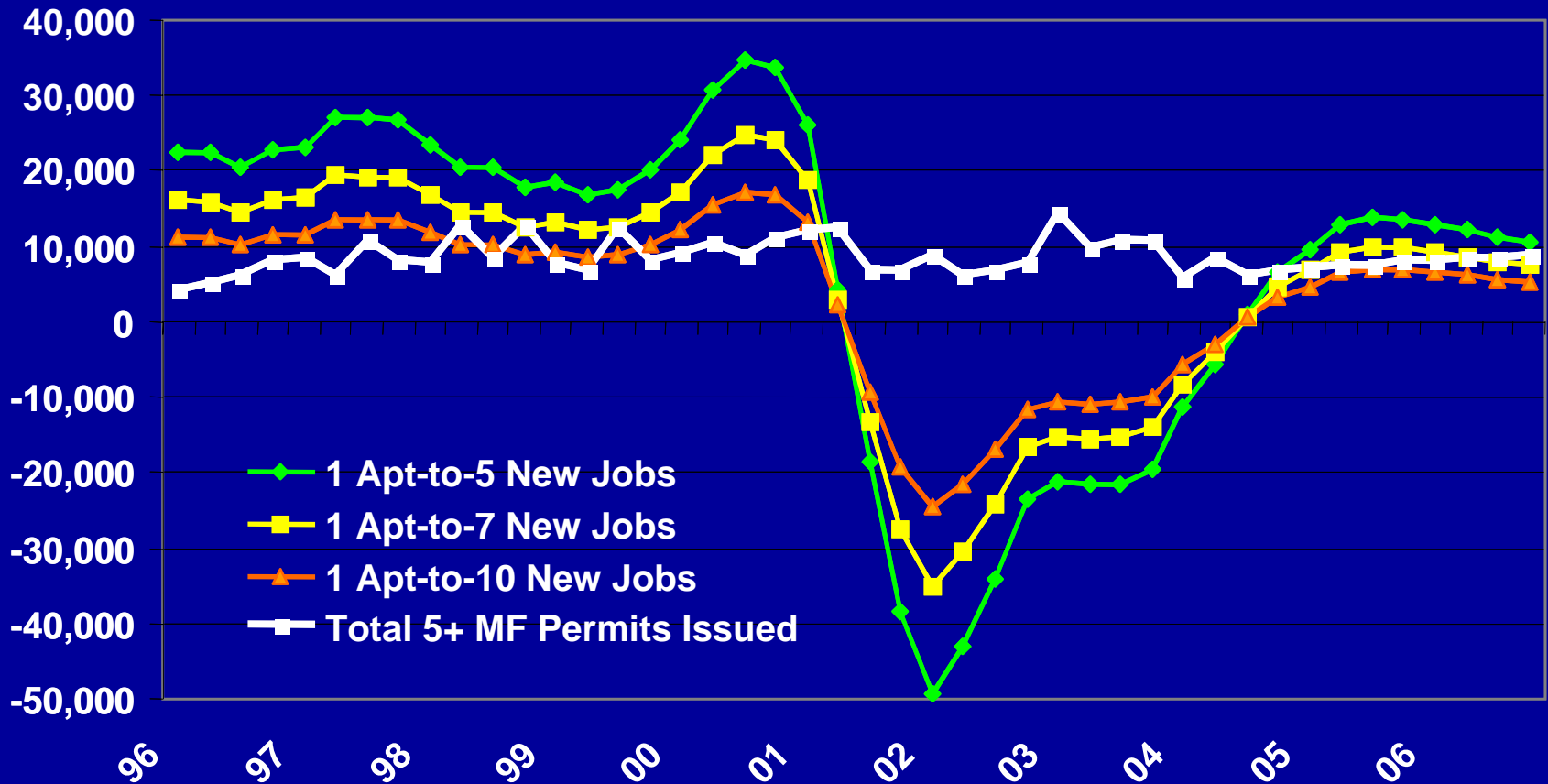
## Metro Market Cycle Graph



**Note:** There are no dates in this graph because the cycle lengths for each metro are *different*. For that reason this graph does not represent a time-line but is instead meant to be a guide as to which *Phase* and in which direction a metro is trending.

# Employment Driven Apartment Demand

Bay Area total 5+ multifamily permits issued are projected to fall below employment driven demand by 2005

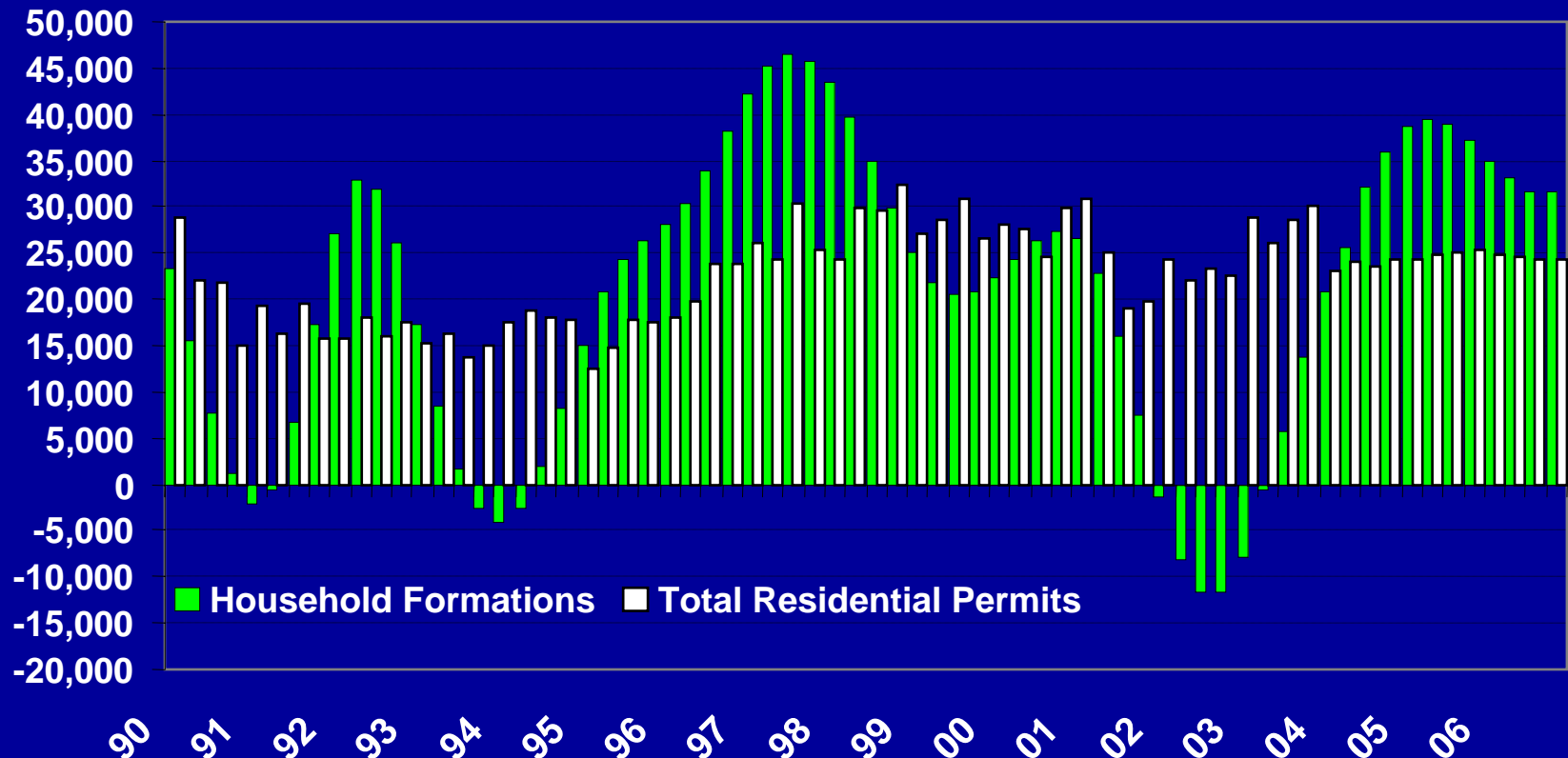


Sources: Economy.com, Bureau of Labor Statistics, U.S. Census, and Johnson/Souza Group, Inc.

# Bay Area household formations turned positive in 3Q/2003 as net outmigration slowed

## San Francisco Bay Area Total Households

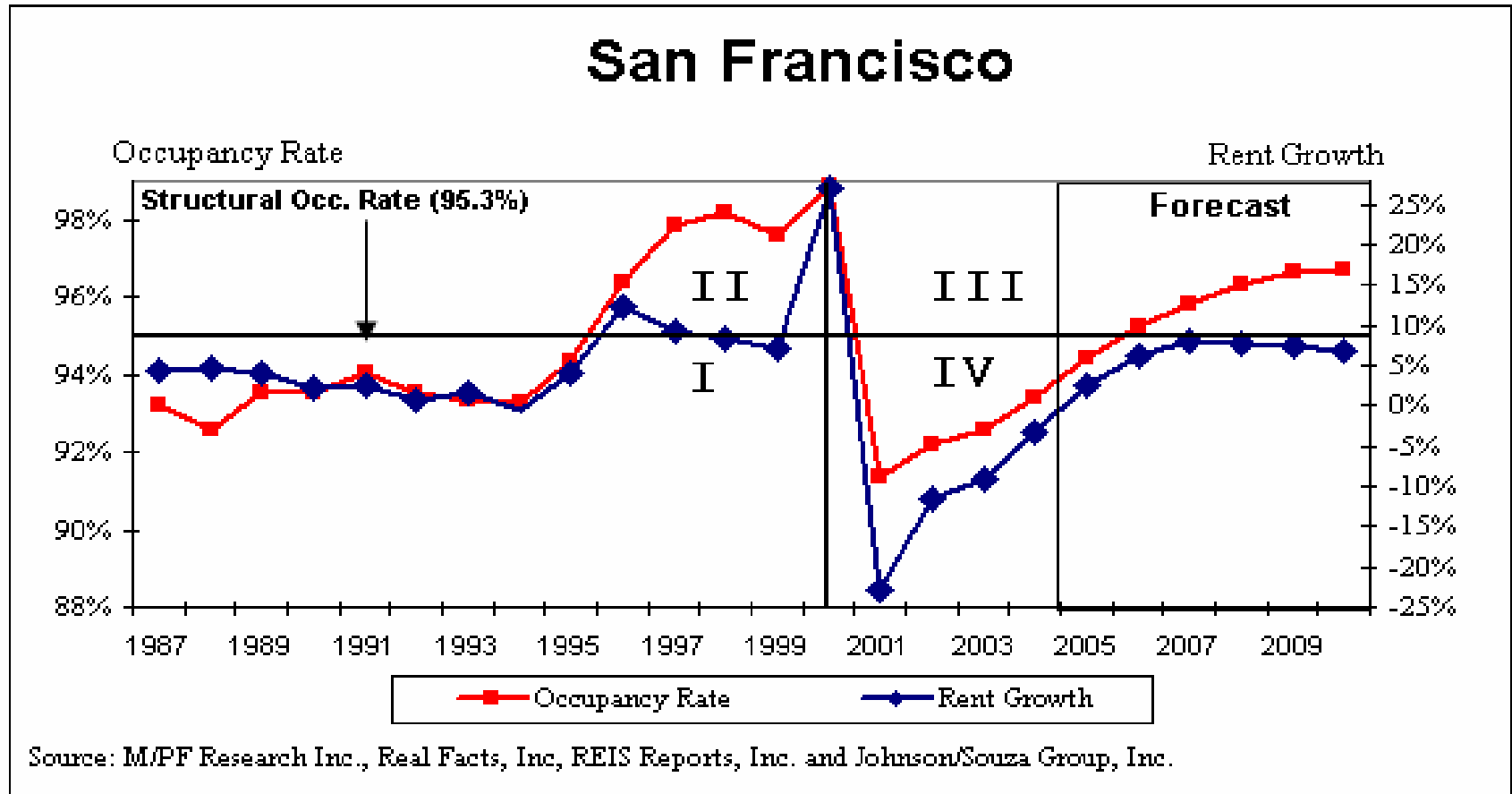
Absolute Change Year-Over-Year vs. Total Residential Permits Issued



Sources: Economy.com, U.S. Census, and Johnson/Souza Group, Inc.

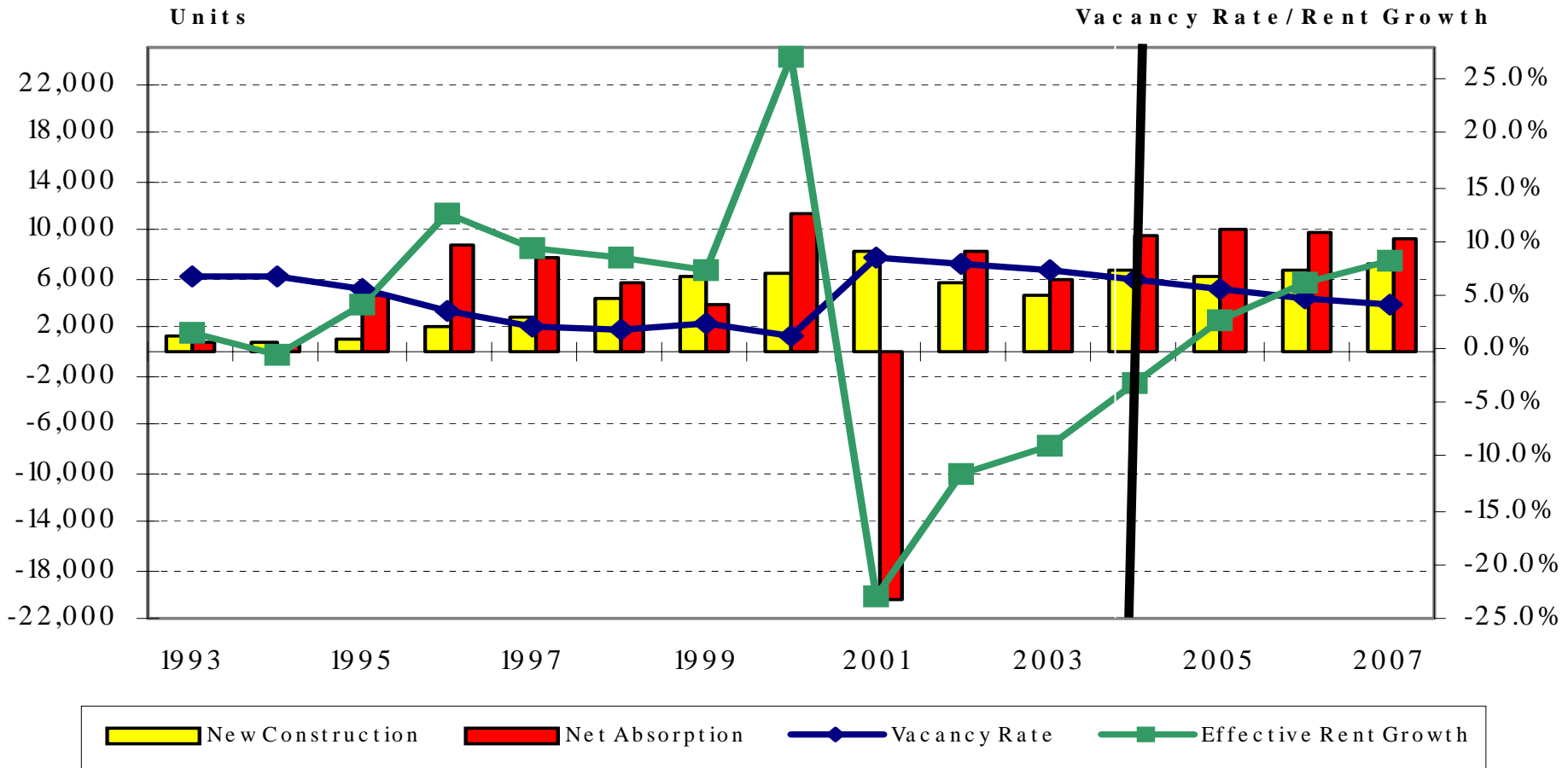
# Bay Area apartment market at structural vacancy, job growth recovery to drive rent growth

## Cycle Graph



# Bay Area Apartment Market

SAN FRANCISCO BAY AREA NEW CONSTRUCTION, NET ABSORPTION, VACANCY RATES AND RENT GROWTH 1993 - 2007



Source: RealData, RealFacts, REIS Reports, MP/F Research, and Johnson/Souza Group, Inc.

# Commodity (Mountain/Desert/Pacific North West) markets have been much more volatile than supply constrained (California) markets

## AVERAGE EFFECTIVE RENT GROWTH, VOLATILITY (RISK) AND RISK-ADJUSTED

Geography	Annual Effective Rent Growth 1986 - 2003			Risk-Adjusted Effective Rents	
	Mean	Median	Standard Deviation	Mean/Std.	Median/Std.
Denver	2.5%	5.2%	5.4%	0.5	1.0
Seattle	3.5%	3.9%	4.5%	0.8	0.9
Phoenix	1.5%	1.3%	4.1%	0.4	0.3
Sacramento	3.8%	4.1%	3.5%	1.1	1.2
SF Bay Area	2.8%	4.2%	10.3%	0.3	0.4
Los Angeles	2.8%	2.6%	3.2%	0.9	0.8
Orange Co.	3.4%	3.5%	3.0%	1.1	1.2
Inland Empire	2.0%	1.5%	2.3%	0.9	0.7
San Diego	3.7%	3.1%	3.3%	1.1	0.9

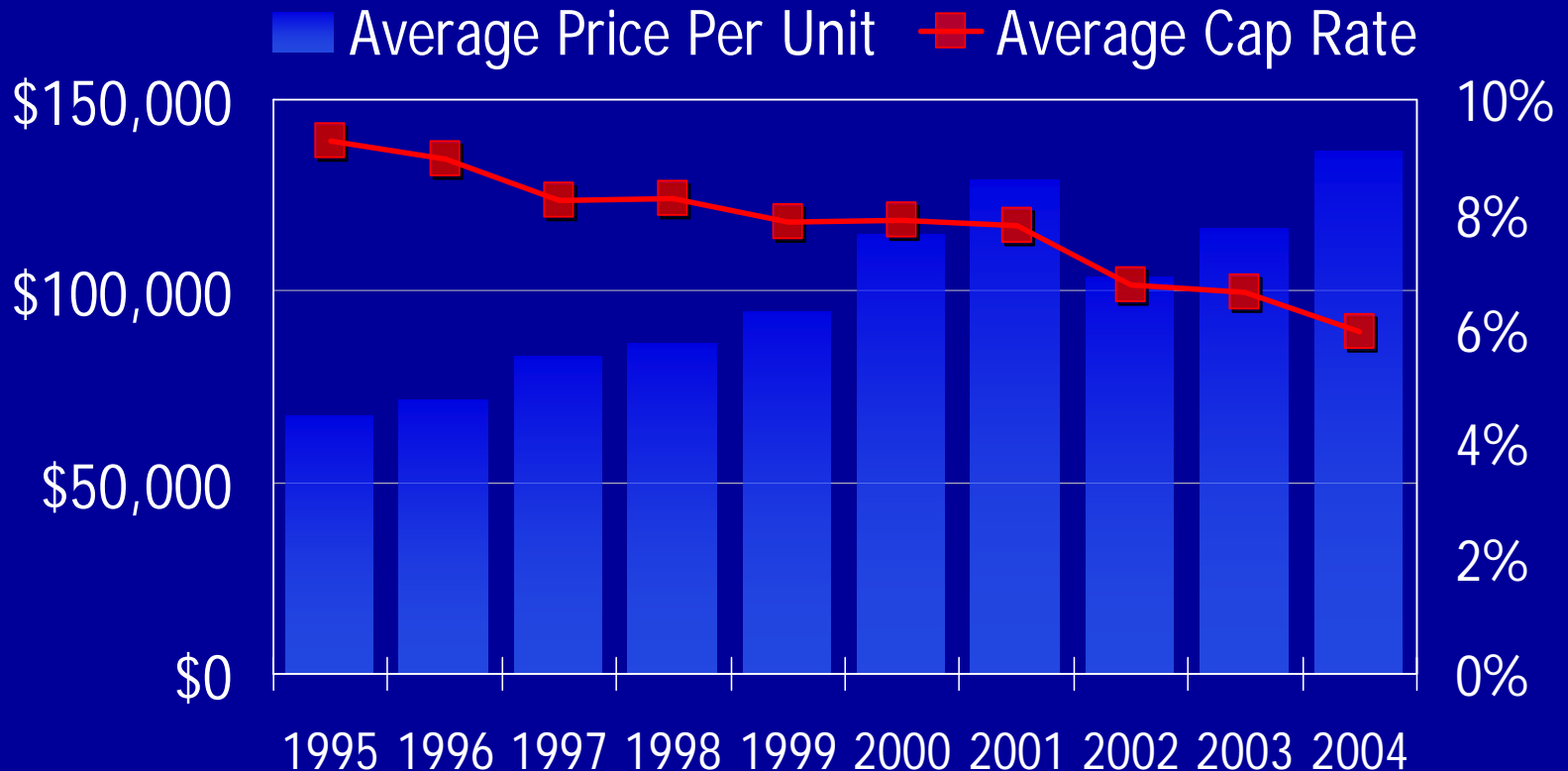
Sources: REIS Reports Inc. and Johnson/Souza Group, Inc.

Update: 05/06/2004

# *Sales Trends*

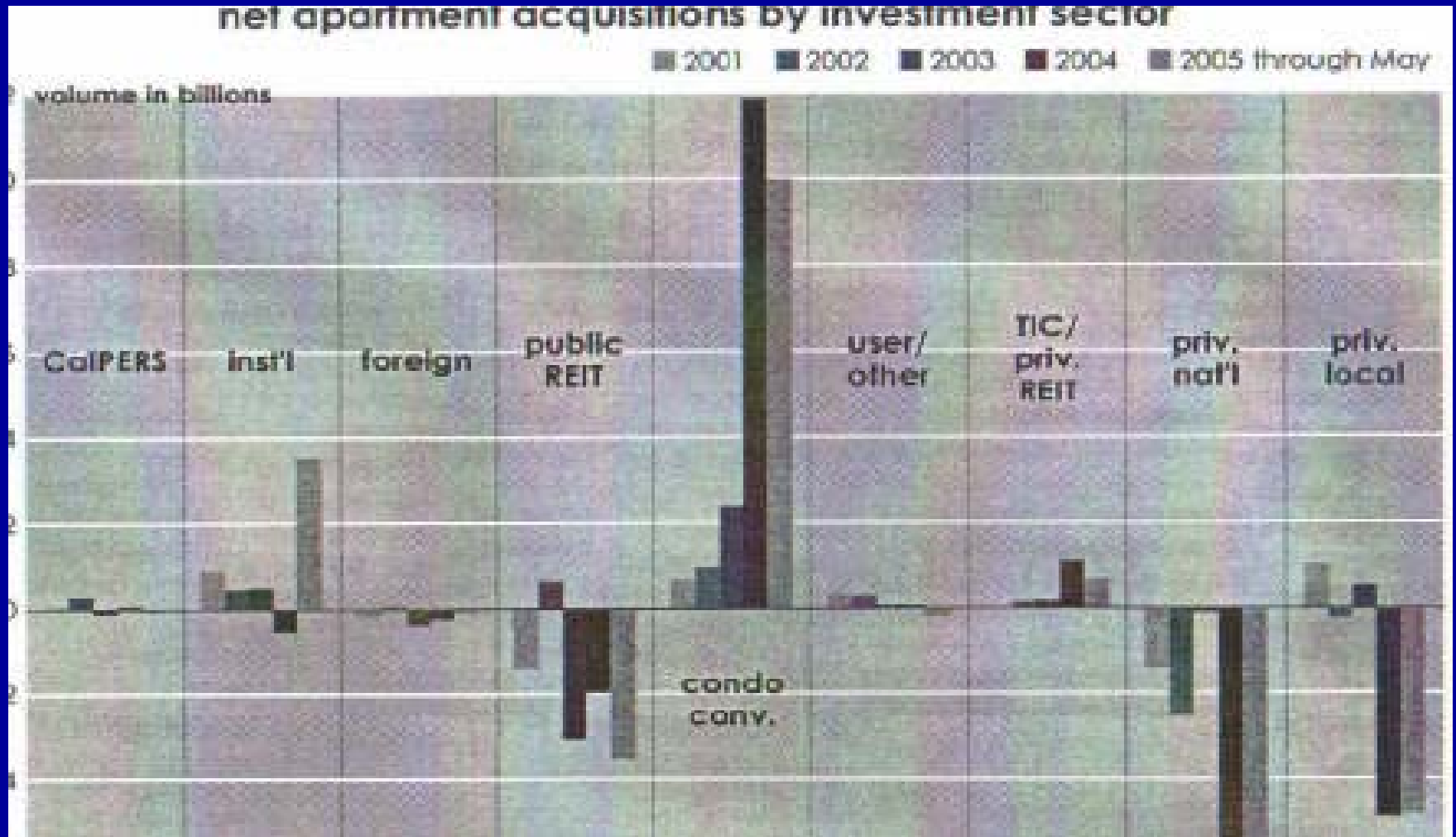
# Apartment Sales

Over 100 Units



# of Sales	8	36	38	34	32	25	13	14	23	23
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# Net Apartment Acquisitions by Investment Sector



# *Vacancy and Rent Trends*

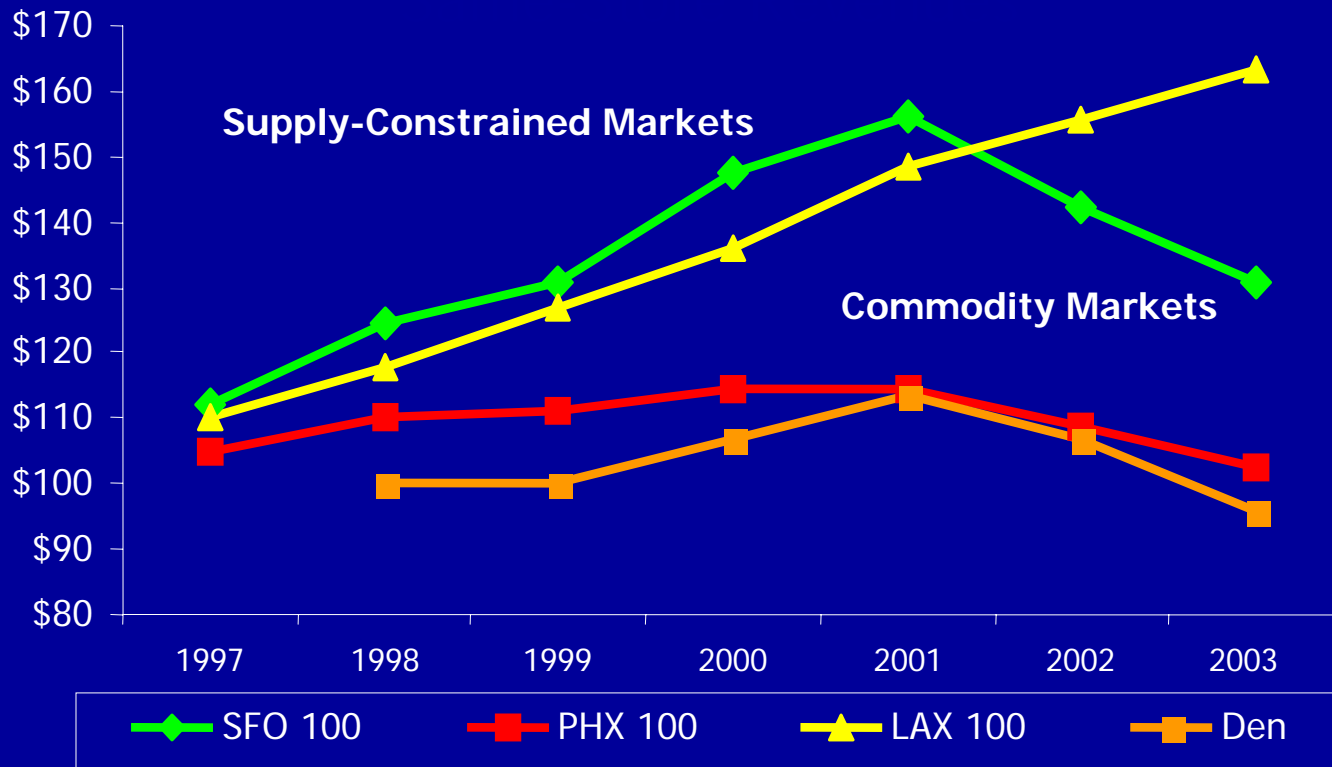
# Market Vacancy Rate Trends

Asking Rents	Vacancy Rate		*Vacancy Rate	
	2003	2004	2005f	2006f
Los Angeles	5.3%	4.9%	4.5%	4.0%
Orange Co.	4.9%	4.5%	4.4%	3.7%
San Diego	5.2%	4.2%	3.9%	3.4%
Riverside	4.3%	4.1%	3.9%	3.8%
SF Bay Area	7.4%	6.6%	5.2%	4.5%
Sacramento	6.9%	7.7%	6.9%	5.8%
Seattle	7.8%	7.0%	5.6%	4.3%
Denver	10.5%	9.9%	8.6%	7.2%
Phoenix	10.0%	8.7%	7.6%	6.4%

# Market Rent Trends

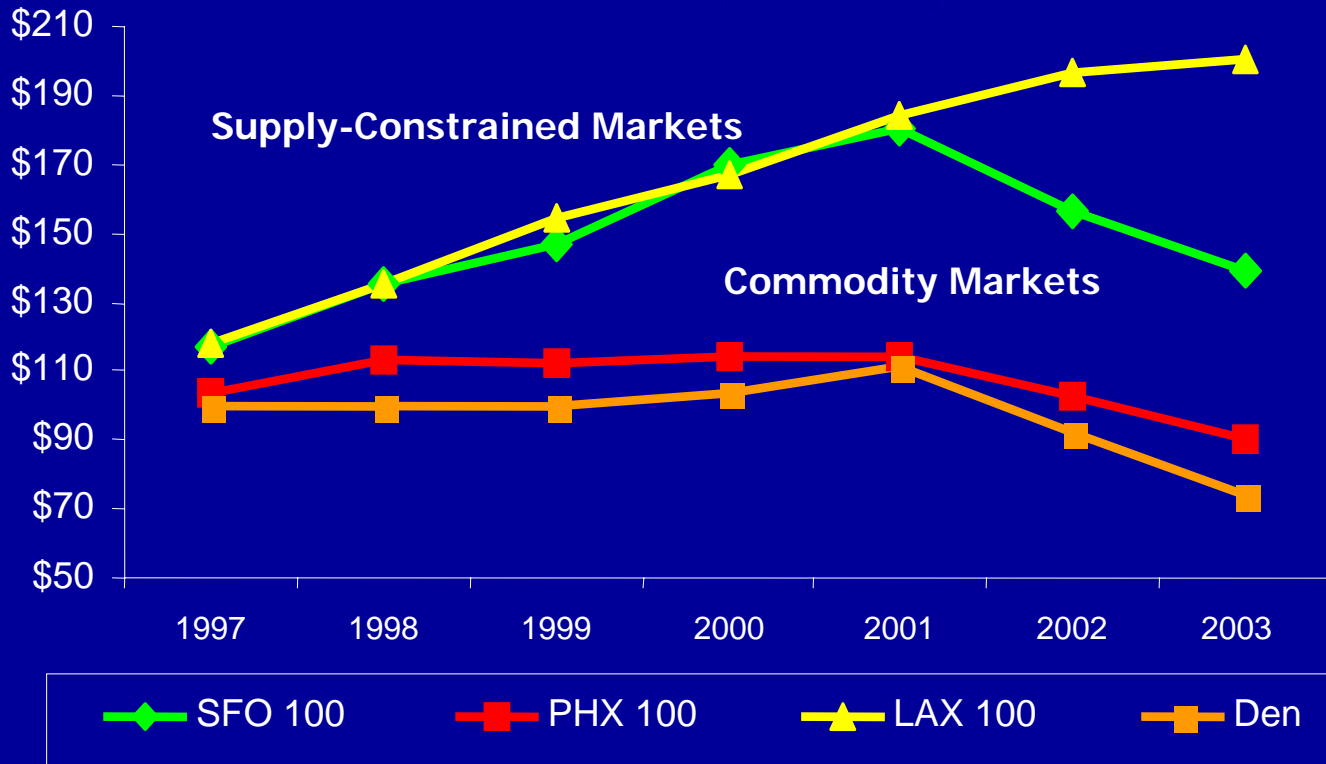
Asking Rents	Effective Rent Growth		*Effective Rent Growth	
	2003	2004	2005f	2006f
Los Angeles	2.5%	3.8%	4.4%	5.4%
Orange Co.	2.1%	3.3%	4.0%	4.4%
San Diego	1.7%	3.4%	4.0%	5.2%
Riverside	4.1%	5.6%	5.1%	5.3%
SF Bay Area	- 9.0%	- 3.1%	2.0%	4.5%
Sacramento	- 2.9%	- 2.3%	-0.2%	3.2%
Seattle	- 5.8%	- 2.2%	3.5%	5.2%
Denver	- 8.8%	- 4.4%	- 2.0%	2.5%
Phoenix	- 4.6%	- 2.0%	2.7%	4.3%

# California's Limited supply leads to sustained revenue growth...



CAGR	
LAX	7.27%
SFO	3.92%
PHX	0.34%
DEN	( 0.82%)

# ...and even stronger NOI growth



CAGR	
LAX	10.45%
SFO	4.88%
PHX	(1.40%)
DEN	(2.74%)

# Commercial Market

# Bay Area Investment Sales

TOTAL VALUE OF TRANSACTIONS OVER \$10 Million

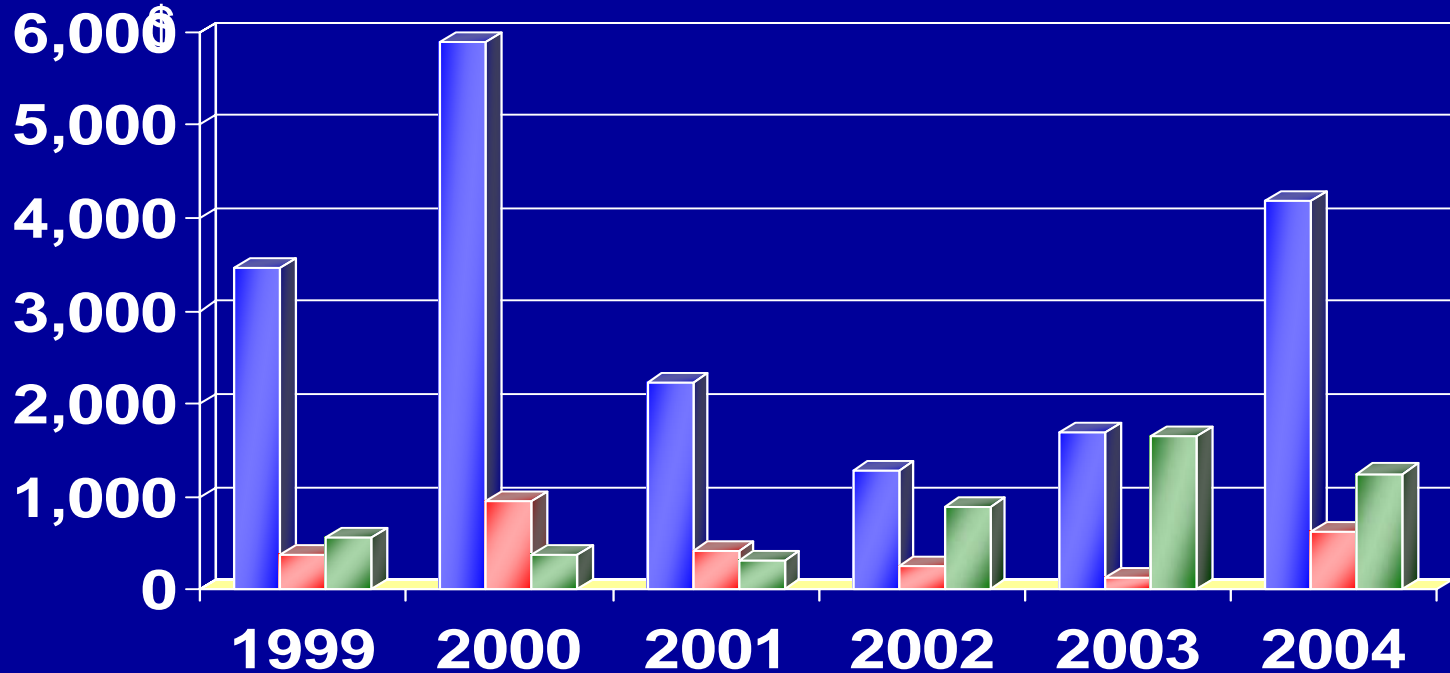
Millions



# Bay Area Investment Sales

VALUE OF TRANSACTIONS BY PRODUCT TYPE

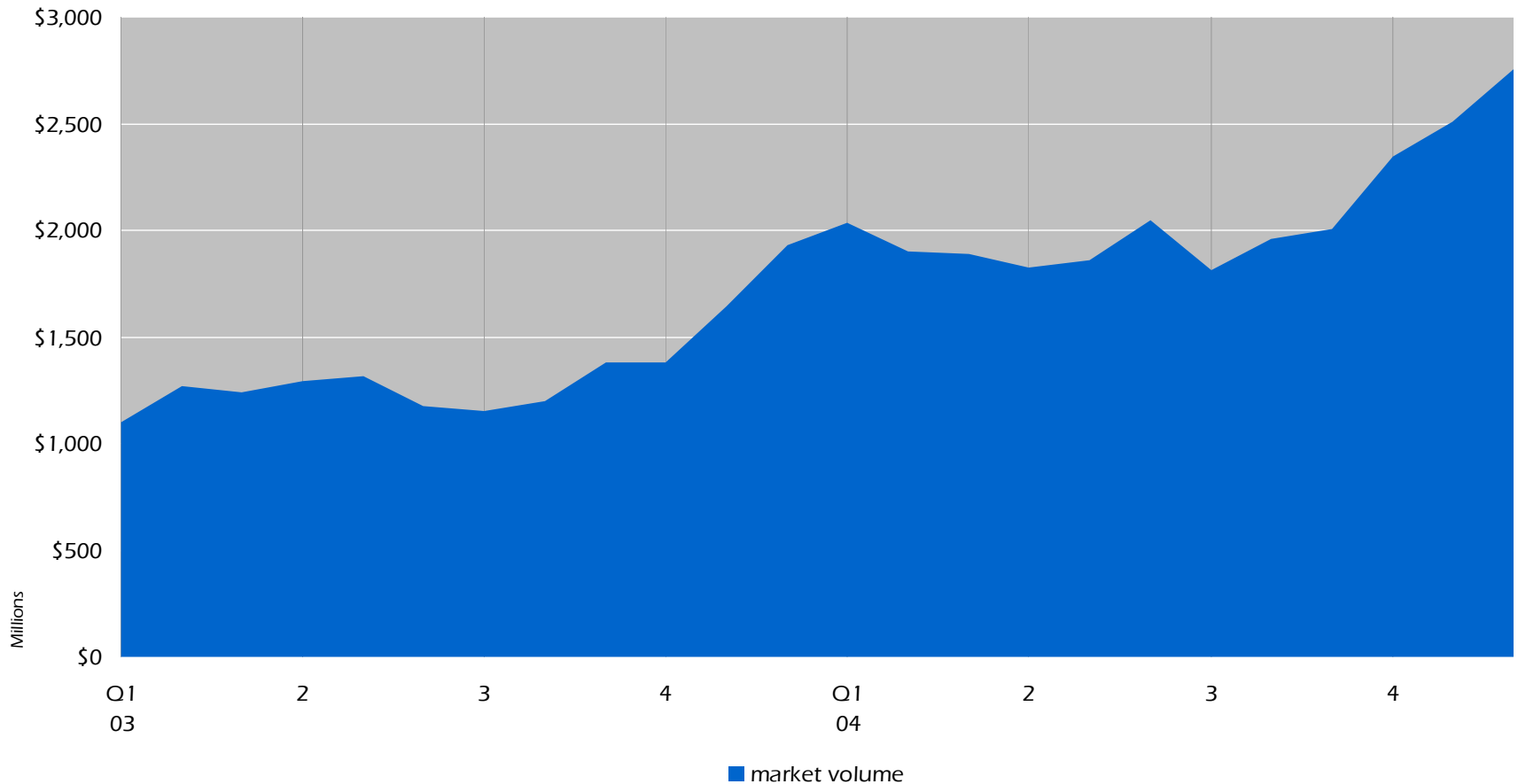
Millions



Office/R&D Industrial Retail

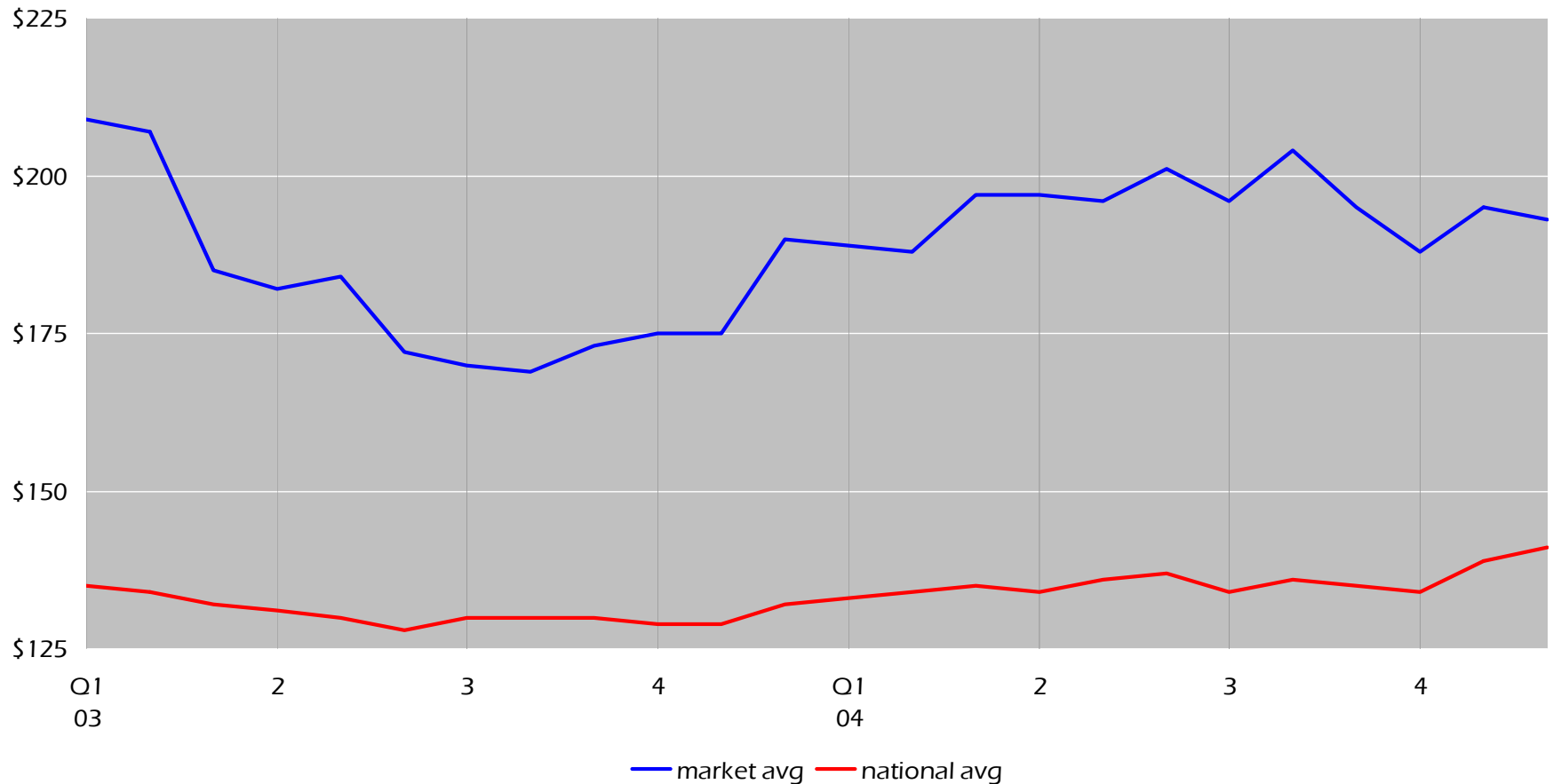
# Bay Area Investment Trends

San Francisco Suburban Office - Annual Volume



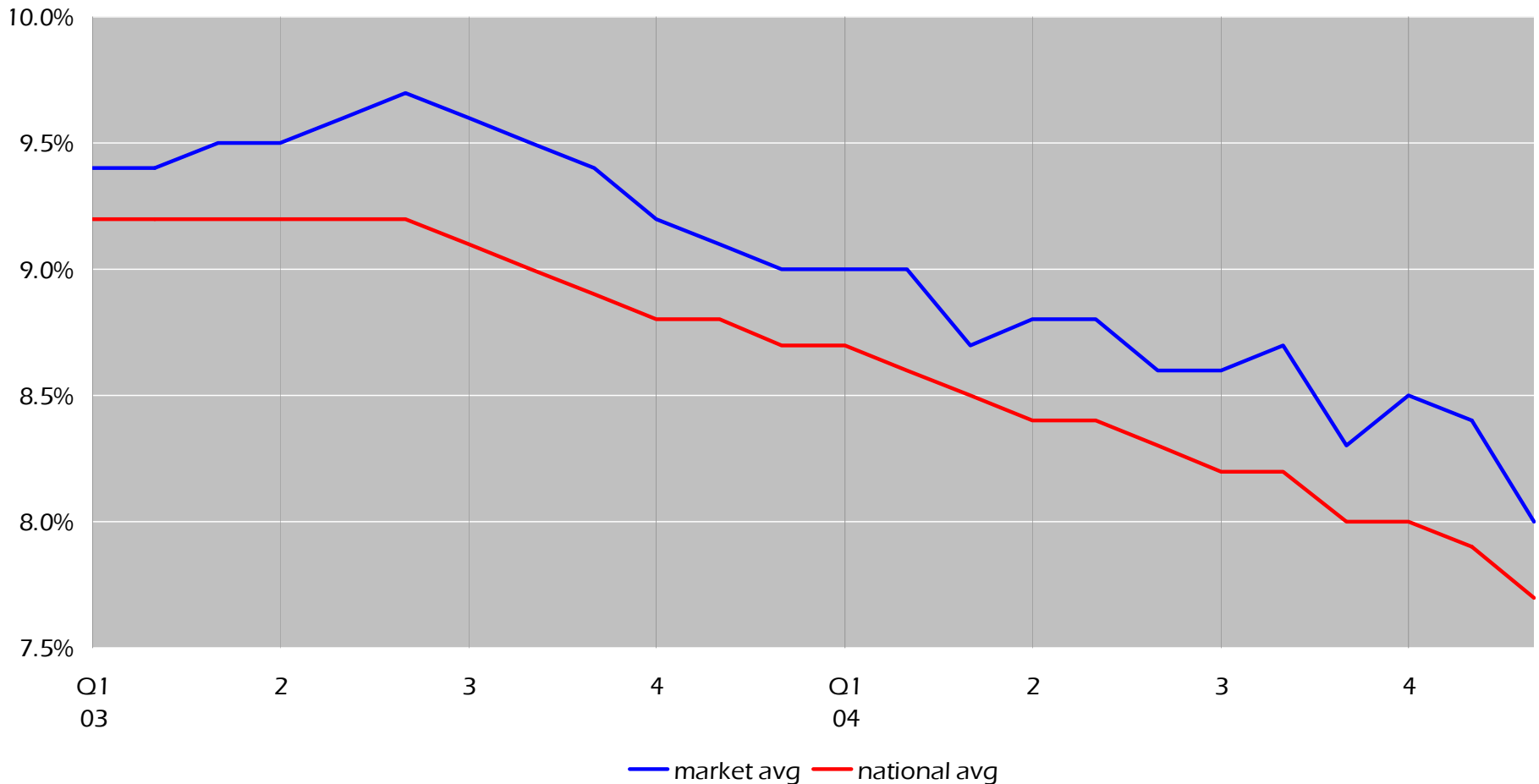
# Bay Area Investment Trends

## San Francisco Suburban Office - Price PSF Trend



# Bay Area Investment Trends

## San Francisco Suburban Office - Cap Rate Trends



# Silicon Valley Commercial Market

## *MSA Office-Industrial Vacancy Rates (4Q03/4Q04)*

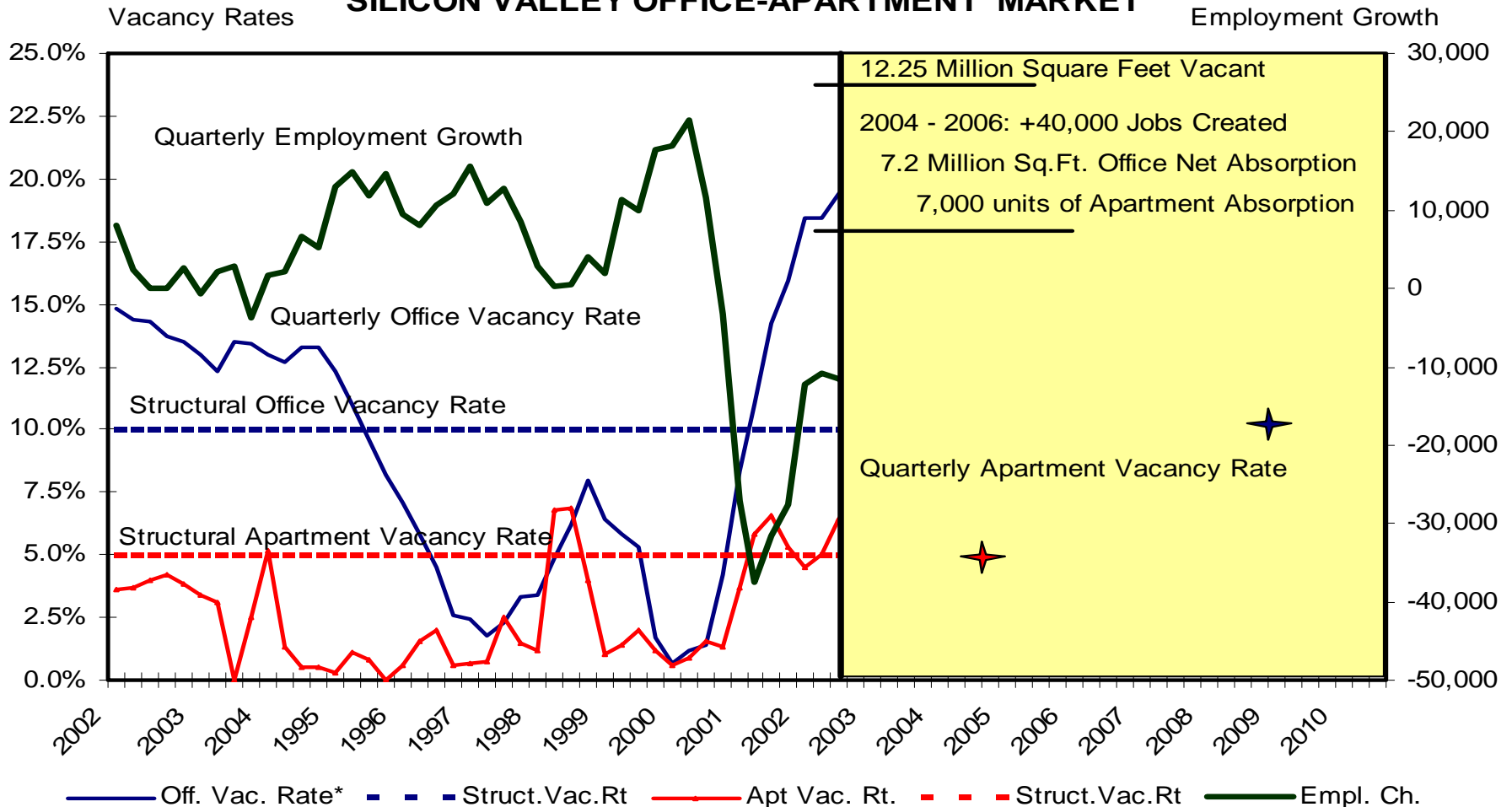
	Office	Industrial	YOY Ch.Rnts
<b>San Jose</b>	<b>24%/19%</b>	<b>10%/12%</b>	<b>- 12%</b>
<b>San Francisco</b>	<b>20%/17%</b>	<b>13%/9%</b>	<b>5.8%</b>
<b>Oakland</b>	<b>19%/18%</b>	<b>15%/13%</b>	<b>0%</b>
<b>Sacramento</b>	<b>12%/14%</b>	<b>12%/11%</b>	<b>- 4%</b>

Bay Area: 9,000,000 sf Net Absorption 2004 (Silicon Valley 16%)

114,570,000 sf Available as of 4Q04 (Silicon Valley 49%)

# Office-Industrial-Apartment Markets Santa Clara County

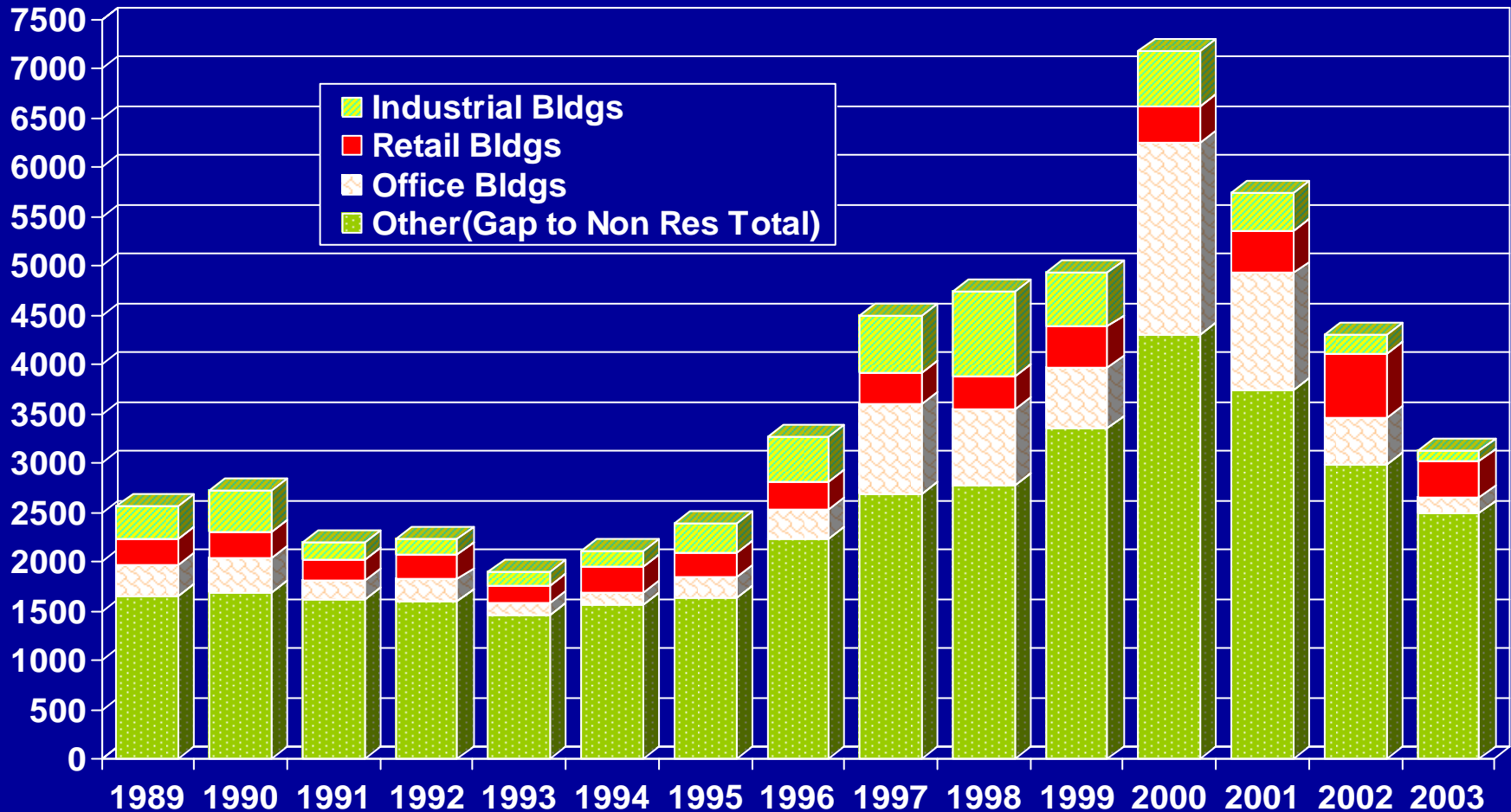
## SILICON VALLEY OFFICE-APARTMENT MARKET



# Non-Residential Permits Valuations

- 9 Bay-Area Counties (1989-2003)

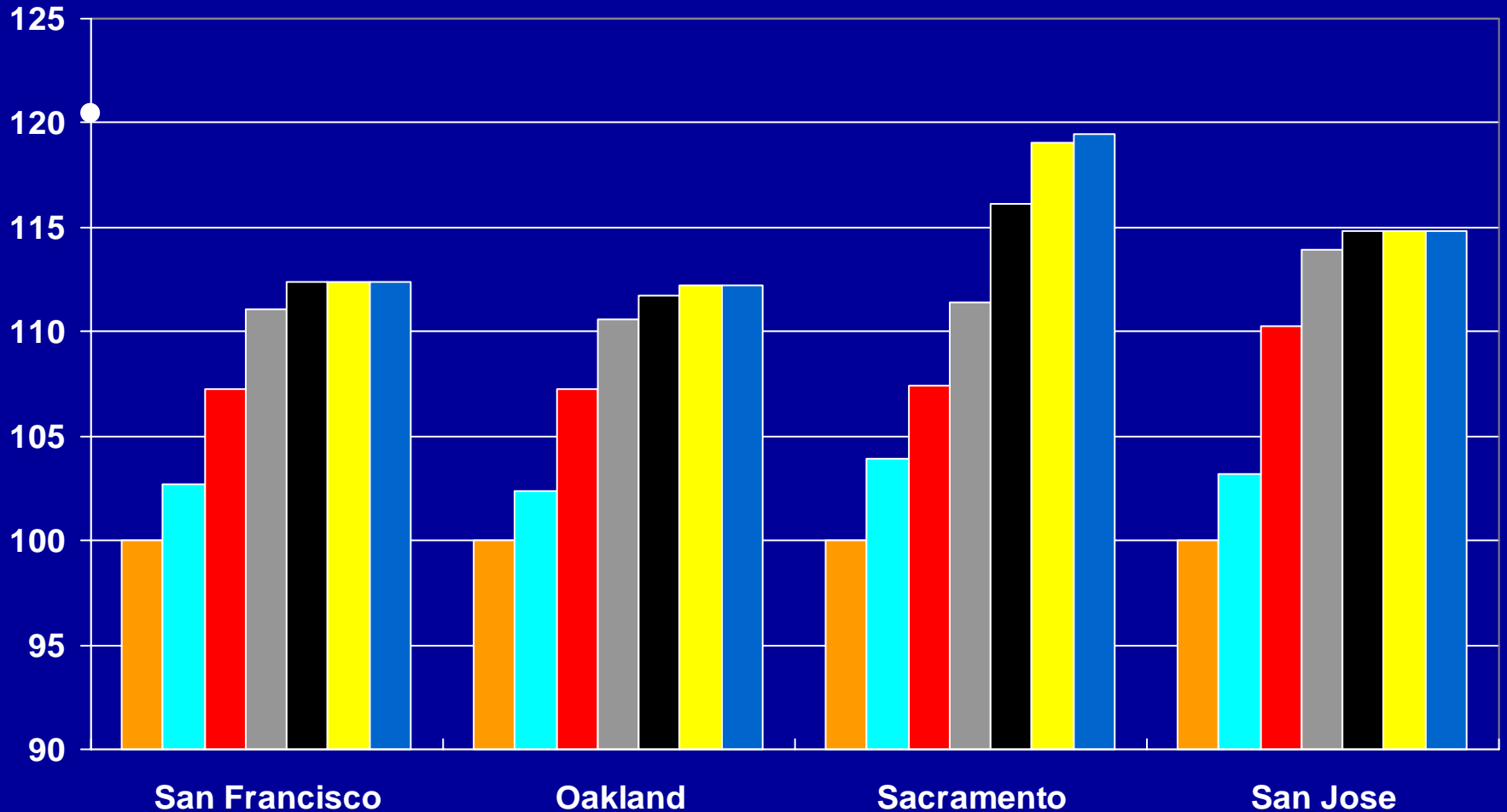
Millions of Dollars



SOURCE:U.S. Real Estate Research Council  
of Northern California

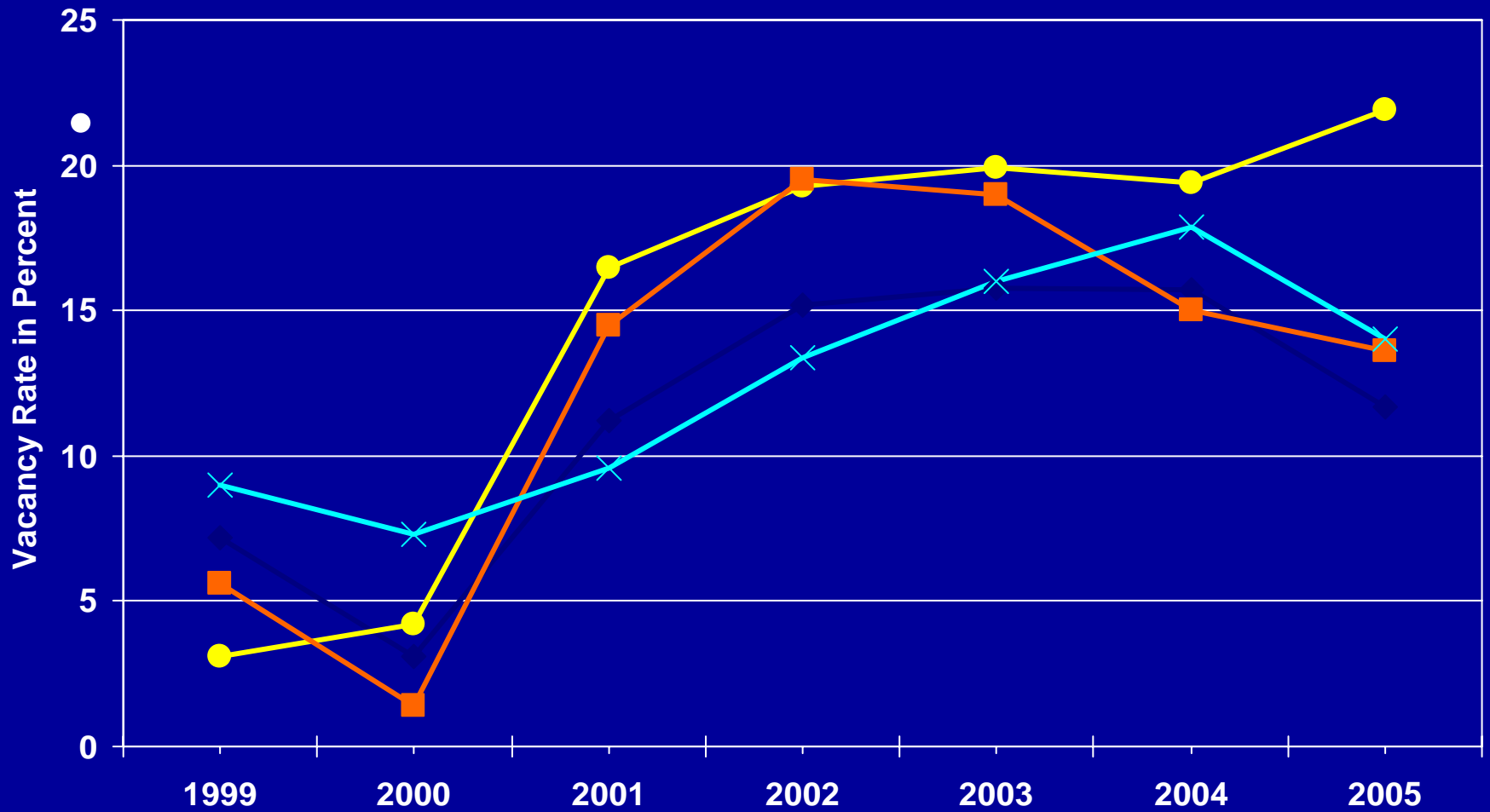
# Office Bldg Total Rentable Space (1999 = 100)

1999 2000 2001 2002 2003 2004 2005



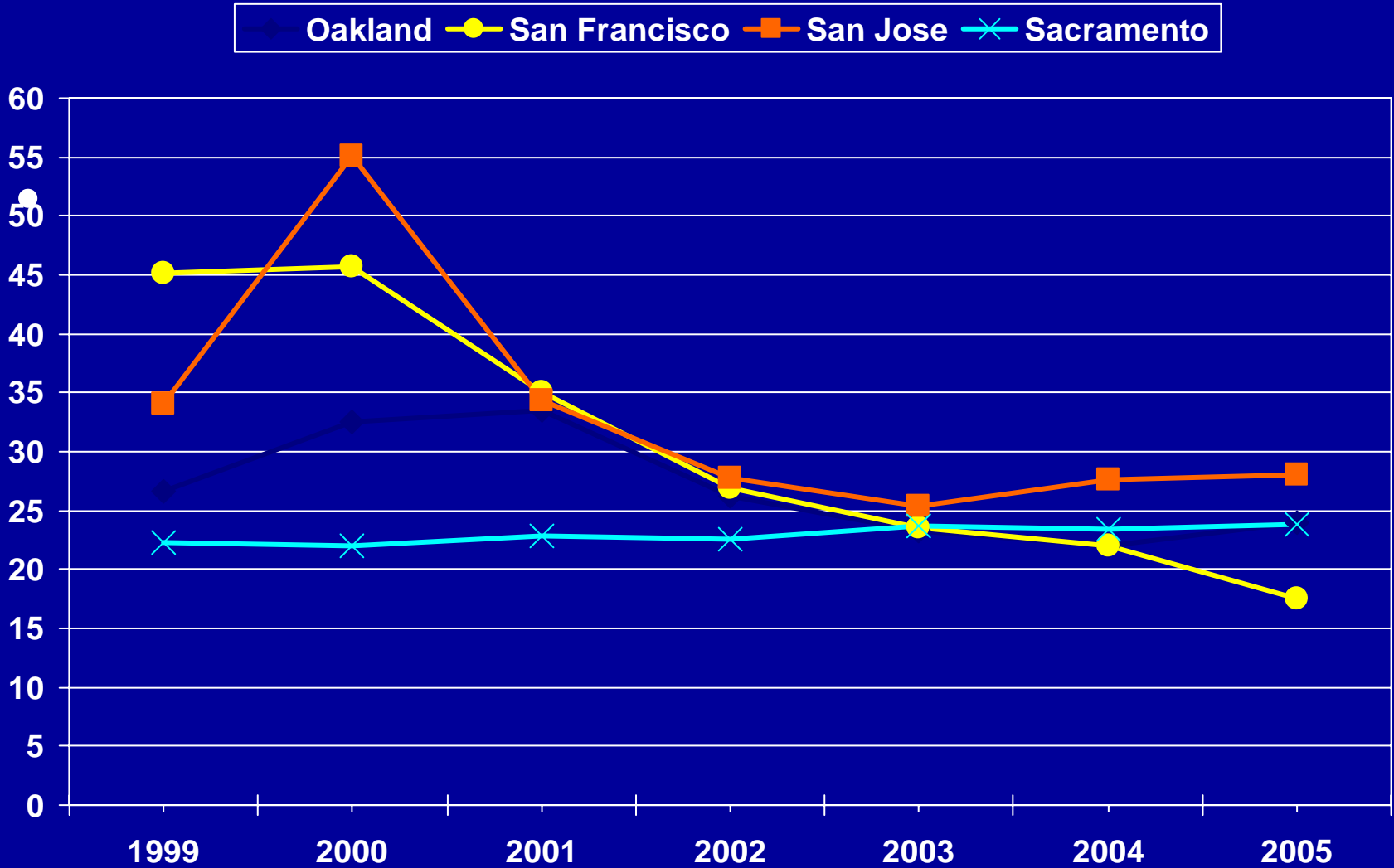
# Office Vacancy Rates

Legend: Oakland (black circle), San Francisco (yellow circle), San Jose (orange square), Sacramento (cyan cross)



SOURCE: Torto Wheaton

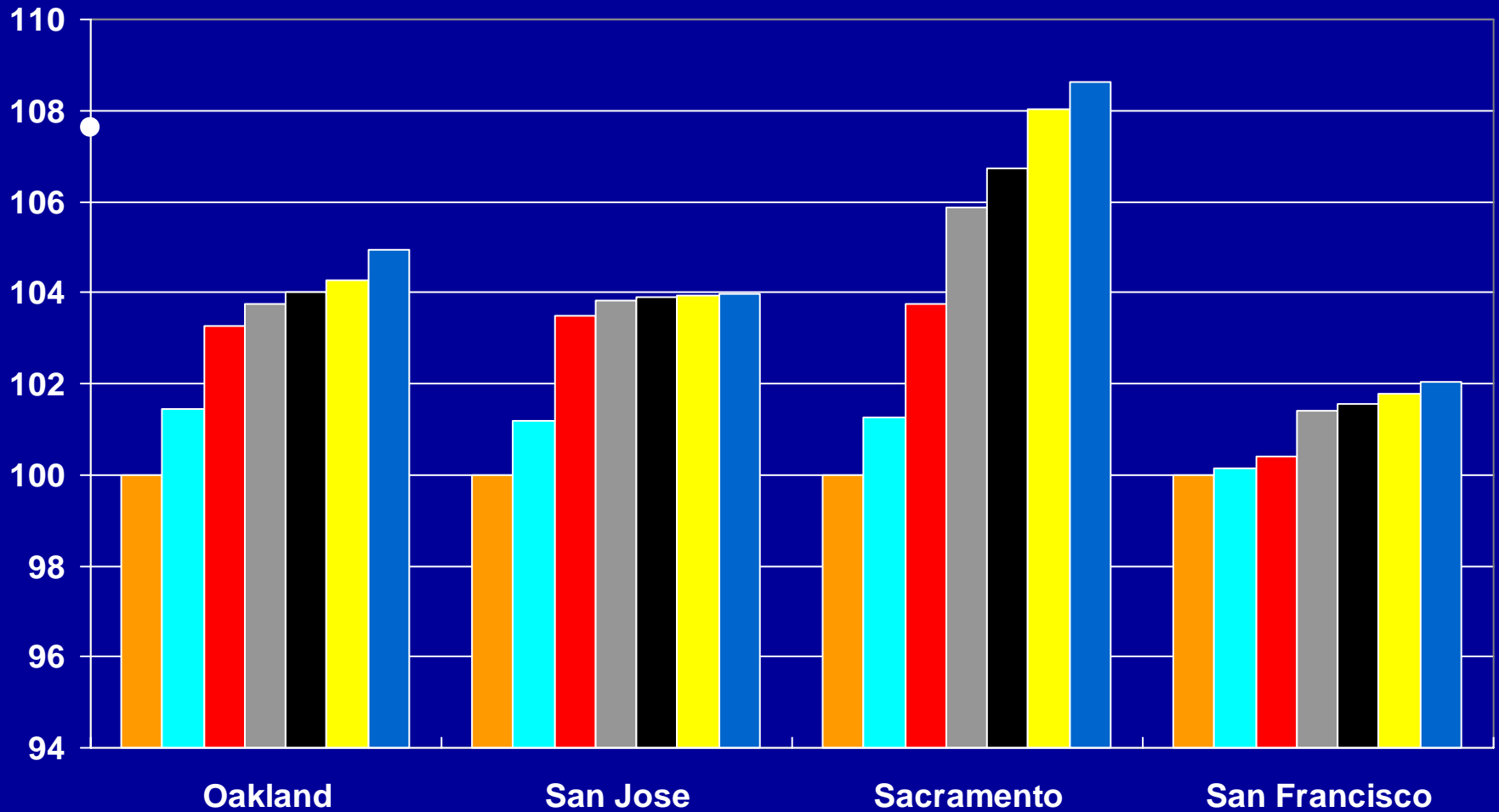
# Office Rent Index, \$/SF



SOURCE: Torto Wheaton

# Industrial Total Rentable Space (1999 = 100)

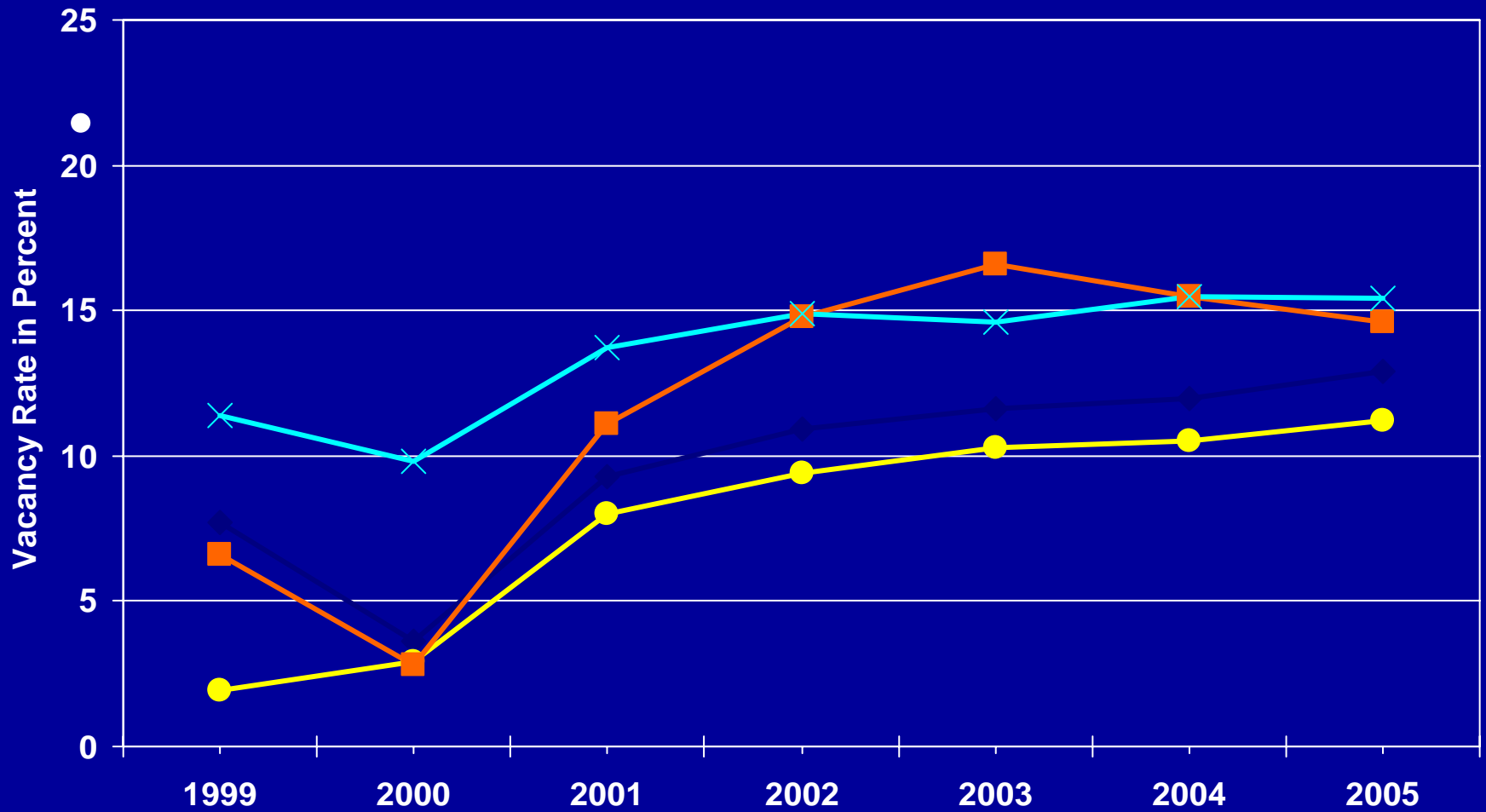
1999 2000 2001 2002 2003 2004 2005



SOURCE: Torto Wheaton

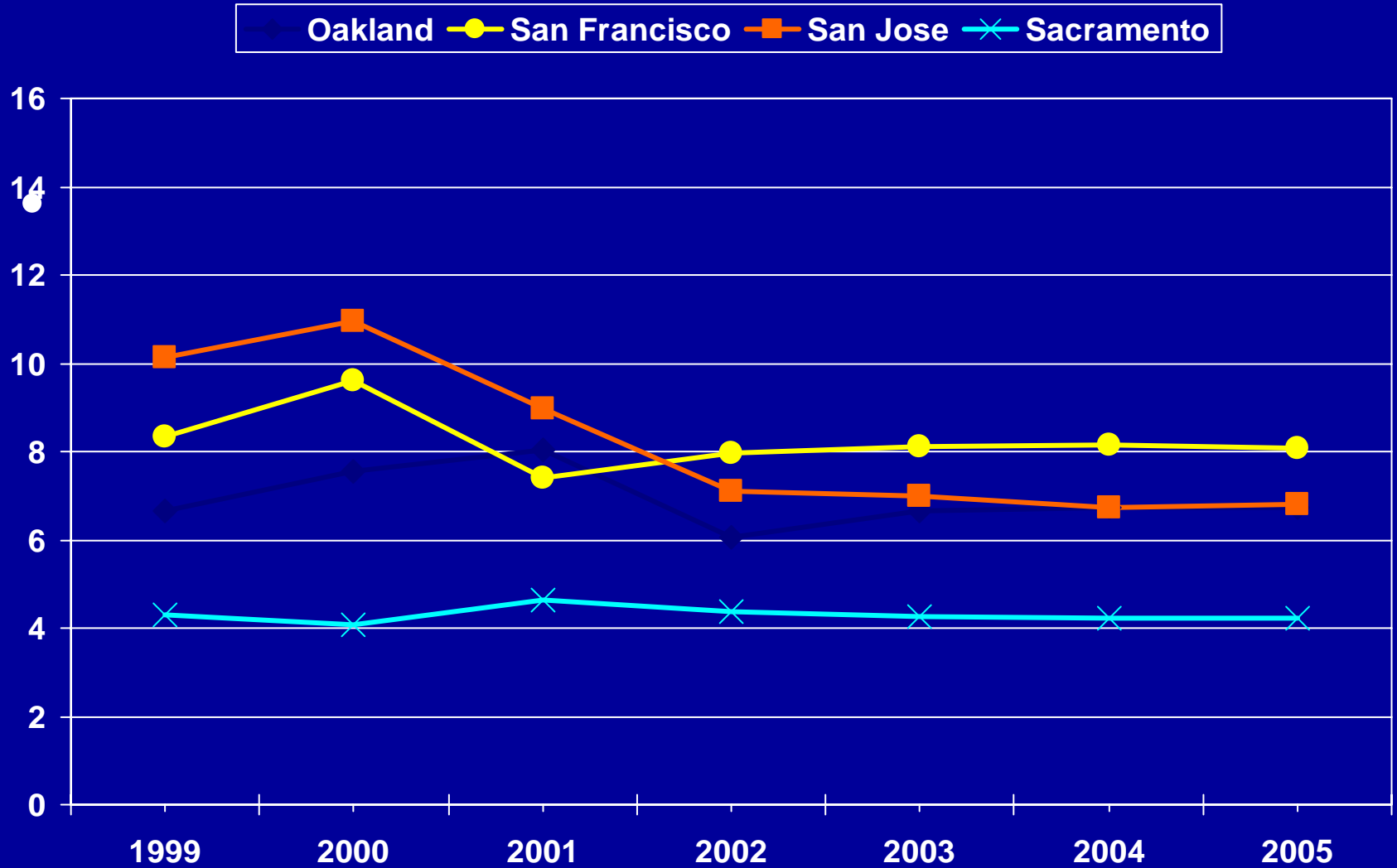
# Industrial Vacancy Rates

Legend: Oakland (black line with circle), San Francisco (yellow line with circle), San Jose (orange line with square), Sacramento (cyan line with cross)



SOURCE: Torto Wheaton

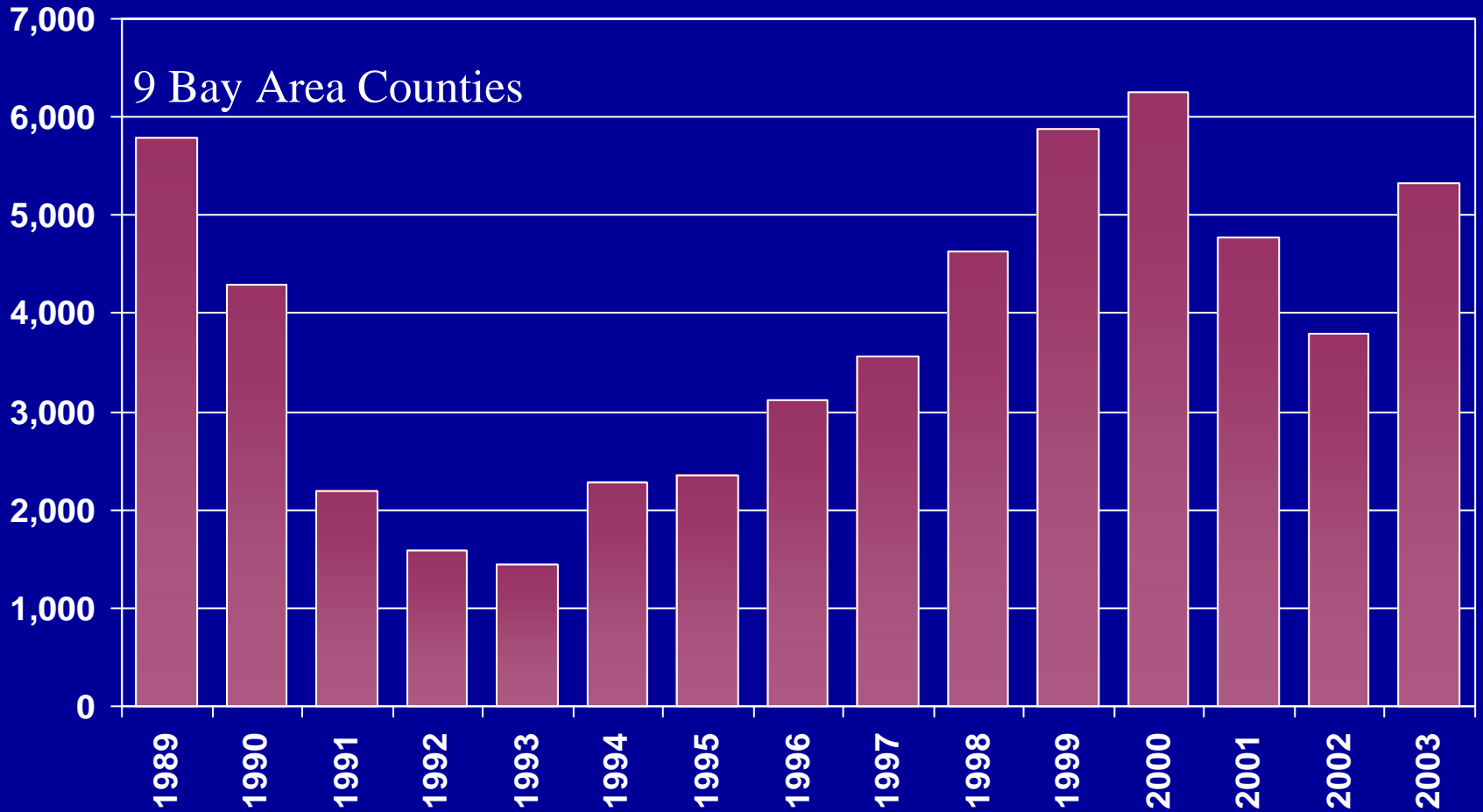
# Industrial Rent Index, \$/SF



SOURCE: Torto Wheaton

# Construction Lending

Millions of Dollars



# Conclusions

# Comparative Advantages

## Long run apartment market fundamentals:

- Extremely low housing affordability
- Scarcity of developable land
- High concentrations of wealth
- High quality of life
- Strong Demographic Trends:
  - Growing population of Empty-Nesters and Echo-Boomers

# Comparative Advantages

## **Future job growth-housing demand:**

- High-tech and Bio-tech Manufacturing
- Healthcare-Information Systems Services
- Financial Services and Venture Capital
- Telecommunications/Networking
- Multimedia and Entertainment
- Internet and Software Programming
- International trade and Tourism
- Construction and Engineering Services
- Education and Government Services
- Defense

# Economic Risks

## Market-Economic Risks:

- High costs of living and doing business
- State-Local Regulations, taxes, workers comp, deficits
- Lack of affordable/developable land
- Traffic Congestion and Infrastructure Constraints
- Out sourcing and migration
- Severe cut-backs in education and social services
- Mergers-consolidation industrial, technology, telecommunications and financial institutions

# Macro-Economic Risks

- **Middle East Wars (Oil Price Spikes)**
- **Current Account and Budget Deficits (Interest Rates)**
- **Rising Inflation Expectations (Health Care Costs)**
- **High Credit-Equity Risk Premiums (Spreads)**
- **Consumer-Business Confidence Investment**
- **European Recessions and Trade Wars**
- **Rising loan defaults, foreclosures, bankruptcies**
- **Labor strikes, falling wage growth, underemployment**
- **Accounting Announcements, Investor Confidence**

Lawrence Souza ([lsouza@Johnson/SouzaGroup.com](mailto:lsouza@Johnson/SouzaGroup.com)) brings to Johnson/Souza Group, Inc. (**Direct: (415-713-0213)**) over 15 years of experience in real estate economic and financial research. As Director of Research for BRE Properties, Inc. (REIT) in San Francisco and holding Senior Market/Research Analyst positions at Metric Institutional Realty Advisors and Mellon-McMahan/MacFarlane Realty Advisors, and market research positions at Norris, Beggs and Simpson and Grubb & Ellis commercial brokerage. **Mr. Souza combines traditional fundamental real estate economic and market research with fundamental and technical financial and capital market research. This combined approach allows for the tracking and forecasting of economic, real estate and financial cycles and efficient portfolio construction, optimization and risk management.**

Mr. Souza is also a licensed California Real Estate Broker (Realtor), affiliated with RE/MAX Commercial, specializing in urban-infill residential, commercial property transactions, and 1031 Exchanges in the San Francisco Bay Area and Western Region.

Mr. Souza has undergraduate degrees in Economics (BA) and Business Administration (BS) with concentrations in Accounting, Finance, Banking and Real Estate; and holds master's degrees in Applied Economics (MA), Finance/Investments (MS), Public Administration (MPA), and Information Systems (MSIS). **Mr. Souza has been teaching Modern Real Estate Principles and Finance since 1996 with an emphasis on real estate in a modern portfolio and capital markets context; and the institutionalization, securitization, internationalization and technologization of real estate markets and products.**