



# The Economic Outlook

## *Singing the housing blues...*

*May 2019*

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*Director, UCR SoBA Center for Economic Forecasting and Development*



# A look back at the Great Recession



## Stock Market Crash of 2008

*The stock market crash of 2008 occurred on September 29, 2008. The Dow Jones Industrial Average fell 777.68 points in intra-day trading. Until 2018, it was the largest point drop in history. It plummeted because Congress rejected the bank bailout bill.*

## NBER says U.S. recession began December 2007

Mon Dec 1, 12:20 pm ET  
*WASHINGTON (Reuters) – The U.S. economy slipped into recession in December 2007, the National Bureau of Economic Research's business cycle dating committee announced on Monday.*

## So what's going on?

- A fall to remember
  - Heard on the street “There are only two positions out there: cash, and fetal”
  - Its not ‘what Wall Street troubles mean to California’, its ‘what California troubles mean for Wall Street’
  - Recession was already fully underway even if many economists and politicians remained in deep denial
- What went wrong
  - The big three imbalances: housing, finance, and the consumer
- Where from here?
  - Things are bad.. But not THAT bad! So far the numbers are in line (if a bit worse) than past recessions, and proportionate to the imbalances in the economy...
  - Recovery is a given, the big question is when

# Will the Real Economy Please Stand Up?

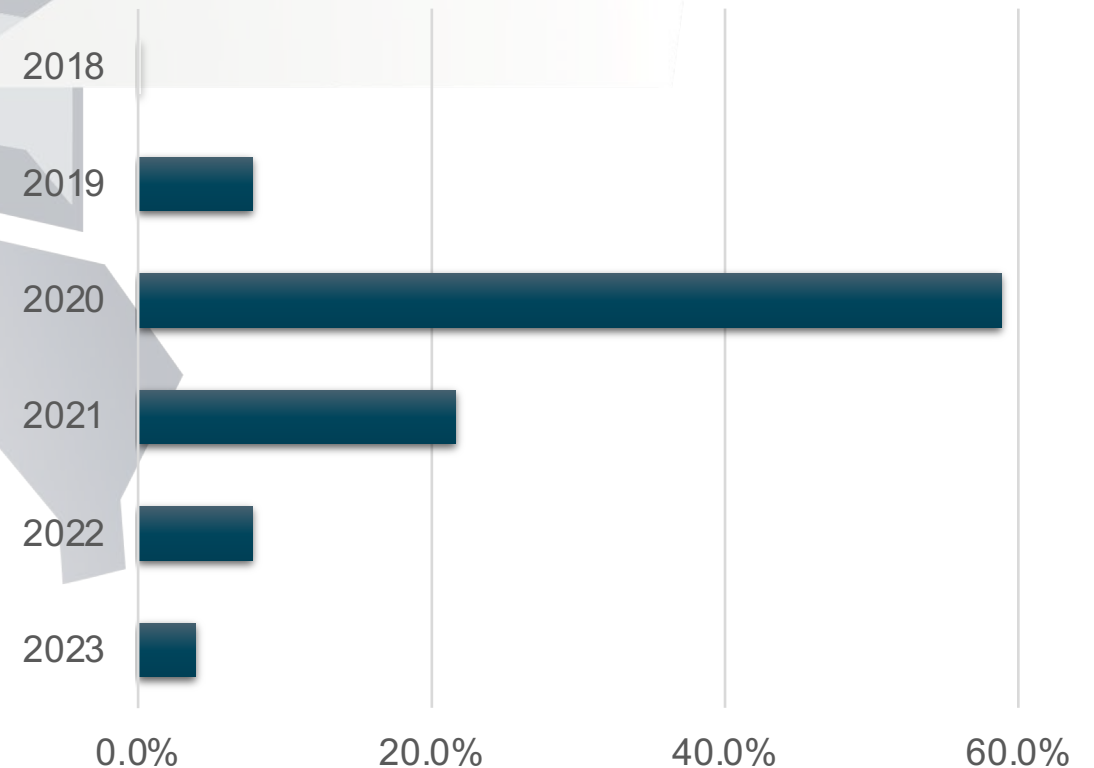


**It isn't the 'when', it's the 'why'**

## Why so glum?

- 2018 Growth: 3.2% with .75% fiscal stimulus after-burner
- Labor markets, consumer spending, business investment, wages, exports, energy, debt levels still all on steady sustainable paths
- Interest rates still low, inflation still constrained
- 2019: back to a steady pace of 2 to 2.5% growth
- Still a low chance of recession in next 24 months

WSJ Next Recession Poll



# Will the Real Economy Please Stand Up?



## **Brakes and Imbalances**

- Labor shortages impacting employers
- Local Housing Shortages
- Recent market volatility / rising long term rates
- An overly aggressive Fed, the flat yield curve
- Sharp growth in government deficits
- Global trade / security worries

## **Political Dysfunction**

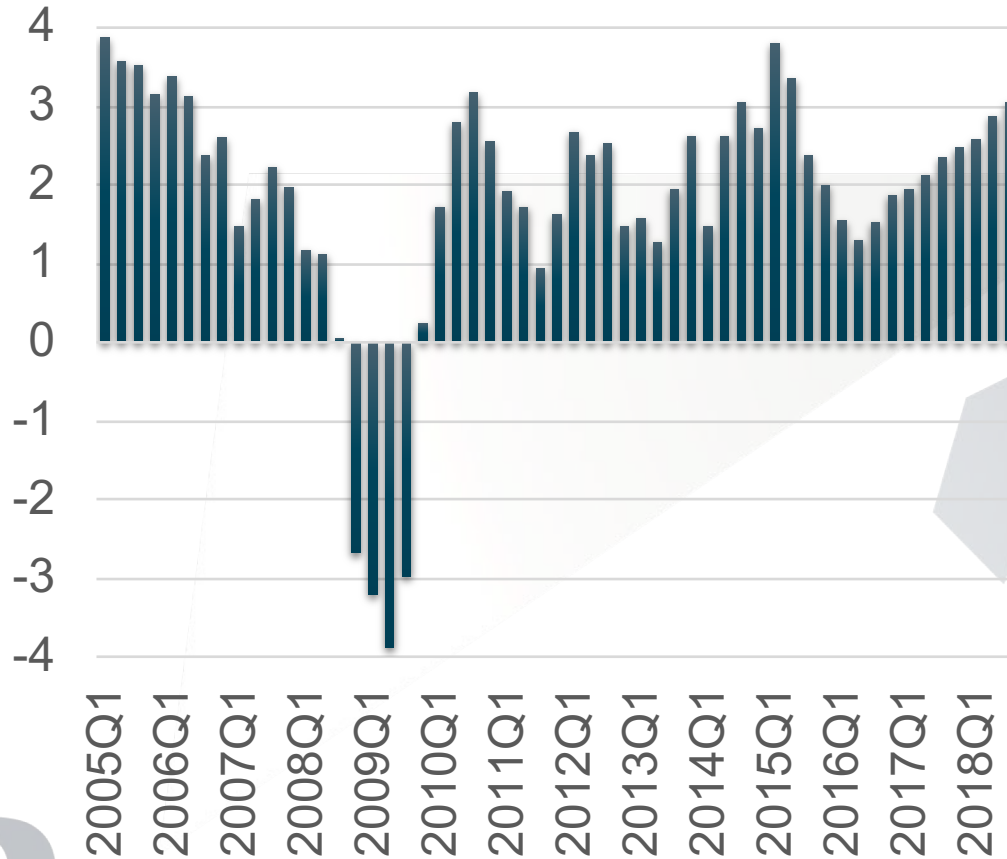
- Little effort to deal with underinvestment in infrastructure, rising wealth inequality, healthcare cost inflation, pension and entitlement issues, etc etc etc
- The great disconnect between economic realities and political discourse



# GDP: 2018 2.9% Year over Year



Real GDP Growth (yoy)



	2016	2017	2018	Q1 19 est
<b>GDP Growth</b>	<b>1.6</b>	<b>2.2</b>	<b>2.9</b>	<b>3.2</b>
Consumption	1.85	1.73	1.81	0.82
Goods	0.77	0.78	0.80	-0.14
Services	1.08	0.95	1.01	0.96
Fixed investment	0.29	0.81	0.91	0.27
Structures	-0.16	0.13	0.15	-0.02
Equipment	-0.09	0.35	0.44	0.01
IPP	0.31	0.20	0.33	0.39
Residential	0.23	0.13	-0.01	-0.11
Inventories	-0.53	0.00	0.12	0.65
Trade	-0.3	-0.31	-0.22	1.03
Exports	-0.01	0.36	0.47	0.45
Imports	-0.28	-0.67	-0.69	0.58
Government	0.25	-0.01	0.26	0.41
Federal	0.03	0.05	0.17	0.00
State local	0.22	-0.06	0.09	0.41

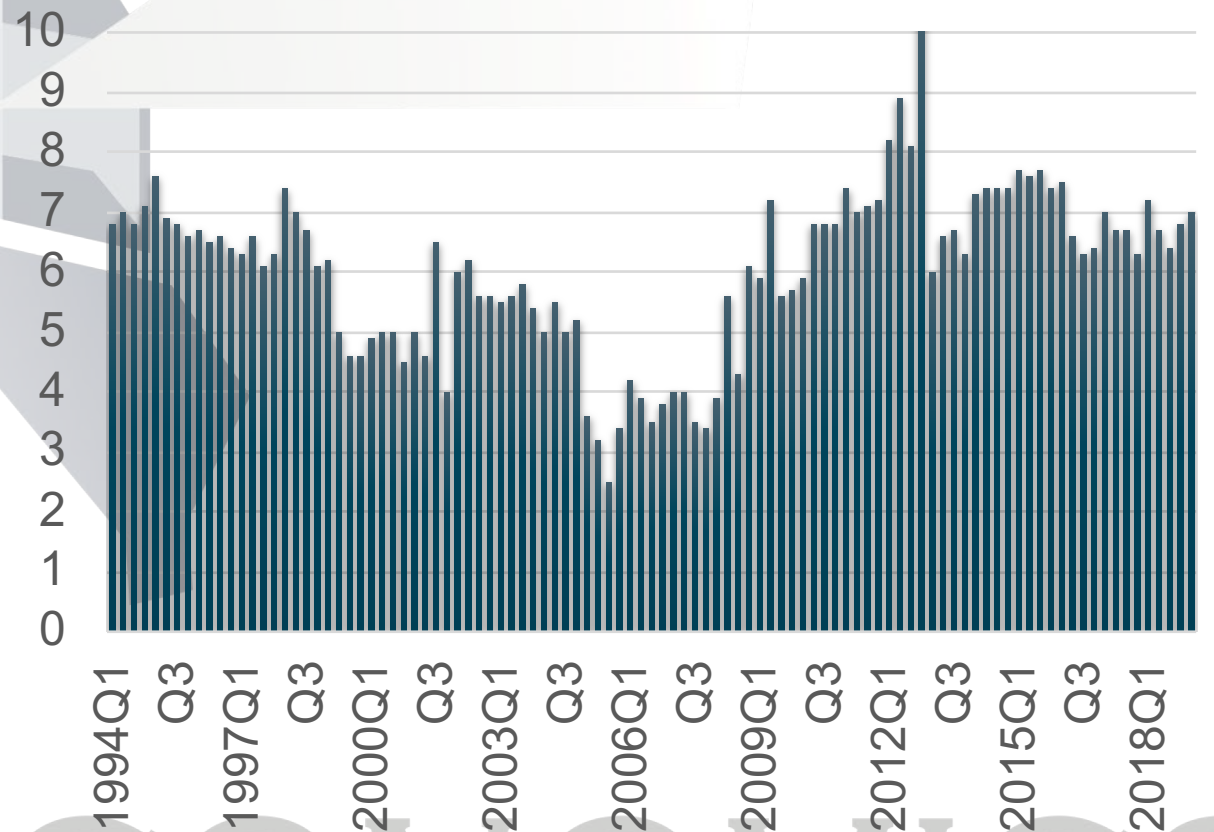
# Consumer Spending



## Real Consumer Spending Growth (y-o-y)



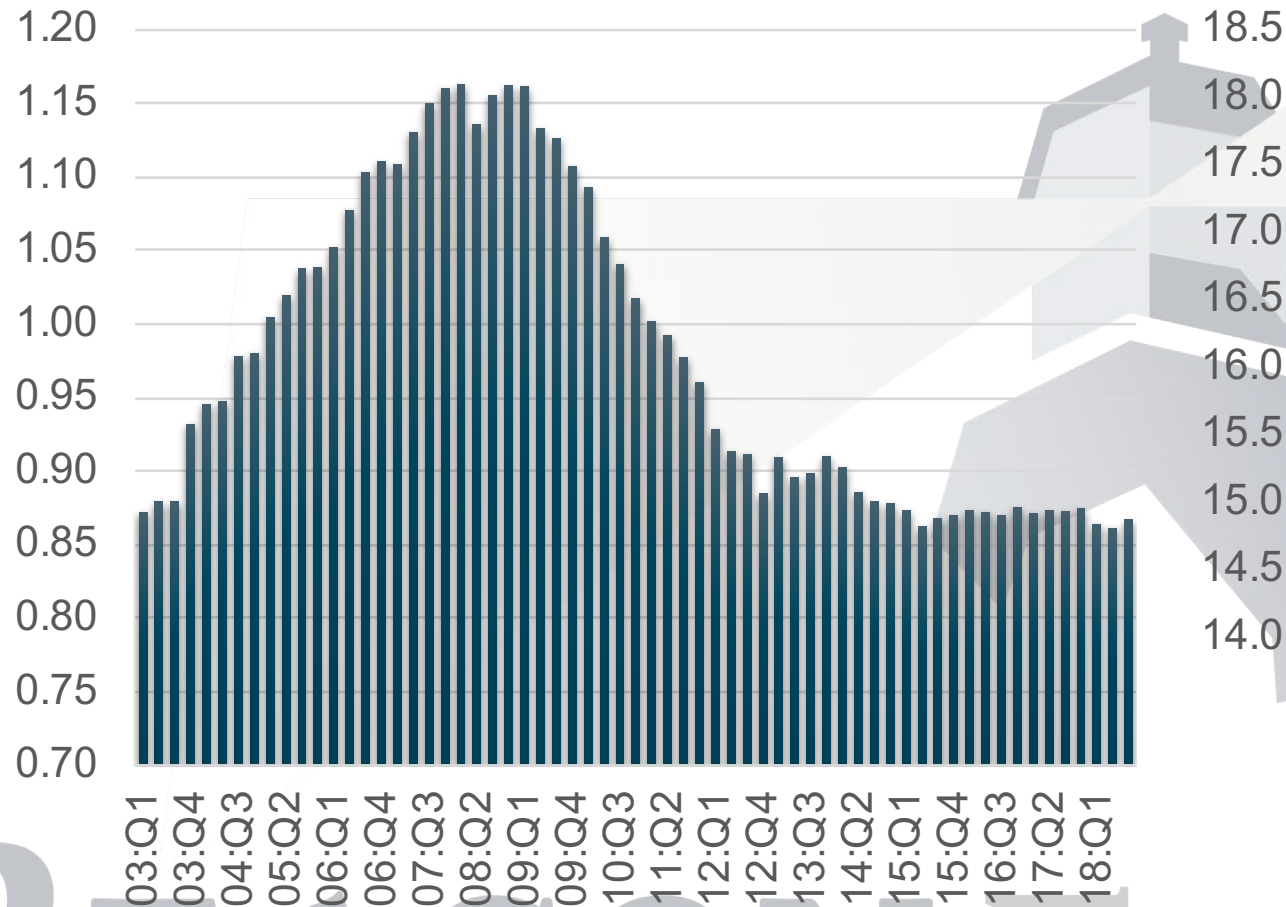
## Personal saving as a percentage of disposable personal income



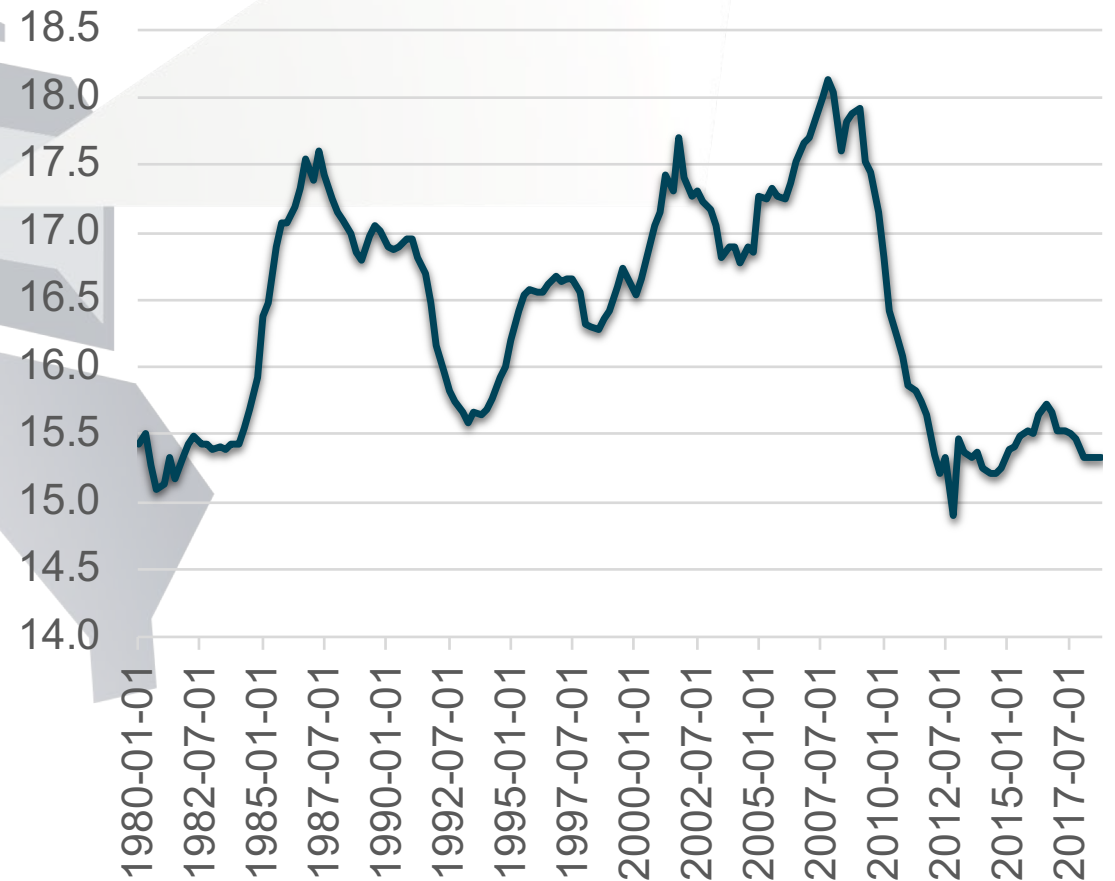
# Consumer Debt Loads



Household Debt / DPI Ratio



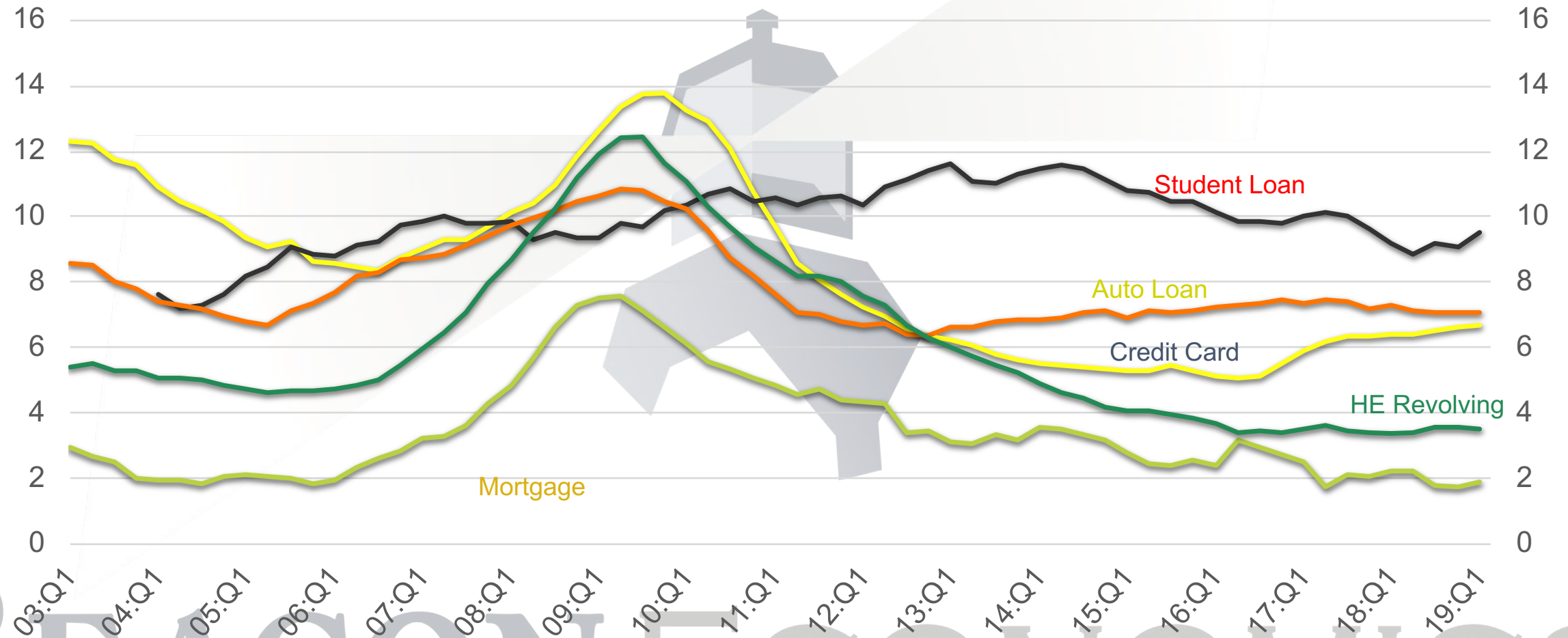
Financial Obligations (% of DPI)



# Consumer Debt

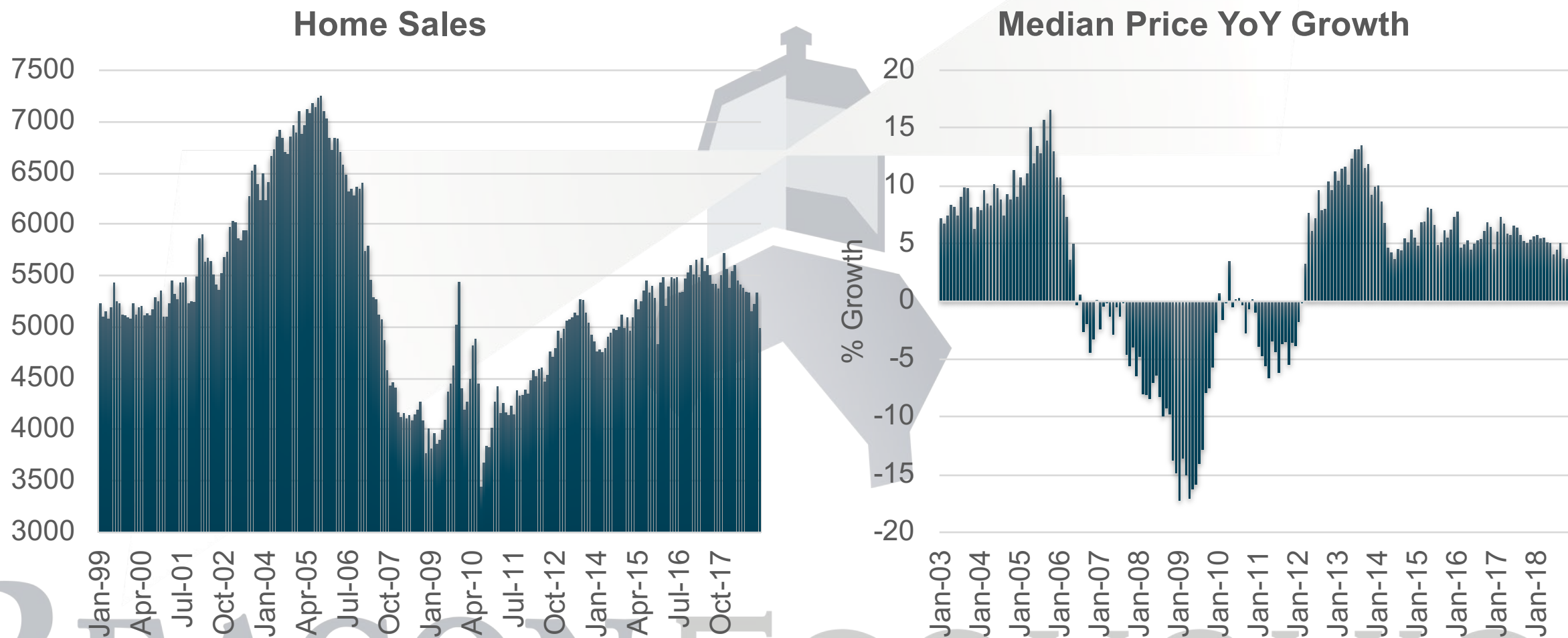


## Transition to 30 day delinquent

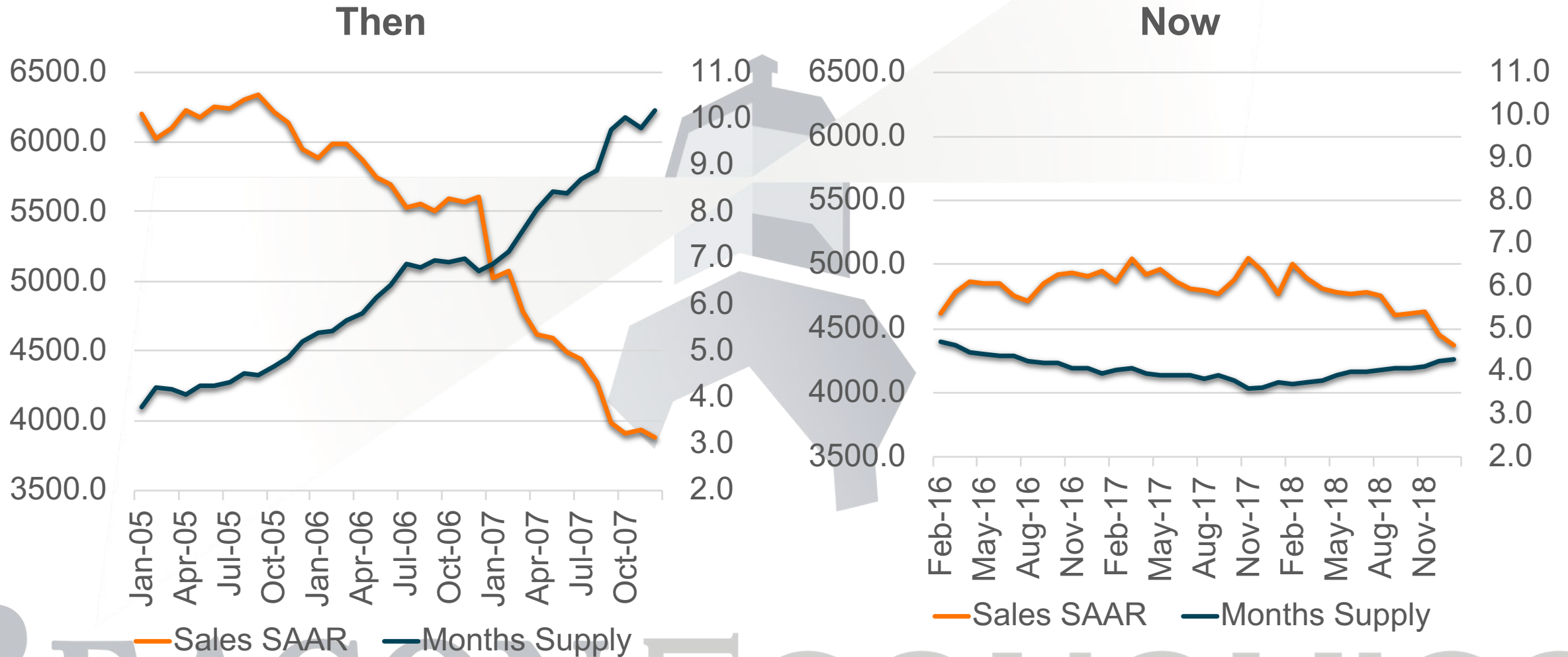




# Housing Markets: Slightly Slowing



# What does a market crash look like?

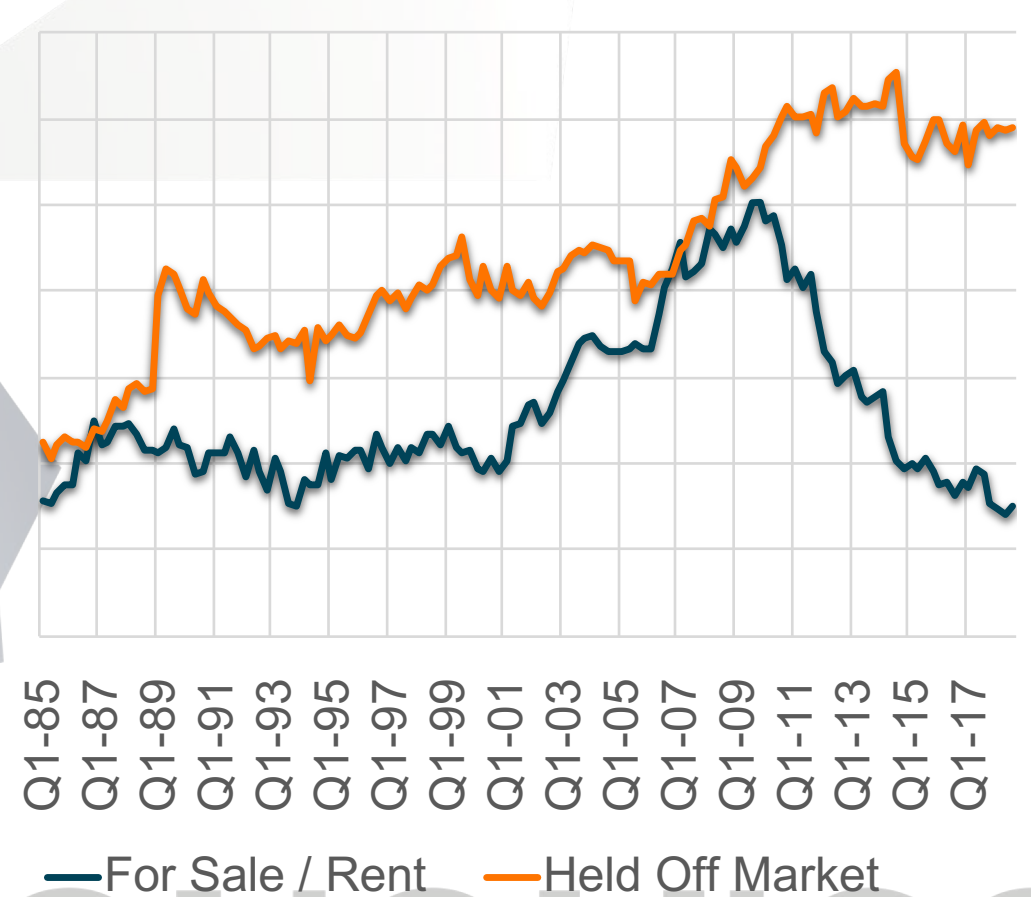


# Pace of Construction

## Housing Starts SAAR



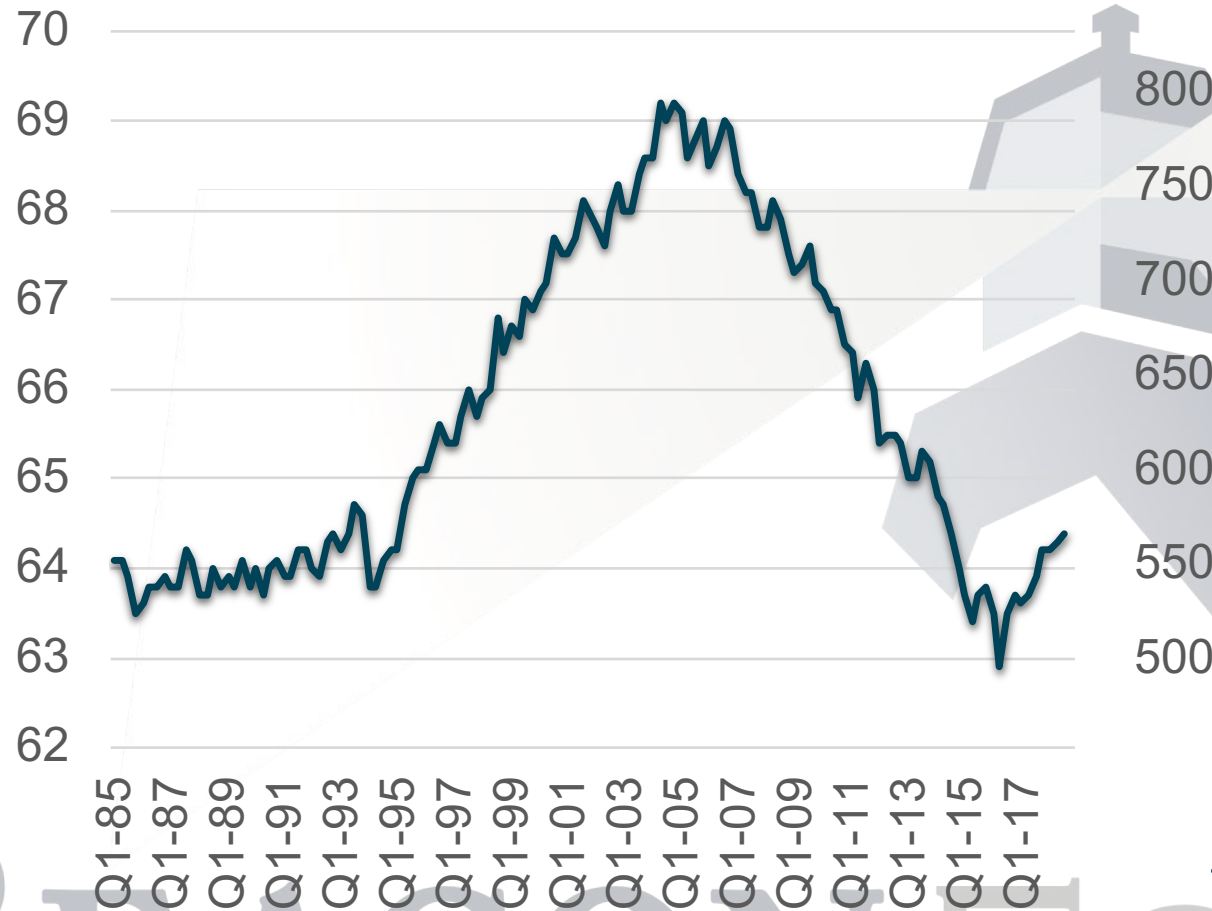
## Vacant Units



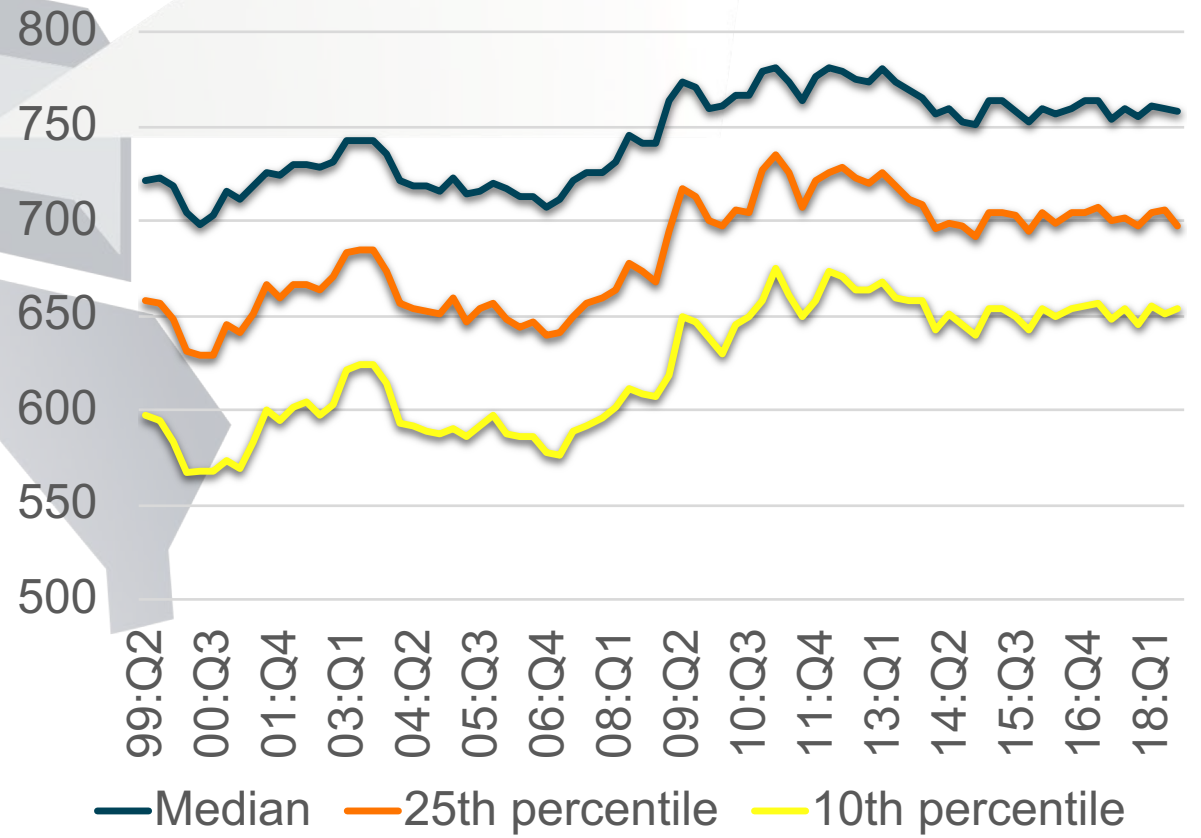
# Credit Conditions



## Ownership Rates



## Mortgage Origination by Credit Score

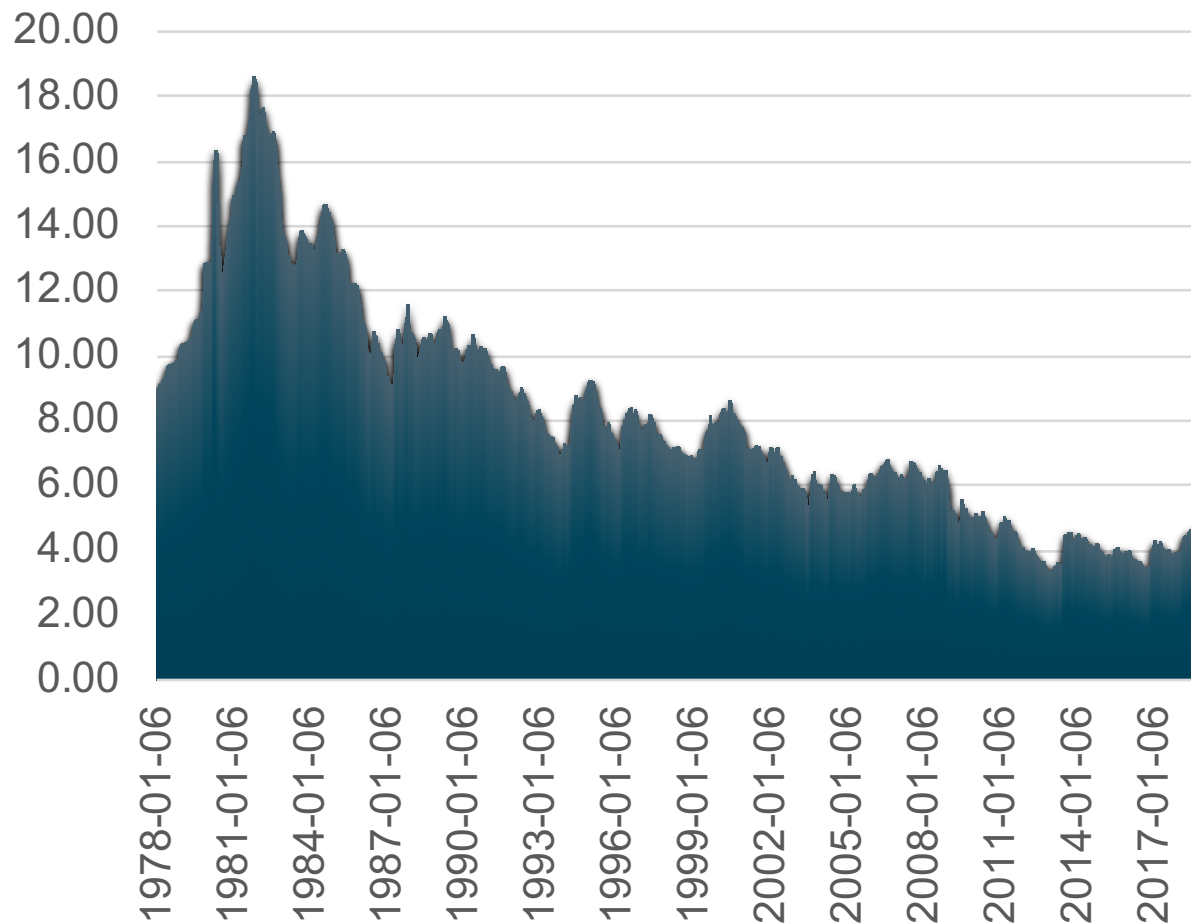




# Rising Rates



Mortgage Rates (30 Year Fixed)



## Why higher?

- Economic Growth
- Federal Borrowing
- Strong Equity Market

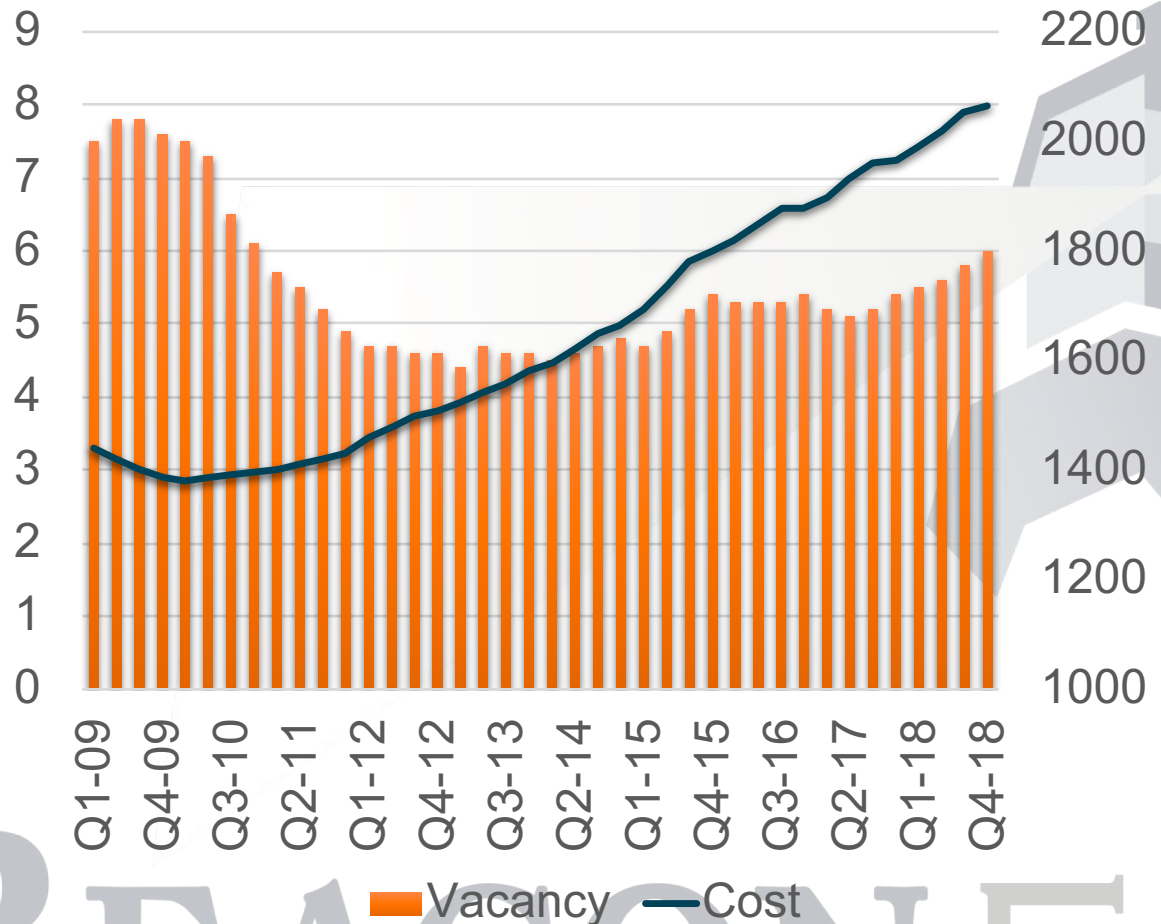
## Not

- Inflation
- Fed Policy
- Lack of Capital

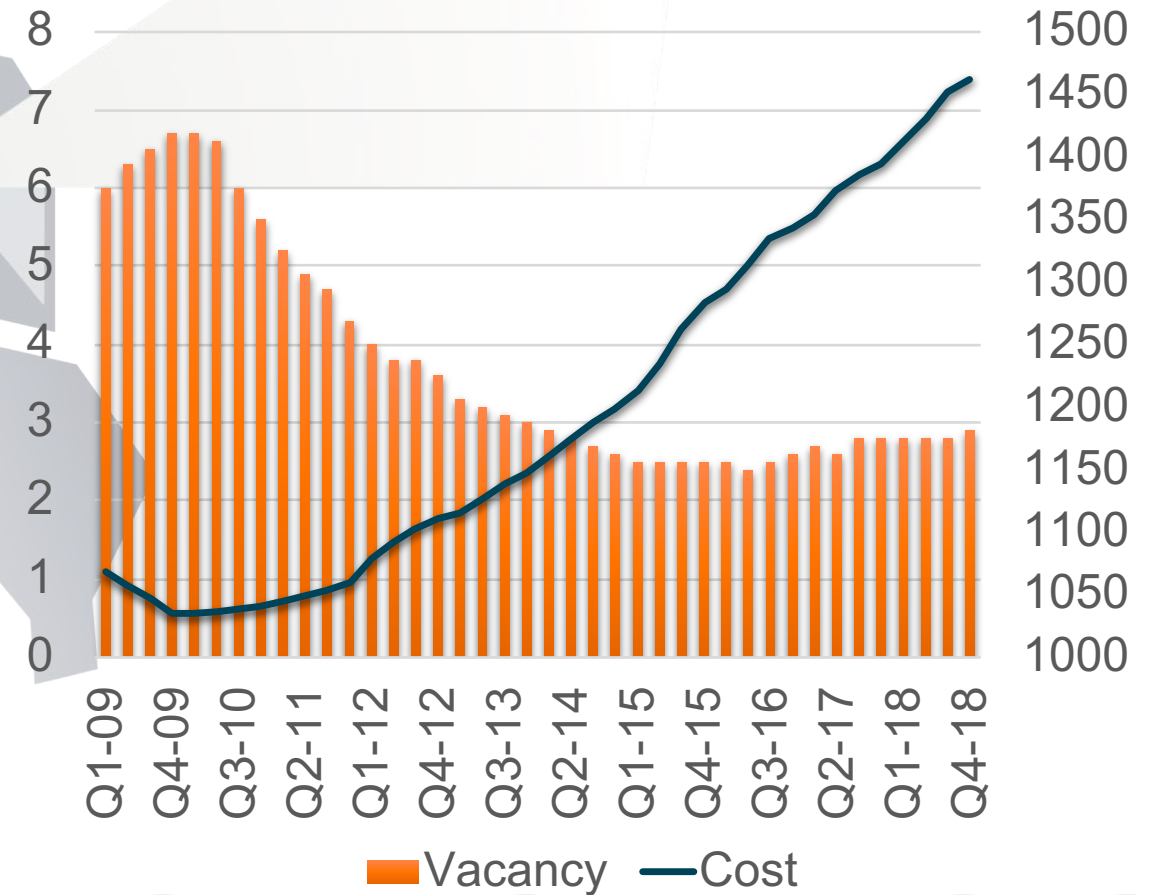
# National Rental Markets



## Class A Apartments



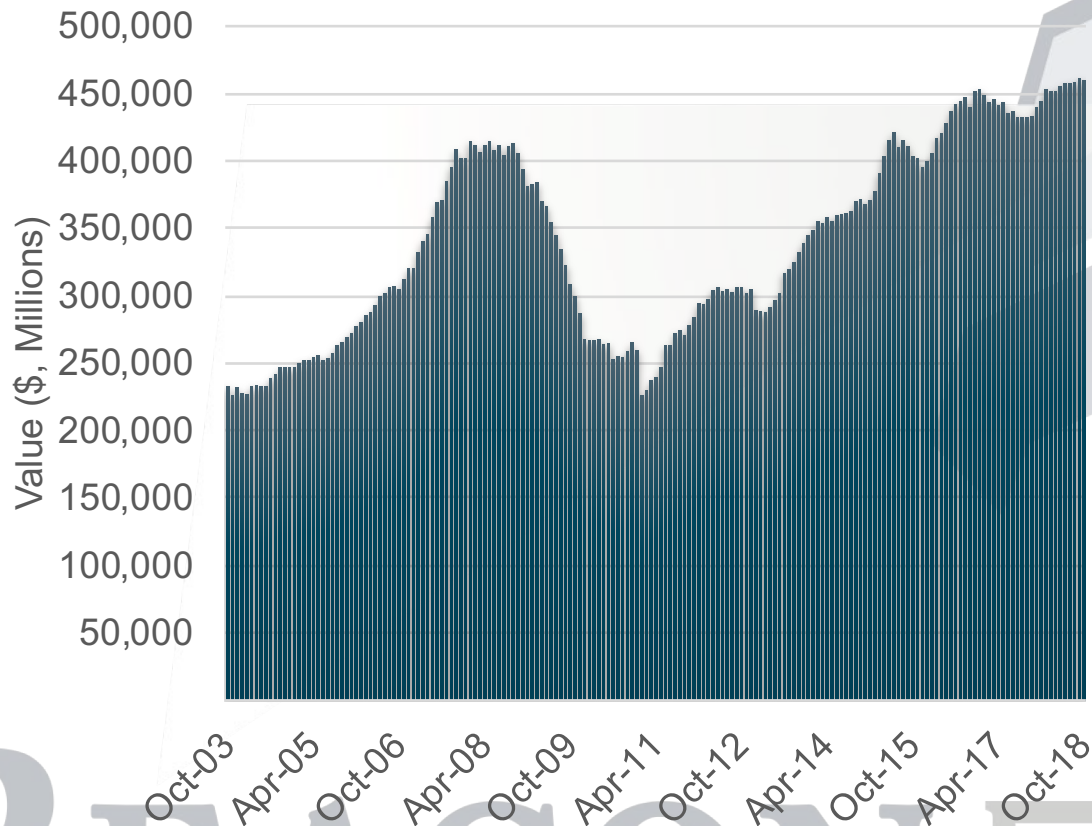
## Class B/C Apartments



# Construction Spending – National



**Value of Nonresidential Construction**  
Oct. 2003 to Oct. 2018

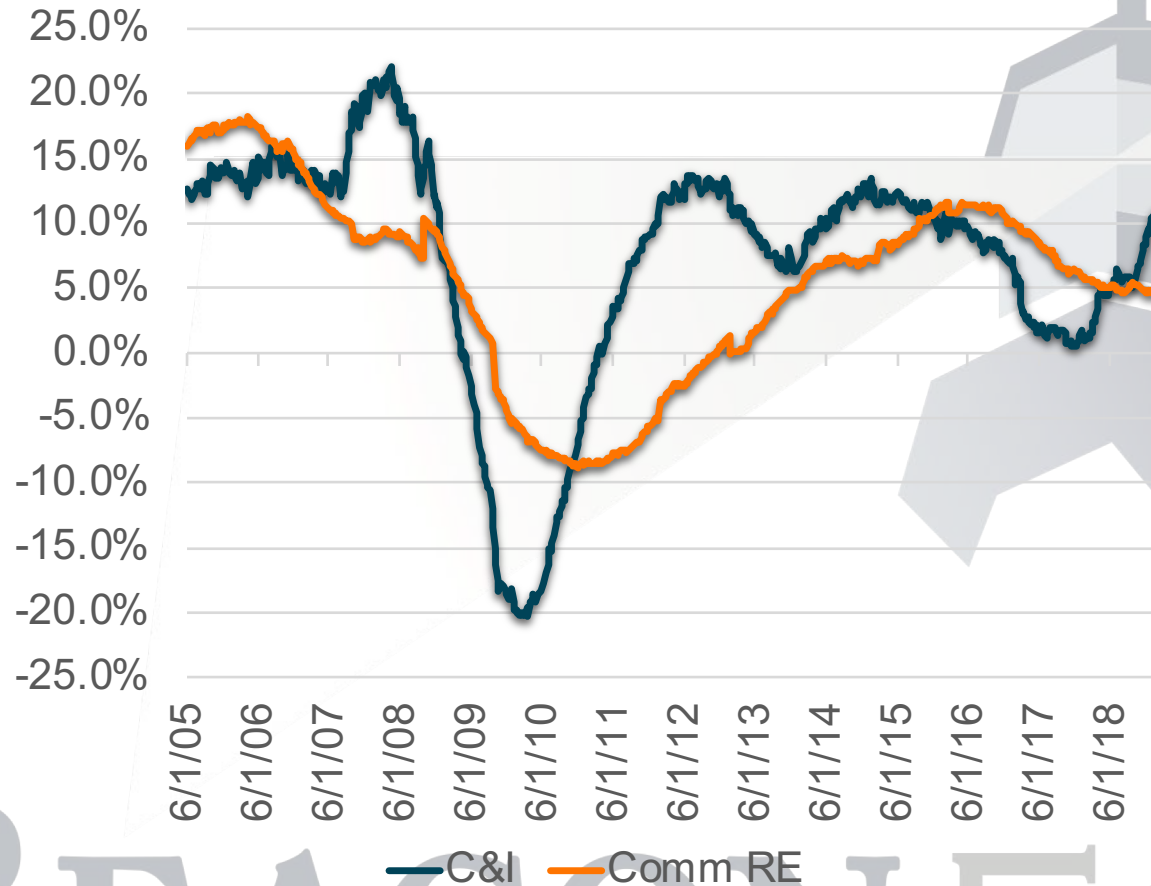


Value by Type (Nonresidential)	October 2018 Value (Millions)	Year over Year % Growth
Total	459,733	6.4%
Commercial	84,714	0.6%
Manufacturing	66,768	3.1%
Office	66,436	16.3%
Health Care	32,885	-0.7%
Communication	23,650	-5.0%

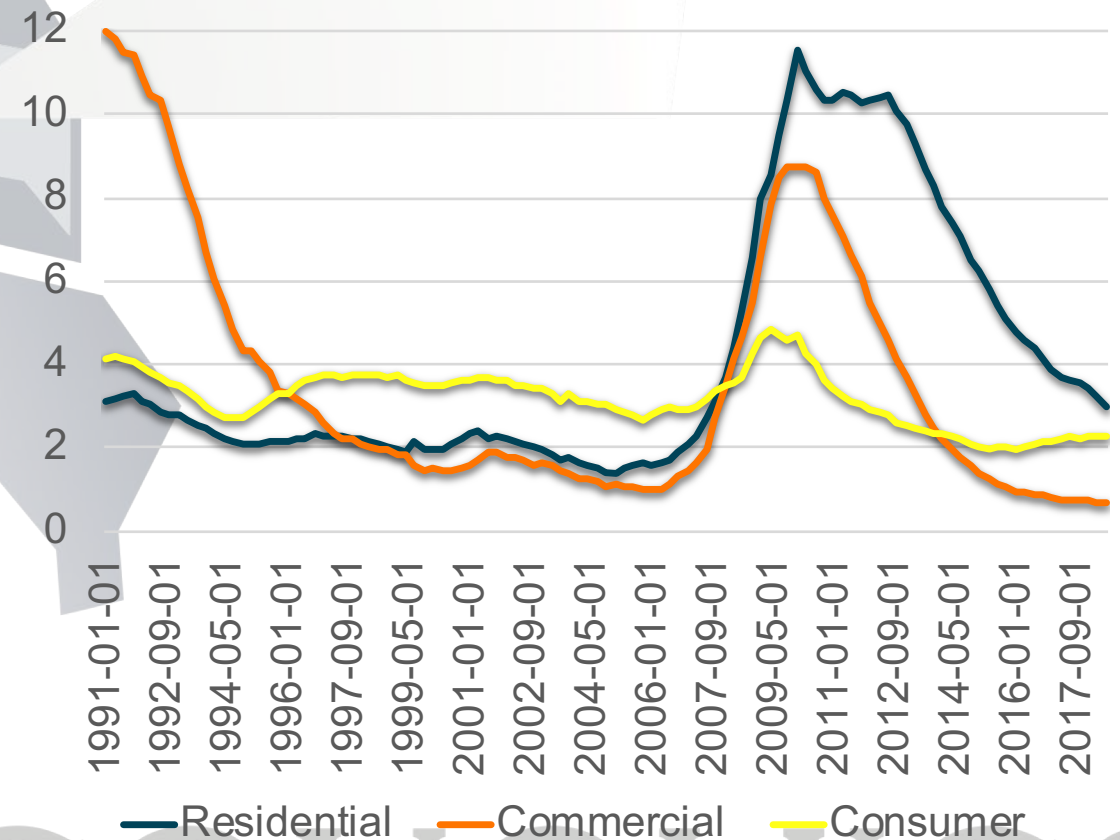
# National Trends in Real Estate



## Bank Debt: Y-o-Y Growth



## Loan Delinquencies: All Commercial Banks

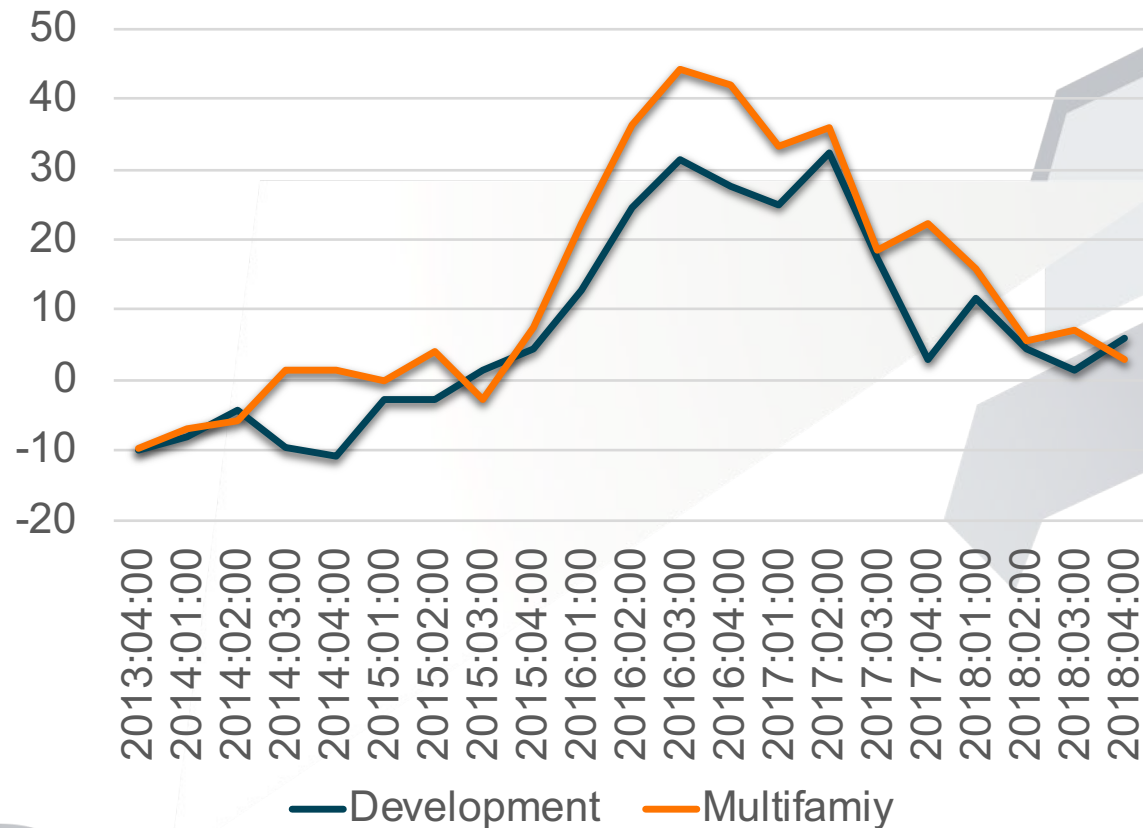




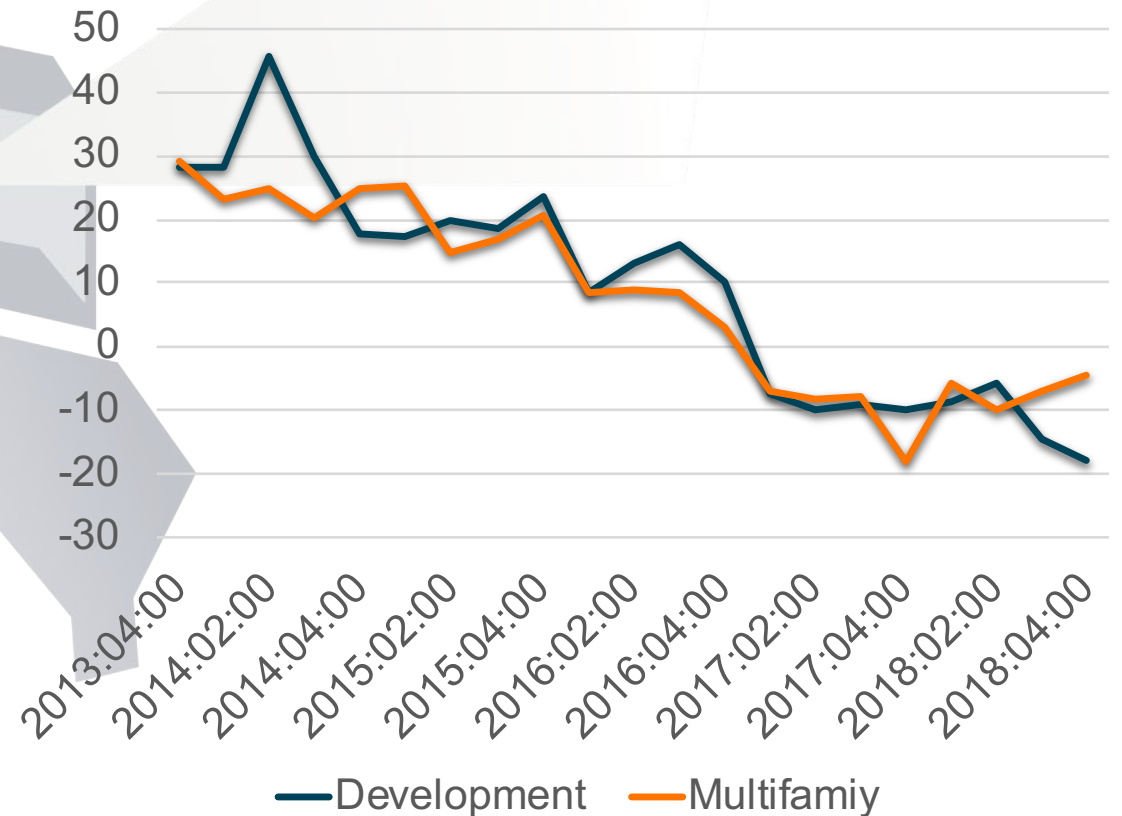
# Lending Markets?



**SLOS: Tightening Standards**



**Increasing Demand**



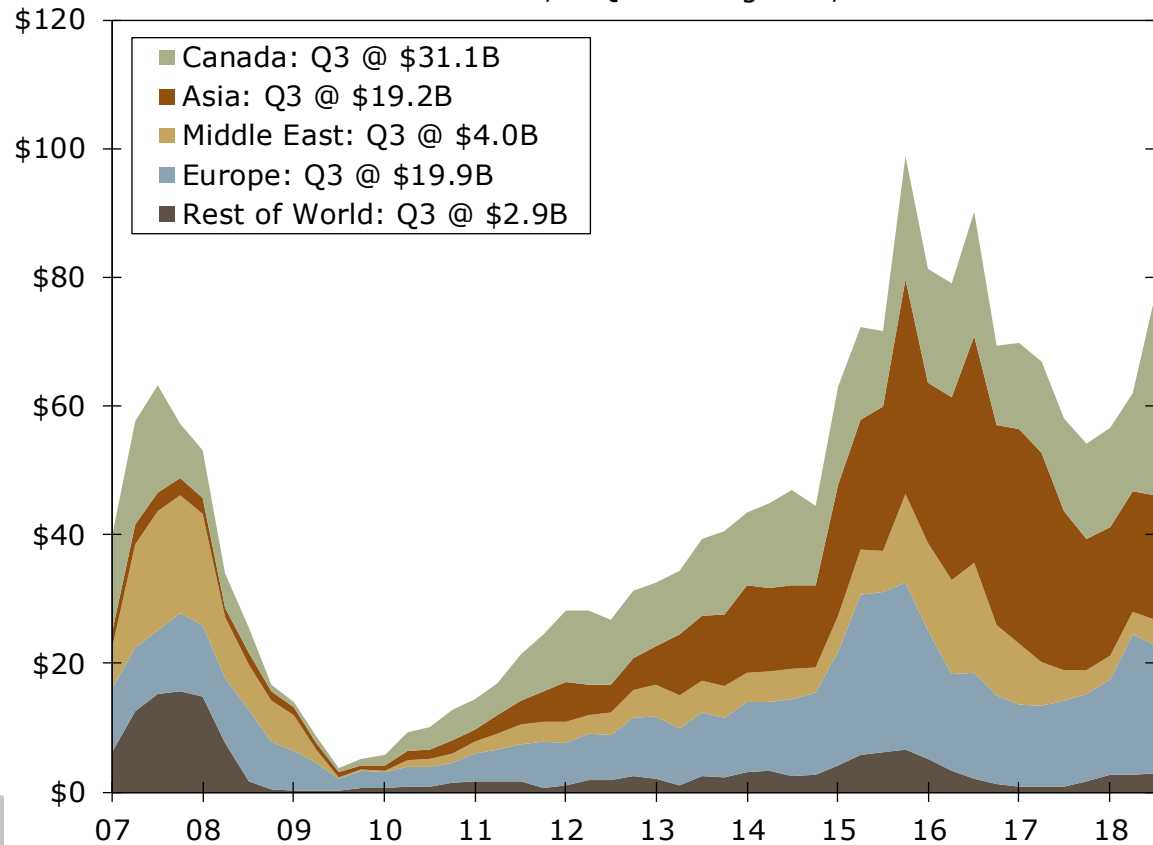
Senior Loan Officer Survey: Net Percent of Respondents saying yes

# National Trends in Real Estate



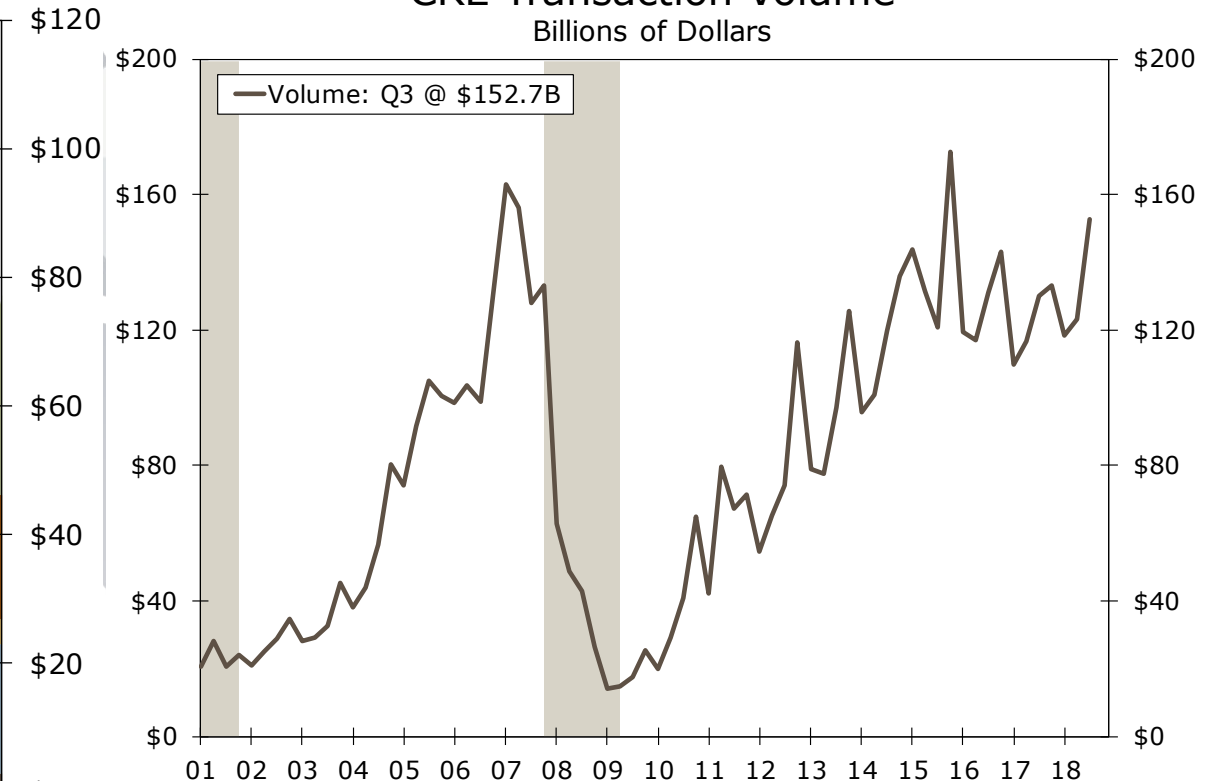
## Origin of Capital Into the United States

For Commercial Real Estate, 4-Qtr. Moving Sum, Billions of Dollars



## CRE Transaction Volume

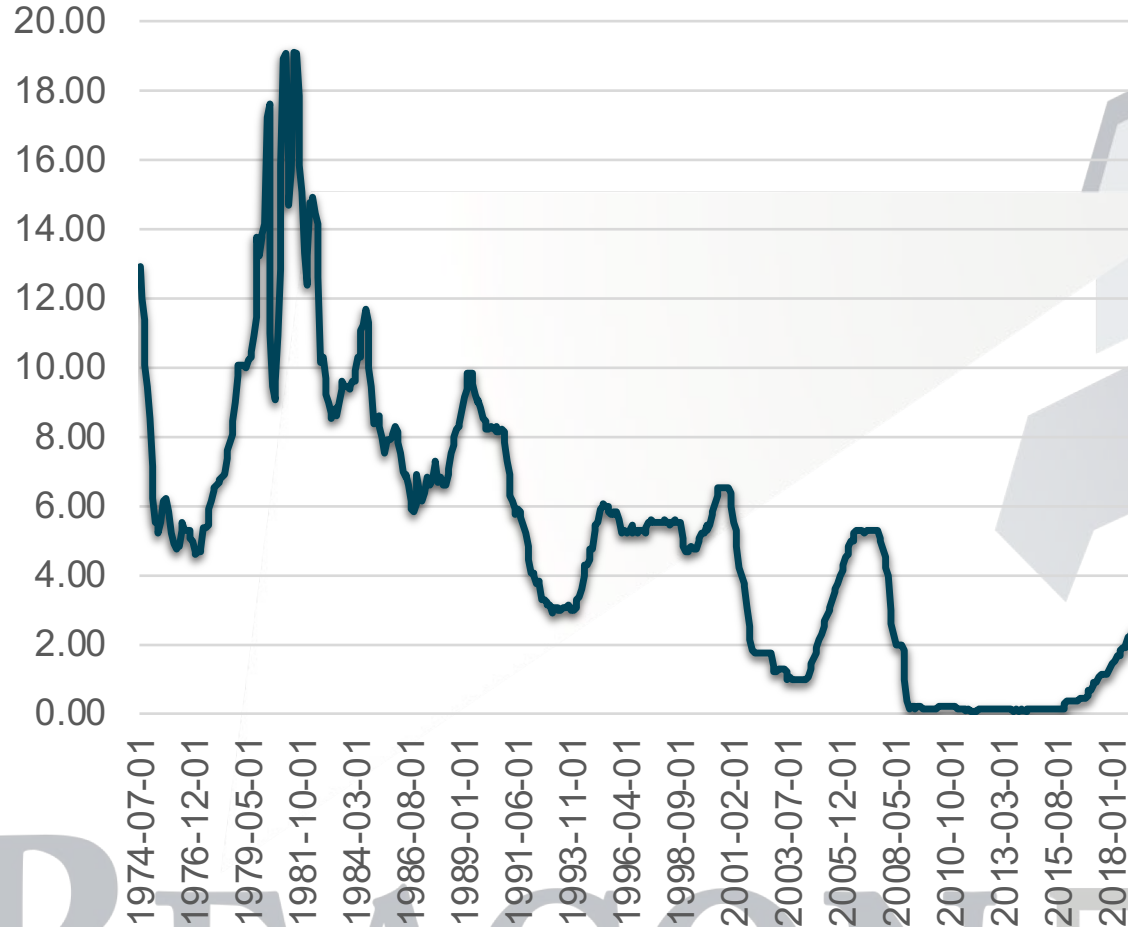
Billions of Dollars



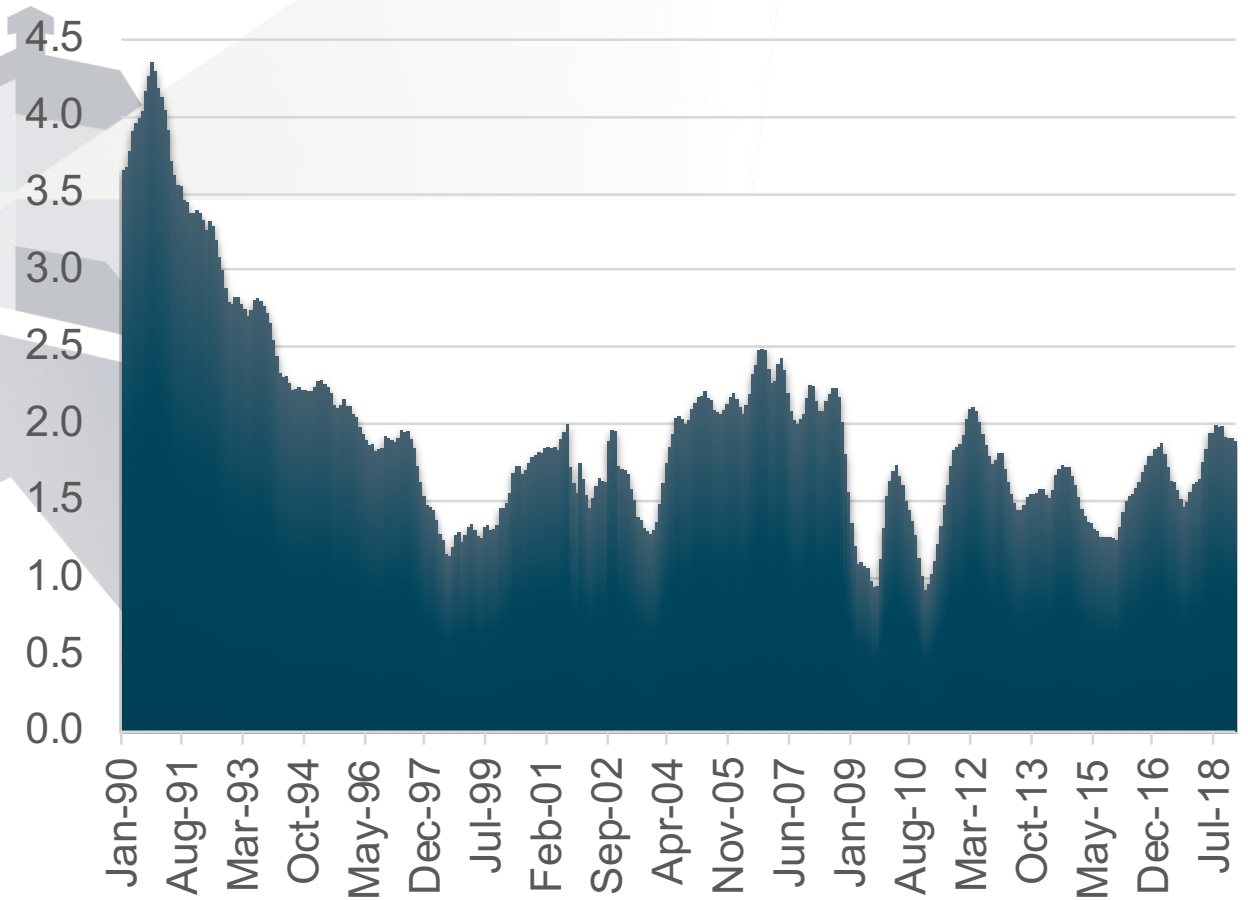
# Federal Reserve Policy



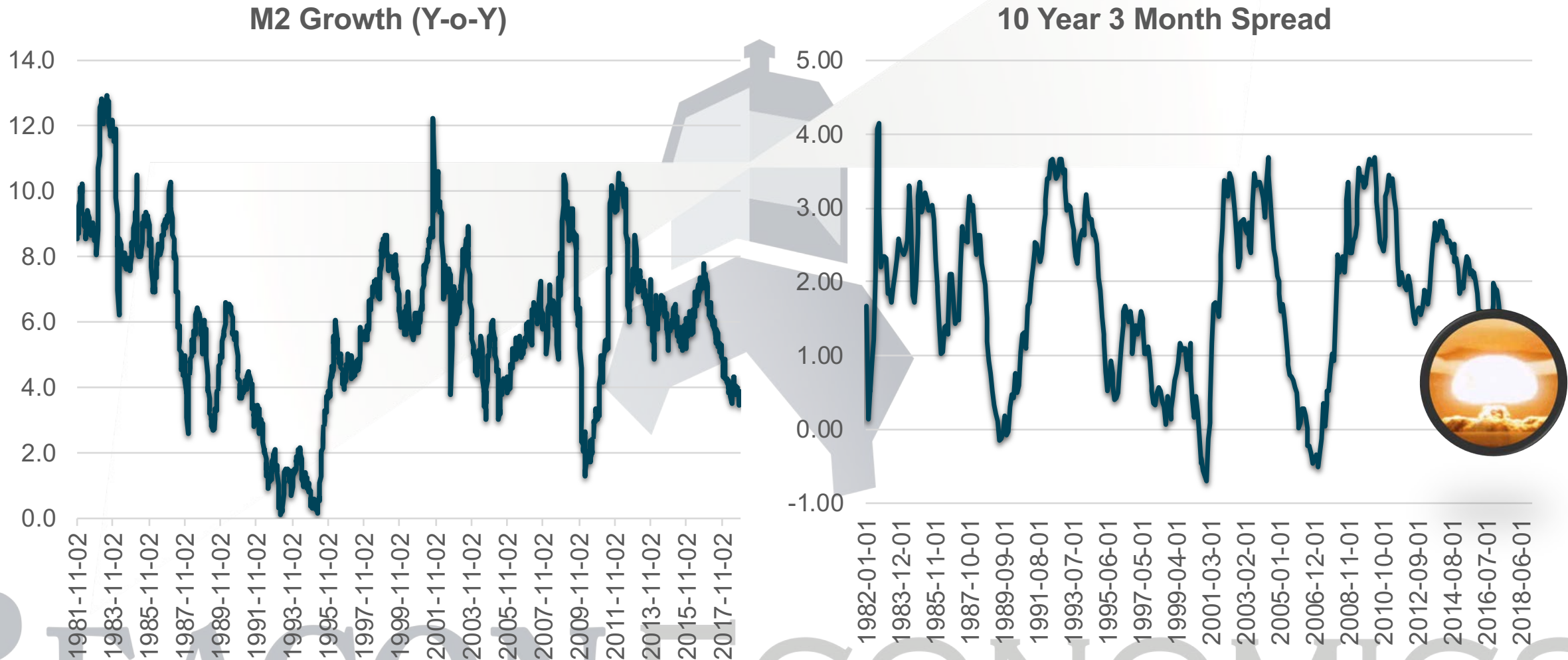
Federal Funds Rate



Core PCE Inflation



# Federal Reserve Policy





# Some questions to keep you up tonight

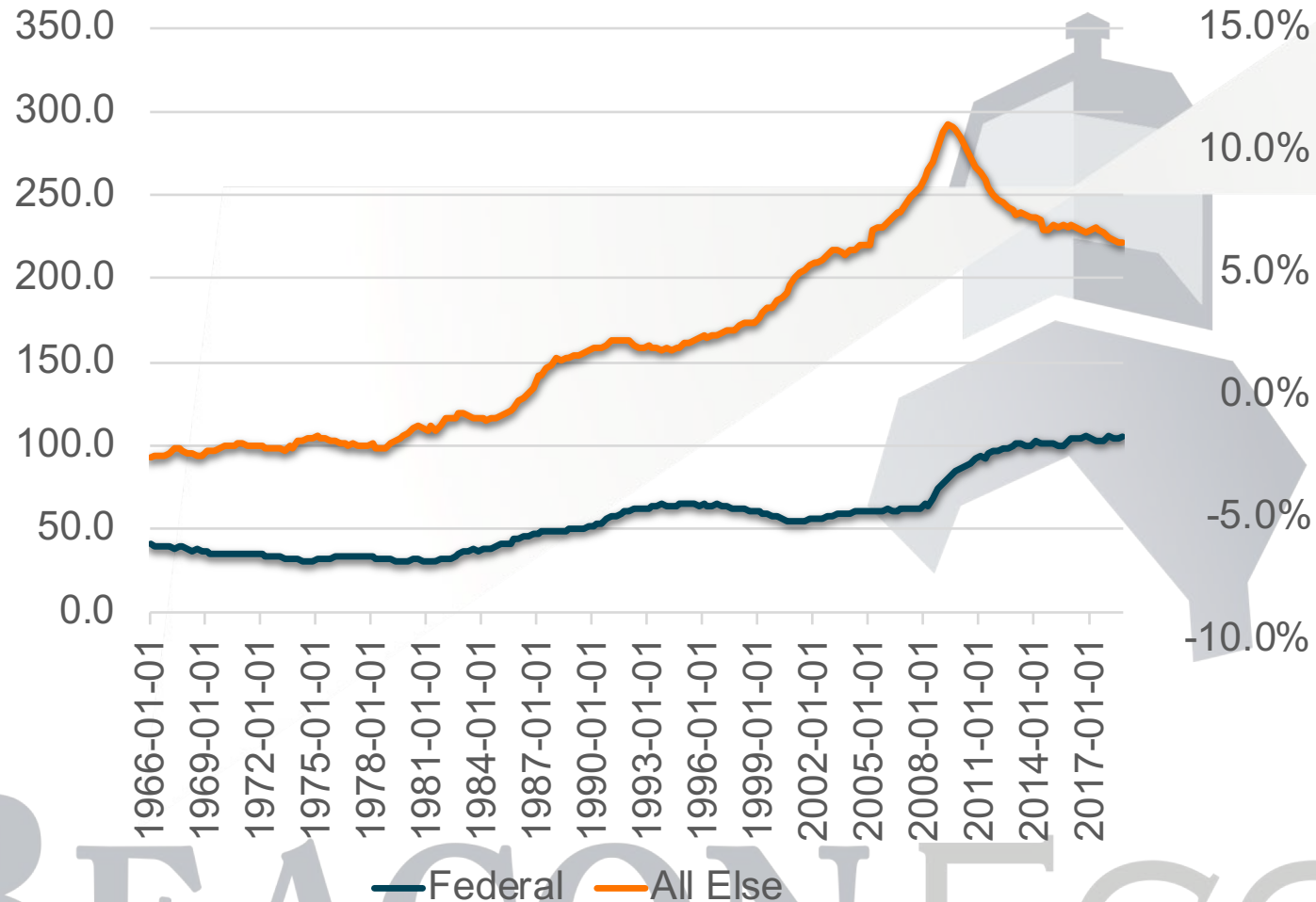


- Does free will truly exist?
- Why is there a "d" in "fridge" but not in "refrigerator"?
- Is there a synonym for "synonym"?
- What *is* the airspeed velocity of an unladen swallow?
- If the Fed inverts the yield curve and the economy is otherwise fine, will it cause a recession?

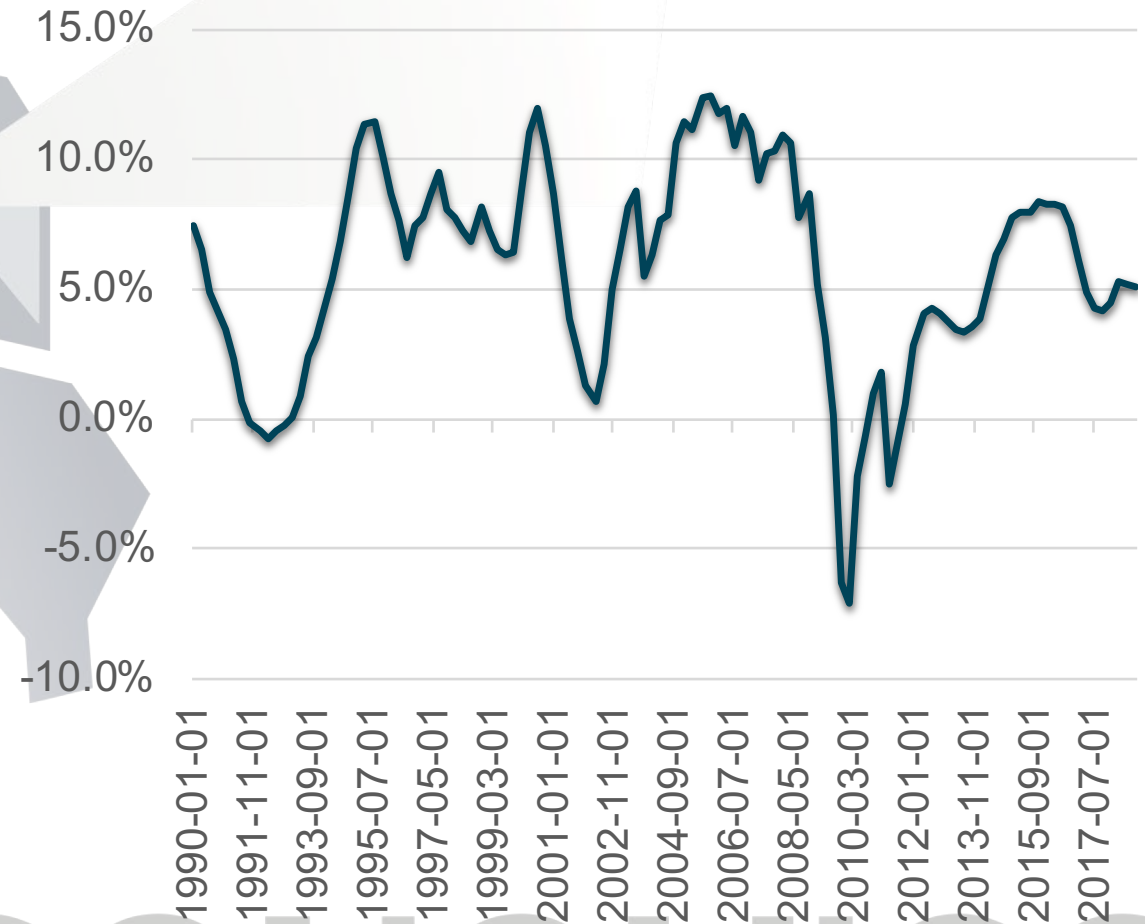
# Bubble Trouble?



## Debt as Share GDP (Percent)



## Growth in Bank and CU Loans

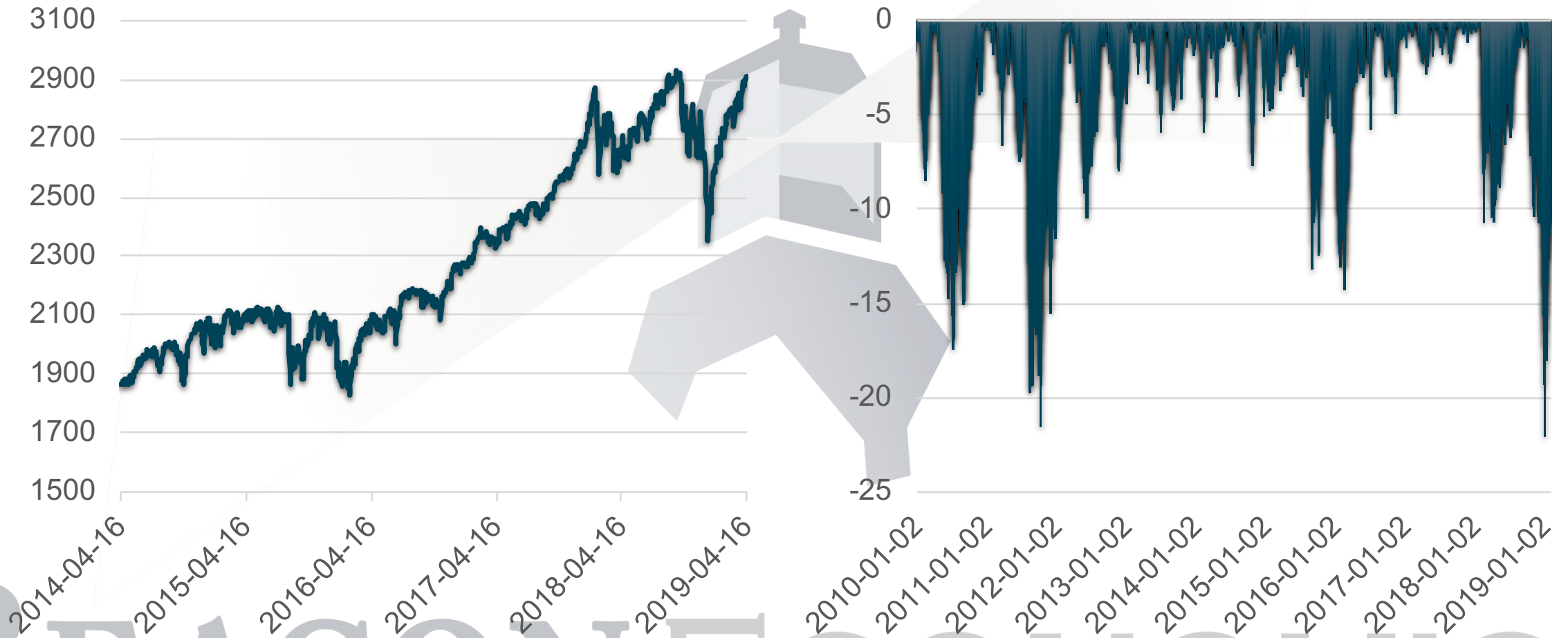


# So what's up with the markets?



**S&P 500**

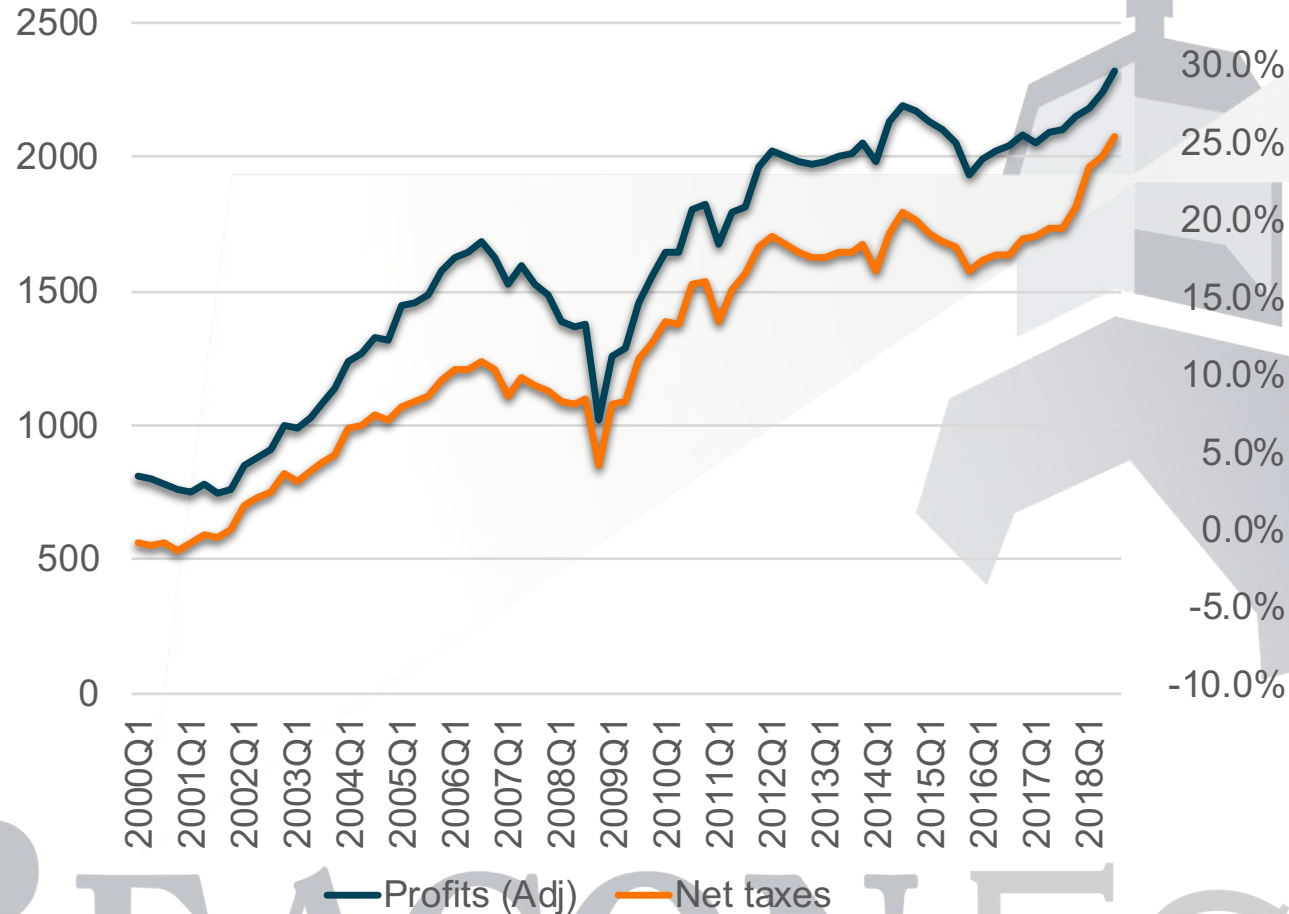
**Market Selloffs Current Expansion**



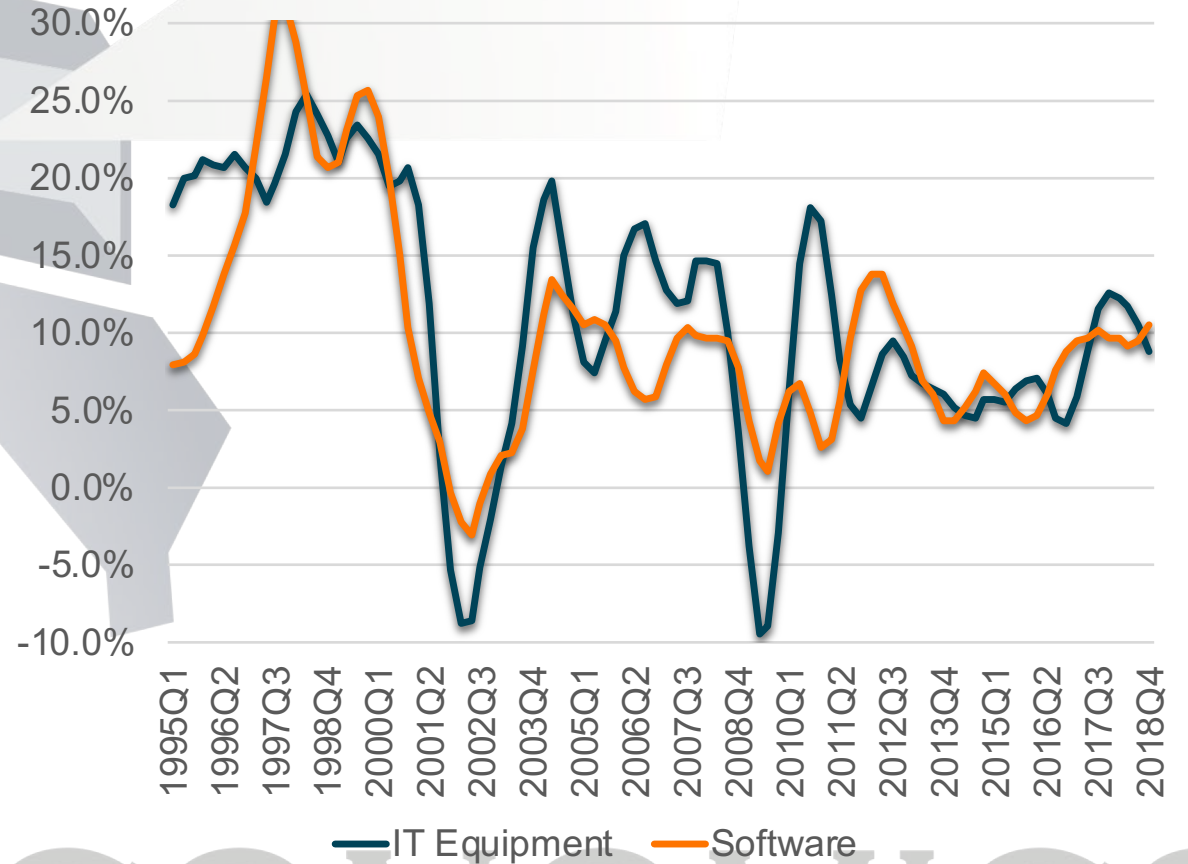
# Business Fundamentals



## US Corporate Profits (BEA)



## Business Investment Growth (Real, Smoothed YoY)



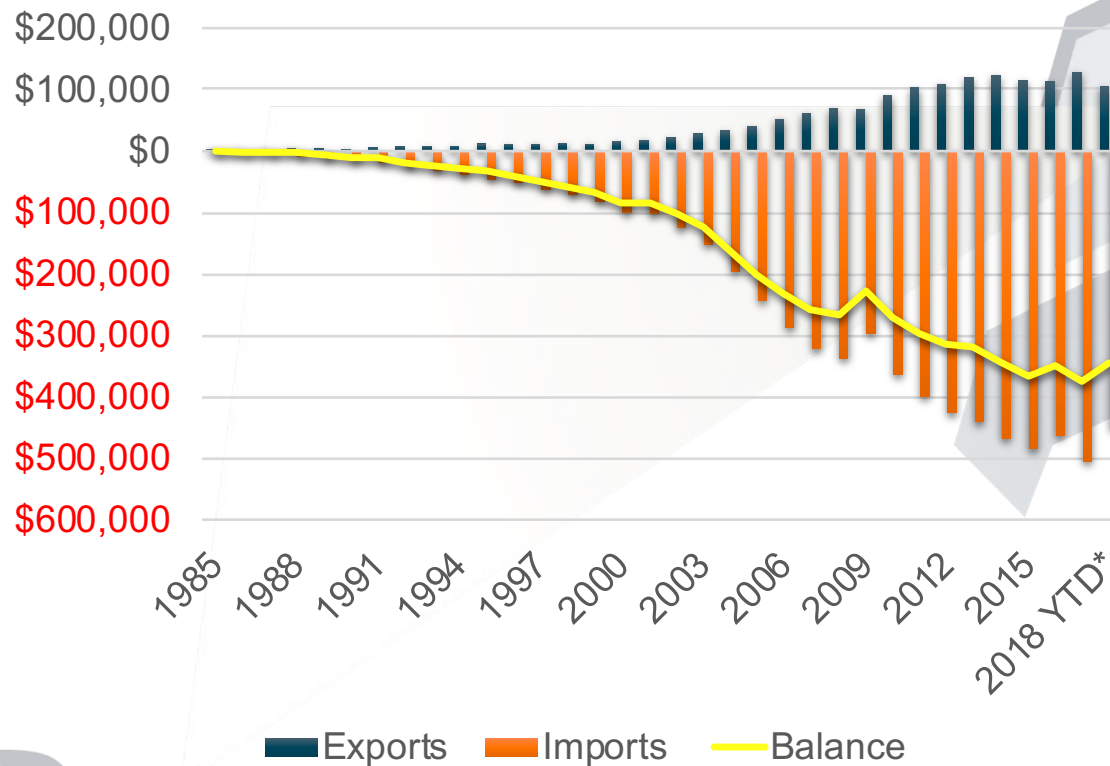
# The China Syndrome

Value US Exports  
to China as % of  
GDP:  
**0.75%**

Value China  
Exports to US as  
% of GDP:  
**4.0%**



United States Goods Trade with China  
(Millions)



\*As of October 2018

	Exports (\$, Billions)	Share	Imports (\$, Billions)	Share
<b>Total</b>	<b>1,389</b>		<b>2,122</b>	
China	102.5	7.4%	447.0	21.1%
Canada	251.5	18.1%	269.2	12.7%
Mexico	222.6	16.0%	289.7	13.7%
Japan	61.38	4.4%	117.6	5.5%
UK	54.76	3.9%	50.2	2.4%
Germany	48.31	3.5%	104.8	4.9%
S. Korea	46.38	3.3%	61.5	2.9%
Netherlands	40.76	2.9%	19.5	0.9%
Brazil	33.29	2.4%	26.4	1.2%
Hong Kong	31.51	2.3%	5.6	0.3%
France	30.3	2.2%	43.7	2.1%
Singapore	27.69	2.0%	23.3	1.1%



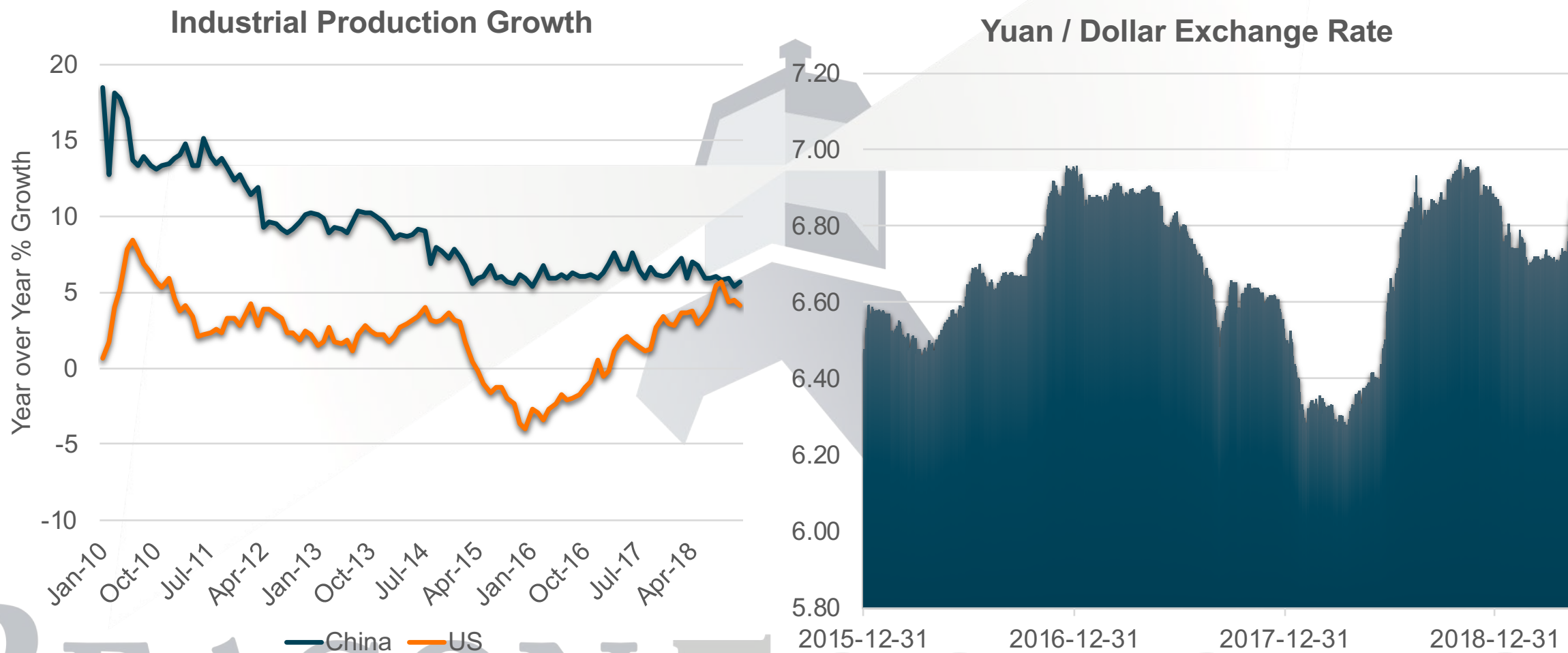
# Where are the risks?



Exports to China (Nominal)	ANNUAL 2017	ANNUAL 2018
TOTAL ALL COMMODITIES	170,335	158,403
Civilian Aircraft, Engines, And Parts	17,853	19,852
Electronic Integrated Circuits & Microassembl, Pts	9,766	9,844
<b>Motor Cars &amp; Vehicles For Transporting Persons</b>	<b>10,665</b>	<b>6,743</b>
Electric Apparatus For Line Telephony Etc, Parts	5,941	5,672
Crude Oil From Petroleum And Bituminous	4,592	5,534
Mach/Apps For Manufct Of Semicndct Boules	2,619	3,753
Diamonds, Worked Or Not, Not Mounted Or Set	3,457	3,282
<b>Soybeans, Whether Or Not Broken</b>	<b>12,254</b>	<b>3,146</b>
Medical, Surgical, Dental Or Vet Inst, No Elec, Pt	2,754	3,104
Articles Of Jewelry & Pts, Of Prec Metal Or Clad	3,386	2,874
Parts & Access For Motor Vehicles	2,365	2,464
Automatic Data Process Machines; Magn Reader	2,010	2,120
Inst Etc For Physical Etc Anal Etc; Microtome; Pts	1,741	1,899
Paintings, Drawings Etc By Hand As Art; Collag Etc	1,282	1,842
Petroleum Gases & Other Gaseous Hydrocarbons	2,414	1,735
Semiconductor Devices; Light-Emit Diodes Etc, Pts	1,529	1,726

Imports from China (Nominal)	ANNUAL 2017	ANNUAL 2018
TOTAL ALL COMMODITIES	512,942	545,917
Electric Apparatus For Line Telephony Etc	72,153	71,622
Automatic Data Process Machines;	50,595	51,892
Parts Etc Typewriters & Other Office Mach	15,390	16,764
Furniture Nesoi And Parts Thereof	11,349	12,560
Tv Recvrs, Incl Video Monitors & Projectors	11,550	12,511
Toys Nesoi; Scale Models Etc; Puzzles; Parts	12,348	12,003
Parts & Access For Motor Vehicles	9,438	11,024
Seats (Except Barber, Dental, Etc), And Parts	10,169	10,894
Lamps & Lighting Fittings & Parts Etc Nesoi	7,197	7,778
Articles For Arcade, Table Or Parlor Games	5,812	6,799
Travel Goods, Handbags, Wallets, Jewelry	6,386	6,406
Elec Trans, Static Conv & Induct, Adp Pwr	5,739	6,298
Elec Water, Space & Soil Heaters; Hair	5,310	6,040
Print Mach Incl Ink-Jet Mach Ancil T Prnt	6,134	5,879
Trans Appar For Radiotele Etc; Tv Camera	6,016	5,738
Articles Of Plastics (Inc Polymers & Resins)	4,582	5,222

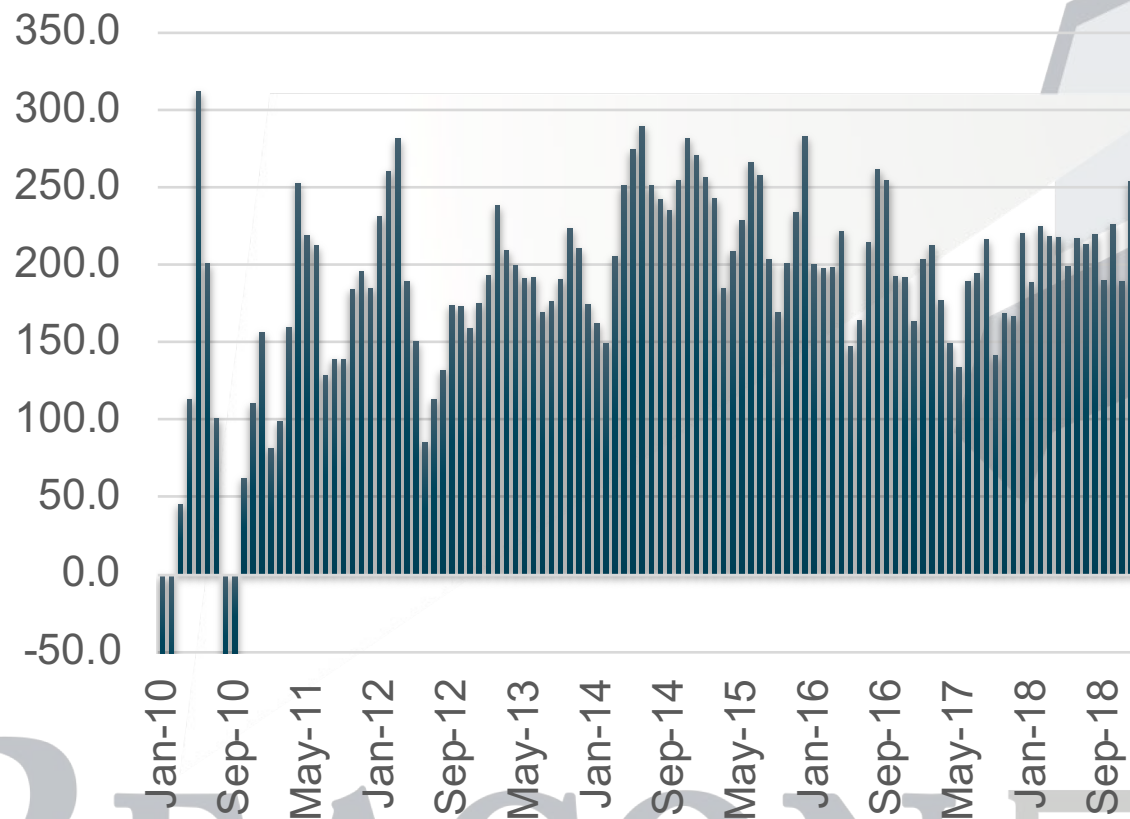
# U.S / China Comparisons



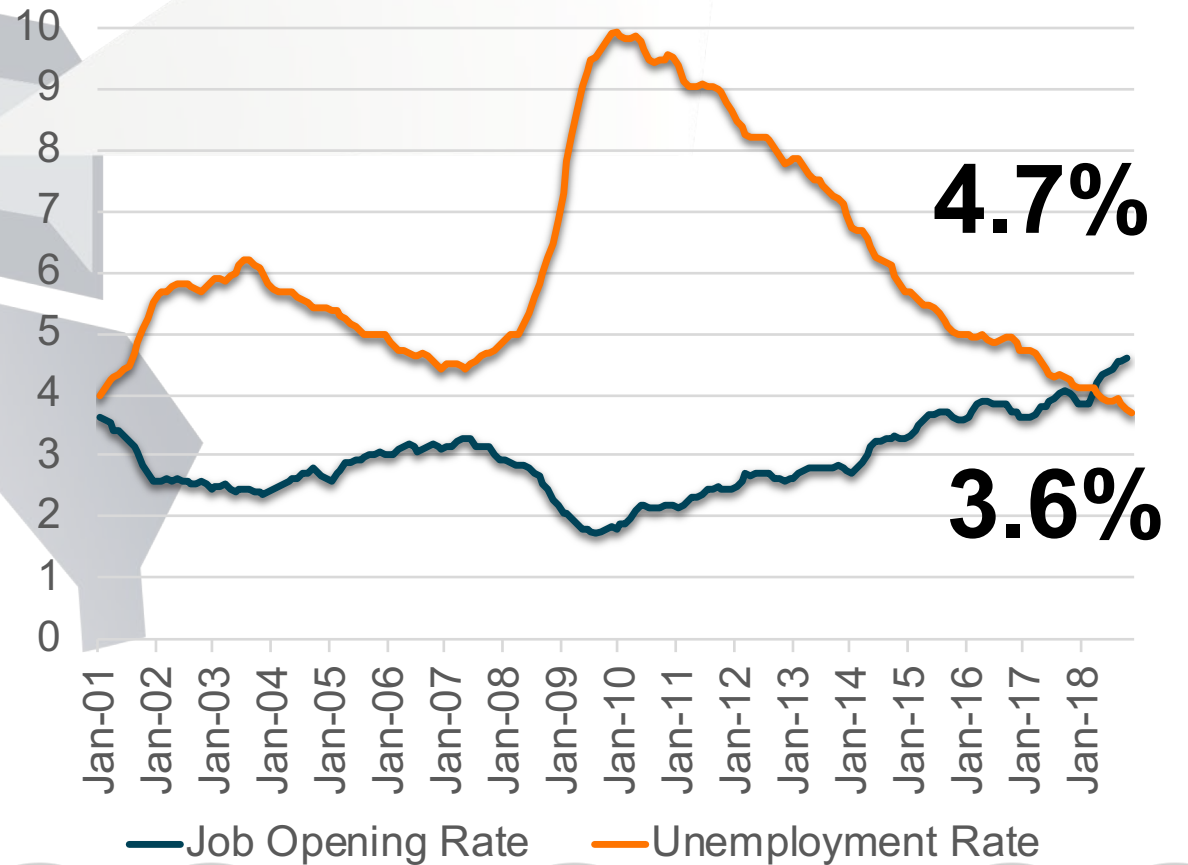
# Labor Markets



## Change Non Farm Payrolls (Smoothed)



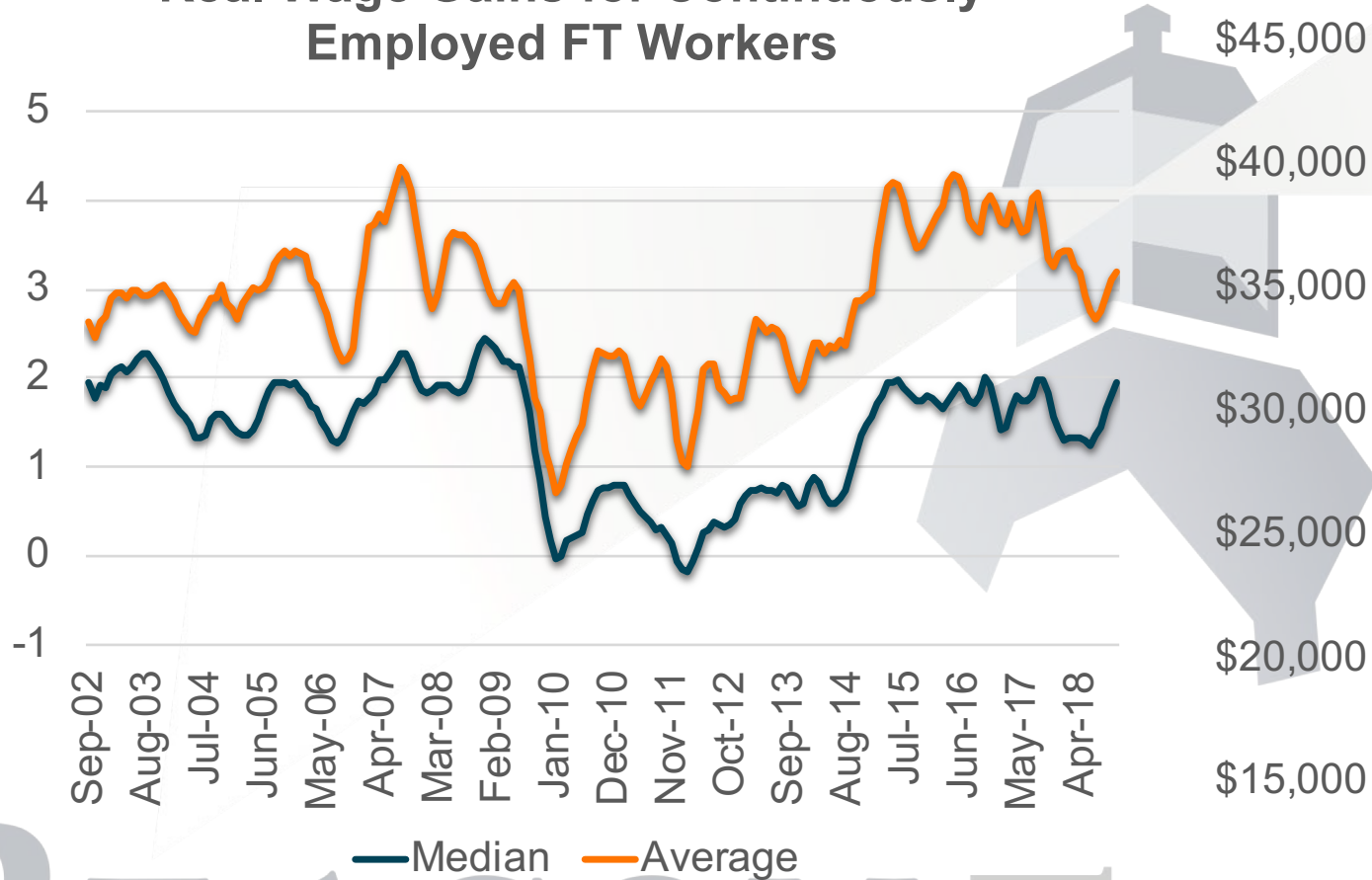
## Unemployment and Job Openings



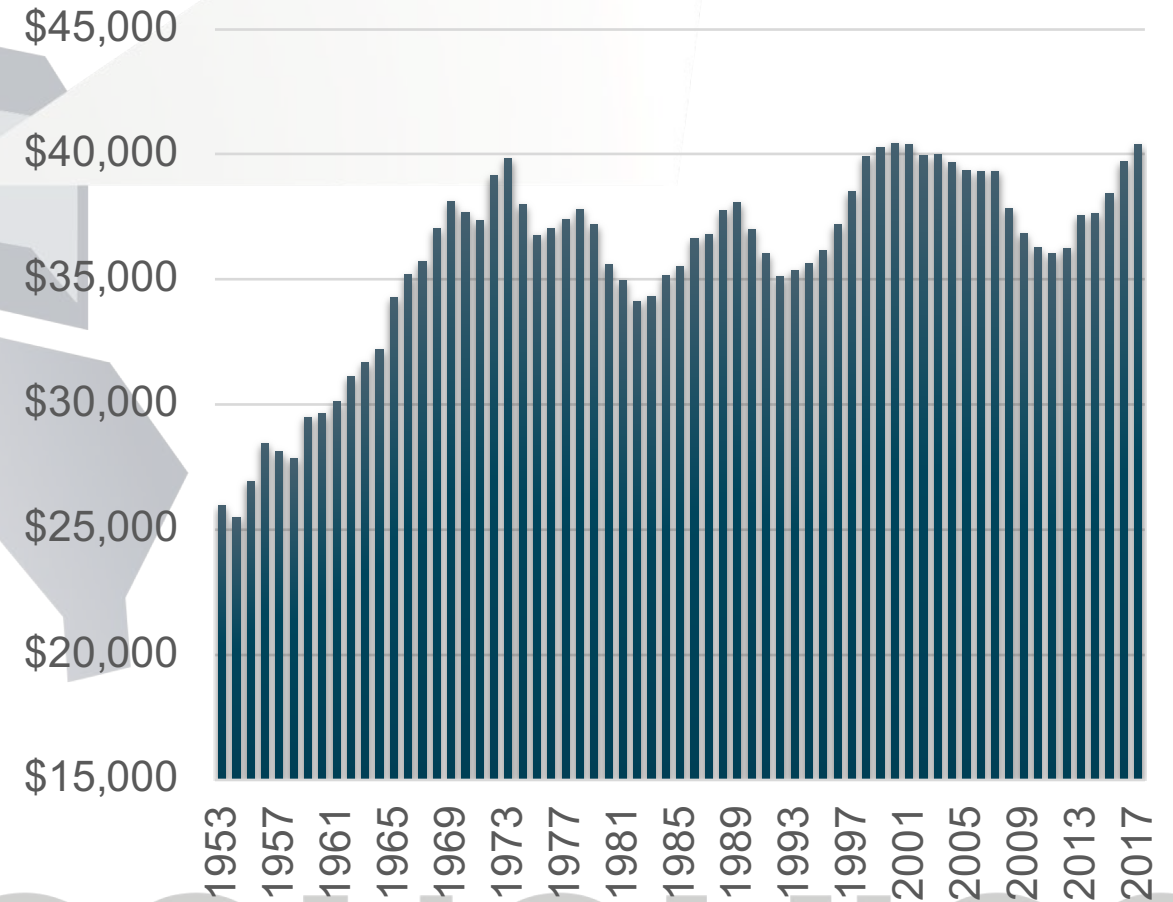
# Consequences



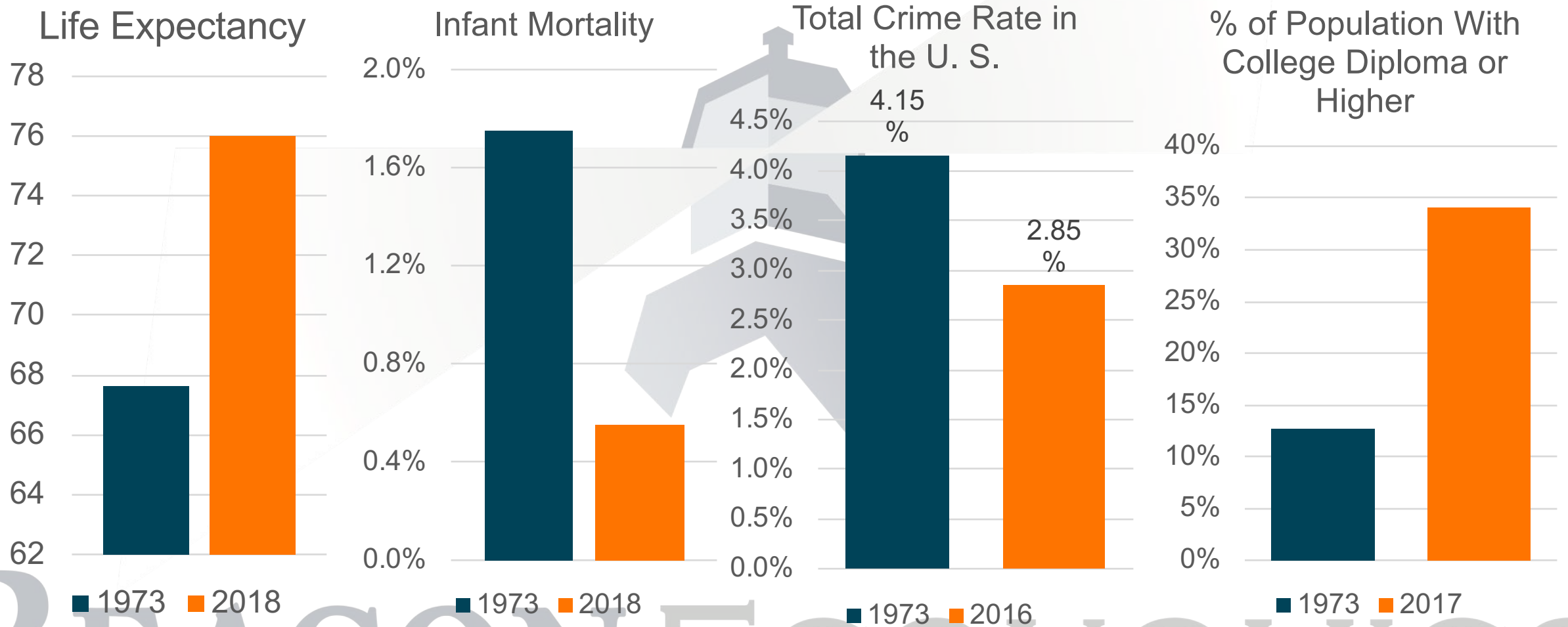
## Real Wage Gains for Continuously Employed FT Workers



## Real Median Income- Males



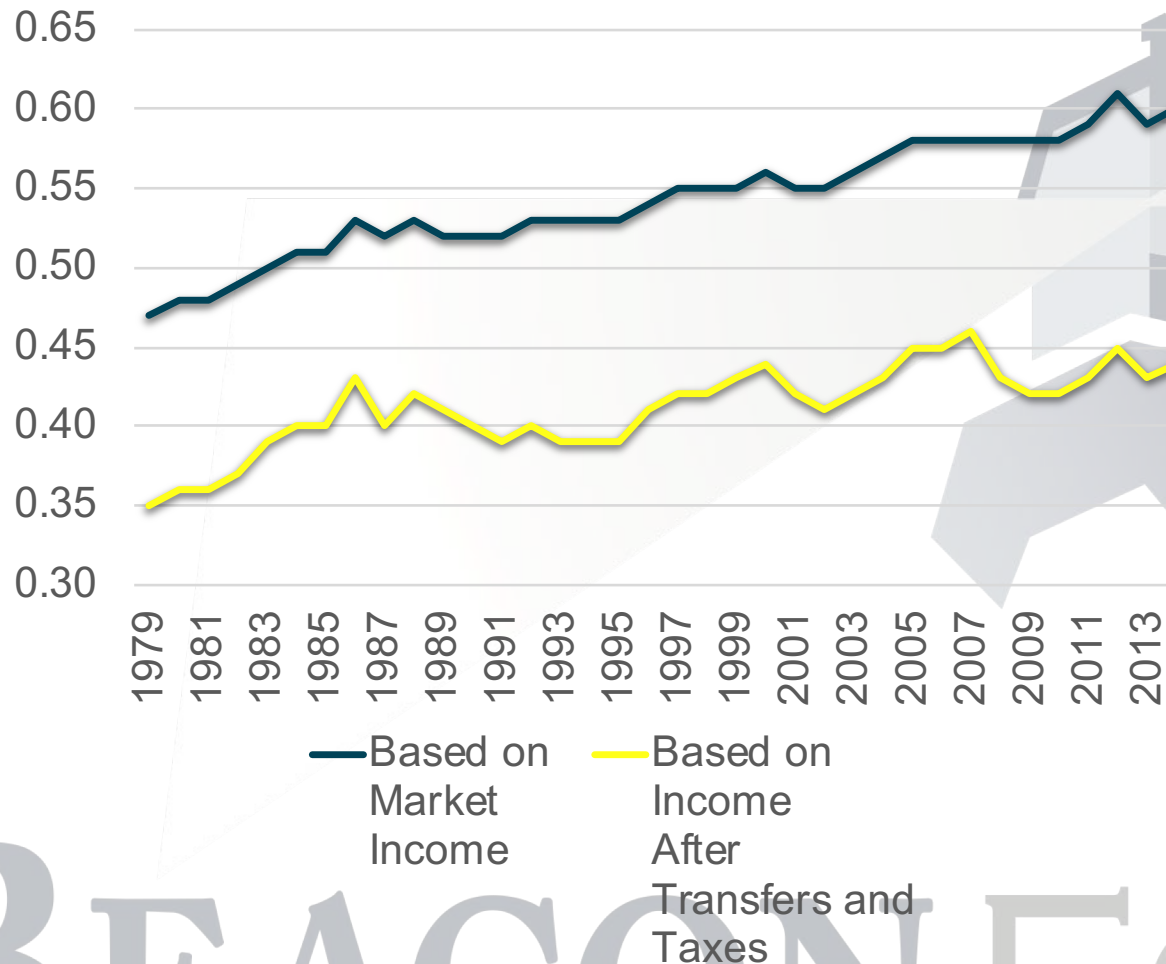
# Quality of Life



# Which Inequality?



## Gini Coefficients

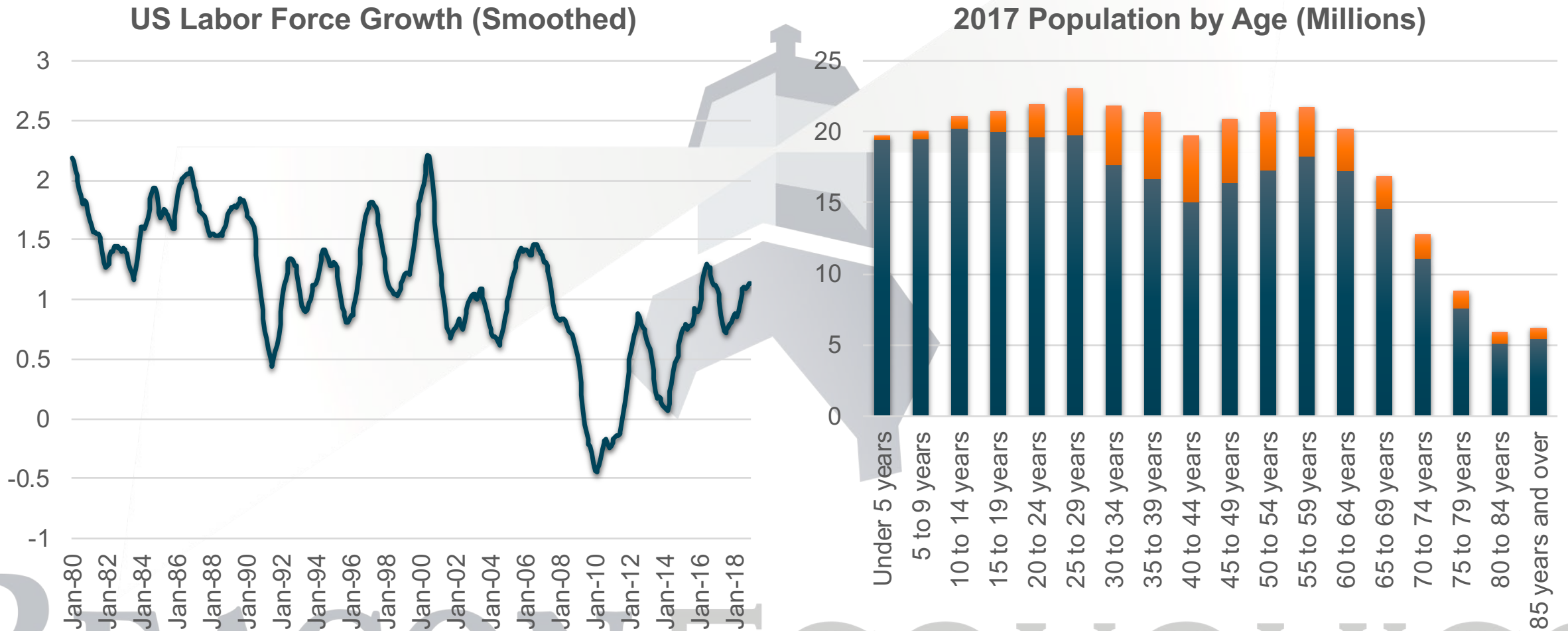


## Real Average Net Worth by Bracket

	1989	2001	2016
< 25	\$(1)	\$0	\$(12)
	0%	0%	0%
25–49.9	\$43	\$60	\$45
	3%	3%	2%
50–74.9	\$166	\$227	\$204
	12%	11%	7%
75–89.9	\$422	\$612	\$659
	18%	17%	14%
90–100	\$2,317	\$3,748	\$5,336
	67%	70%	77%
Top 1%	\$10,407	\$17,772	\$26,645
	30%	33%	39%



# Workforce Growth



# Demographic Stressors



US Population Forecast

	0-24	25-64	65+
<b>Current</b>	104.5	169.4	49.2
<b>2016-26</b>	0.9	4.7	17.8
<b>2026-36</b>	2.0	6.2	11.9
<b>2036-46</b>	2.3	9.4	4.8
<b>Total</b>	5.3	20.3	34.5

<u>Median Real Net Worth</u>	<u>1989</u>	<u>2016</u>
All families	87.5	97.3
Less than 35	14.6	11.0
35–44	105.3	59.8
45–54	184.2	124.2
55–64	182.6	187.3
65–74	143.1	223.4
75 or more	135.2	264.8

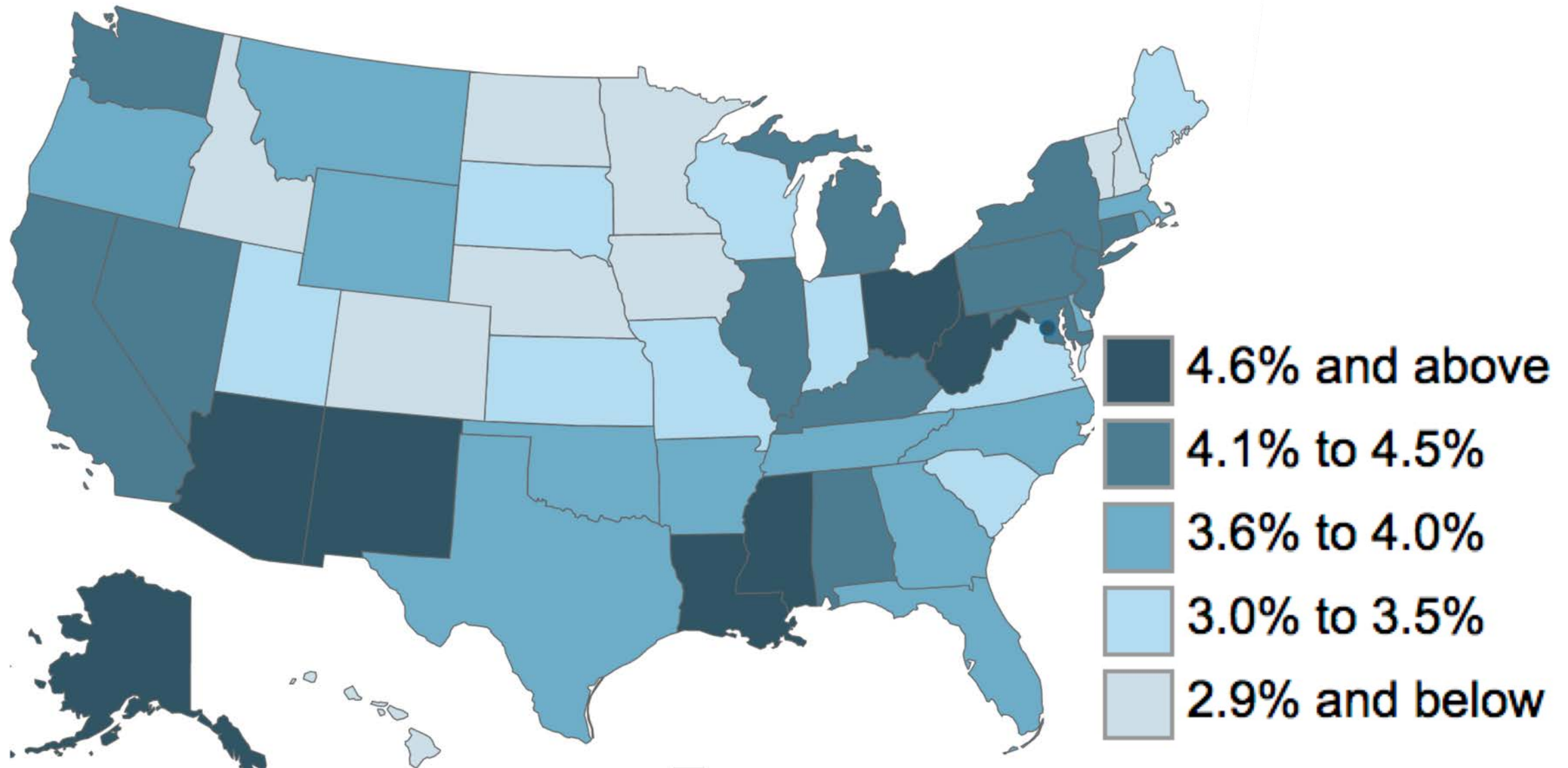
# The Cure for Secular Stagnation



**Figure 8: Increase in Average Annual Growth Rate With Estimated Policy Shifts**

Policy Change	Boost in Annual Growth Rate	Estimated By
Enact immigration reform to increase number of workers	0.3%	<a href="#">CBO</a>
Reform the income tax code	0.05% - 0.3%	<a href="#">JCT, Treasury</a>
Increase the Social Security retirement ages by two years	0.15%	<a href="#">CBO</a>
Reduce deficits by \$4 trillion over ten years	0.1%	<a href="#">CBO</a>
Expand energy production at level of shale boom*	0.09%	<a href="#">CBO</a>
Repeal the Affordable Care Act ("Obamacare")	0.08%	<a href="#">CBO</a>
Ratify the Trans-Pacific Partnership	0.01%	<a href="#">U.S. ITC</a>
Increase public investment in infrastructure, education, and research by \$400 billion	0 - 0.01%	<a href="#">CBO</a>

## State unemployment rates, August 2018, seasonally adjusted

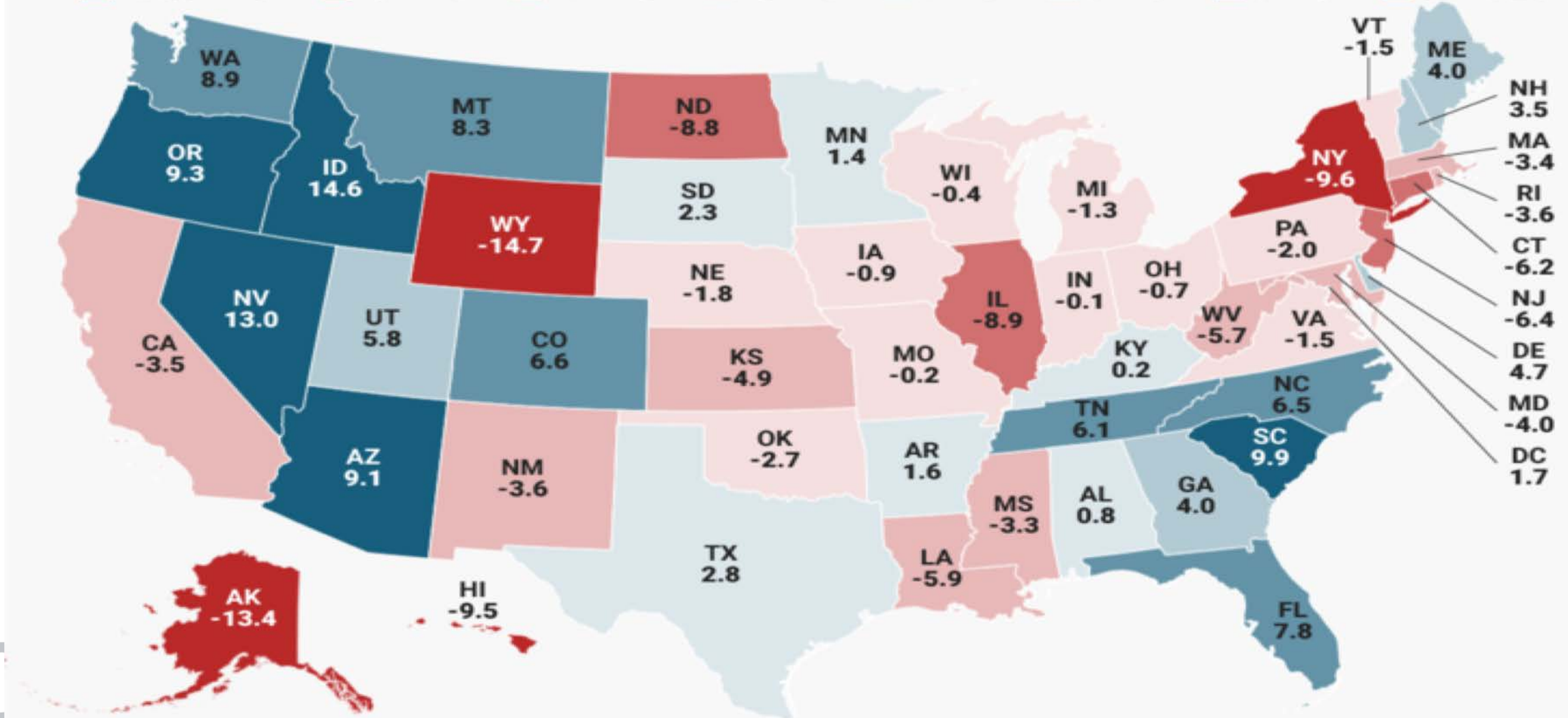




# NET DOMESTIC MIGRATION

NET DOMESTIC MIGRATION PER 1,000 RESIDENTS, JULY 1, 2016 – JULY 1, 2017

■ -14.7 – -9 ■ -9 – -6 ■ -6 – -3 ■ -3 – 0 ■ 0 – 3 ■ 3 – 6 ■ 6 – 9 ■ 9 – 14.6



# California fact versus fiction



## 2016 Best & Worst States For Business

- 50 [California](#)
- 49 [New York](#)
- 48 [Illinois](#)
- 47 [New Jersey](#)
- 46 [Massachusetts](#)
- 45 [Connecticut](#)
- 44 [Hawaii](#)
- 43 [Michigan](#)
- 42 [Oregon](#)
- 41 [Vermont](#)
- 40 [Maryland](#)
- 39 [Mississippi](#)
- 38 [West Virginia](#)
- 37 [Rhode Island](#)





# State Economic Performance



## Gross State Product

## 5 Year Payroll Employment

Q1 2018	1 Year	5 Year
<b>Washington</b>	<b>4.3%</b>	<b>3.7%</b>
<b>California</b>	<b>3.5%</b>	<b>3.7%</b>
Utah	3.7%	3.4%
Colorado	4.5%	3.4%
<b>Oregon</b>	<b>3.4%</b>	<b>2.9%</b>
Florida	2.3%	2.8%
Texas	4.2%	2.8%
Idaho	3.2%	2.8%
Georgia	2.5%	2.8%
Nevada	4.0%	2.7%
South Carolina	2.0%	2.5%
Arizona	4.2%	2.5%

<u>Rk</u>	<u>State</u>	<u>#</u>	<u>Ann Gr</u>	<u>Share US</u>
1	Nevada	211.2	3.4%	1.7%
2	Utah	218.3	3.2%	1.7%
3	Florida	1238.2	3.1%	9.8%
4	<b>Oregon</b>	<b>252.1</b>	<b>2.9%</b>	<b>2.0%</b>
5	Idaho	92.1	2.8%	0.7%
6	Colorado	328.7	2.7%	2.6%
7	<b>Washington</b>	<b>413.1</b>	<b>2.7%</b>	<b>3.3%</b>
8	<b>California</b>	<b>2051</b>	<b>2.6%</b>	<b>16.3%</b>
9	Georgia	537.9	2.6%	4.3%
10	South Carolina	237.6	2.4%	1.9%

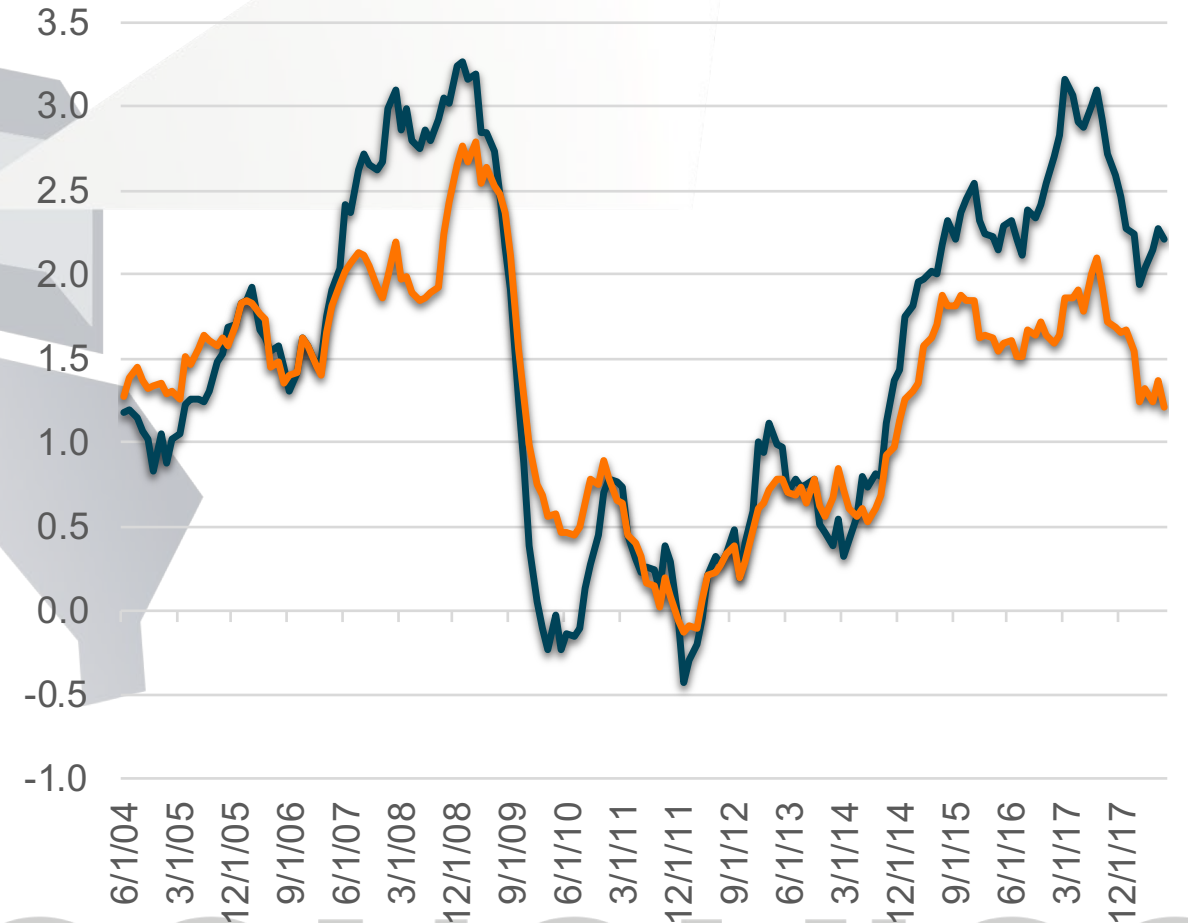
# California Economic Engine



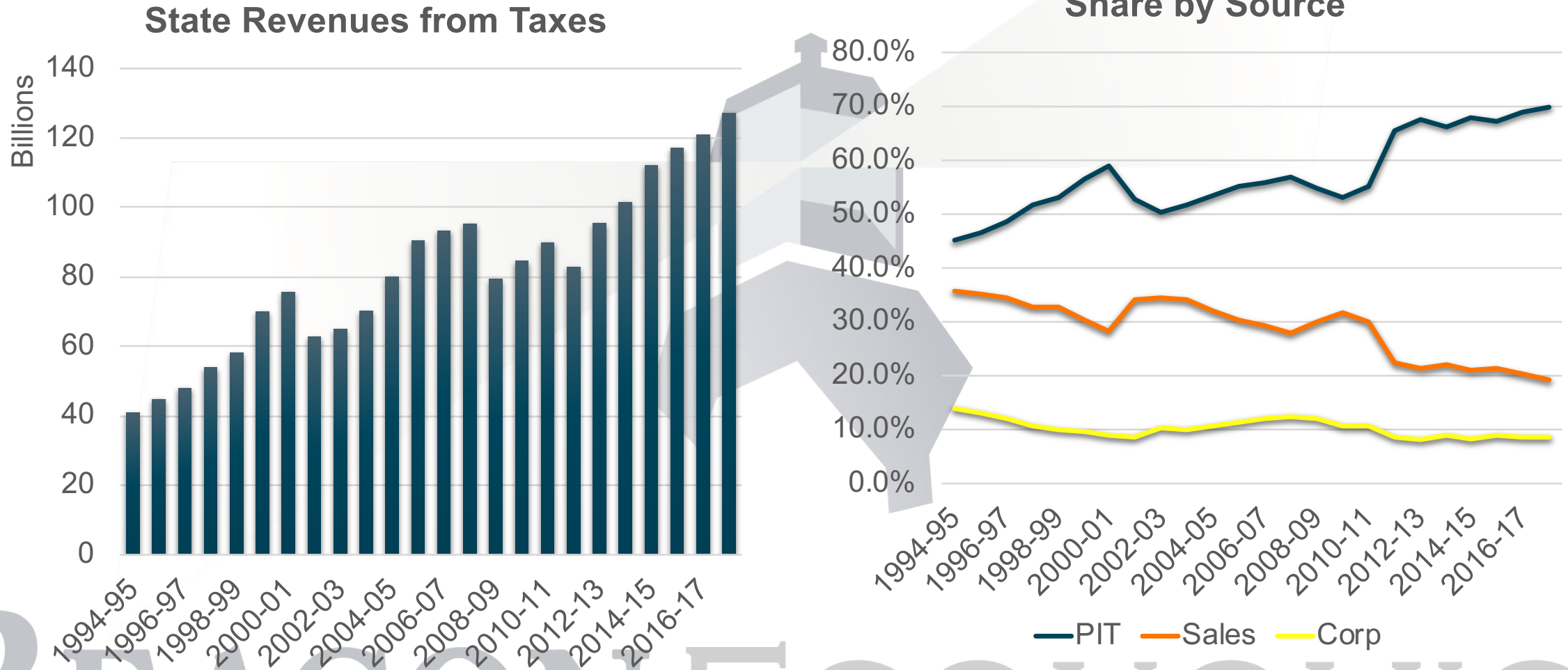
## California Share National Personal Income



## Median Wage Growth West VS US



# A (Temporary) Revenue Glut



# The recent market swoon ...



## 2018-19 Comparison of Actual and Forecast Agency General Fund Revenues

(Dollars in Millions)

Revenue Source	FEBRUARY 2019					2018-19 YEAR-TO-DATE			
	Forecast	Actual	Change	Percent Change		Forecast	Actual	Change	Percent Change
Personal Income	\$3,051	\$2,914	-\$137	-4.5%		\$60,386	\$57,591	-\$2,795	-4.6%
Sales & Use	2,454	2,606	152	6.2%		17,946	17,916	-31	-0.2%
Corporation	162	264	102	63.3%		4,514	5,051	537	11.9%
Insurance	30	30	0	1.7%		1,315	1,324	9	0.6%
Estate	0	0	0	2.30%		0	0	0	56.8%
Pooled Money Interest	23	23	0	-1.8%		314	316	2	0.8%
Alcoholic Beverages	24	22	-2	-8.7%		260	245	-15	-5.7%
Tobacco	5	5	0	-1.2%		43	44	1	1.5%
Other	42	55	13	31.1%		372	445	74	19.8%
Total	\$5,791	\$5,919	\$128	2.2%		\$85,150	\$82,932	-\$2,218	-2.6%

# Not High, Just Stupid



Tax Revenues as % GSP

1 Mississippi	24.8%	14 Alabama	18.7%
2 West Virginia	23.1%	15 Rhode Island	18.6%
3 New Mexico	22.8%	16 Montana	18.5%
4 Vermont	22.5%	17 North Dakota	17.7%
5 Wyoming	22.3%	18 Iowa	17.5%
6 Alaska	21.9%	19 Michigan	17.5%
7 Arkansas	20.6%	20 Louisiana	17.2%
8 Maine	20.1%	21 Minnesota	17.2%
9 Hawaii	19.2%	22 Idaho	16.8%
10 New York	19.1%	23 California	16.7%
11 Oregon	19.0%	24 Ohio	16.7%
12 Kentucky	18.9%	25 New Jersey	16.6%
13 South Carolina	18.8%	26 Oklahoma	16.5%

- Hyper-Cyclical
- Progressive / Regressive
- Tax on Effort vs Tax on Wealth
- Inflation for Goods relative to Inflation for Services
- Evolutionary vs revolutionary reform

# Myth Busting



## Share New FT Employees 2014-2017

California's economy recently grew to become the world's fifth-largest economy if it were its own country.

Sounds like great news, but that wealth mostly benefits the very rich in the tech sector.

"Almost all the income growth and high-end job growth took place in Silicon Valley,"

Joel Kotkin, professor of Urban Studies at Chapman University  
May 18, 2018

	2017 Tot		Ch < 50k	Ch 50-100k	Ch 100k+
County Total	12,831.3	8.8%	69.0	417.4	548.1
Coast SC	5,748.9	6.9%	18.6	161.4	193.3
Bay	2,503.5	10.1%	-35.4	53.7	212.0
Balance	4,578.9	9.4%	85.8	202.4	142.8
Inland SC	1,608.6	9.4%	33.1	62.5	42.0
North Inland	1,137.0	12.5%	33.6	55.8	37.4
North Coast	575.2	11.9%	10.7	27.6	22.8
Central Coast	721.7	8.9%	0.6	29.7	28.4
Central Valley	536.5	9.6%	7.8	26.9	12.2



# Myth Busting



Match the payroll employment growth rate (letters) (1994-2019) to the California region (numbers)

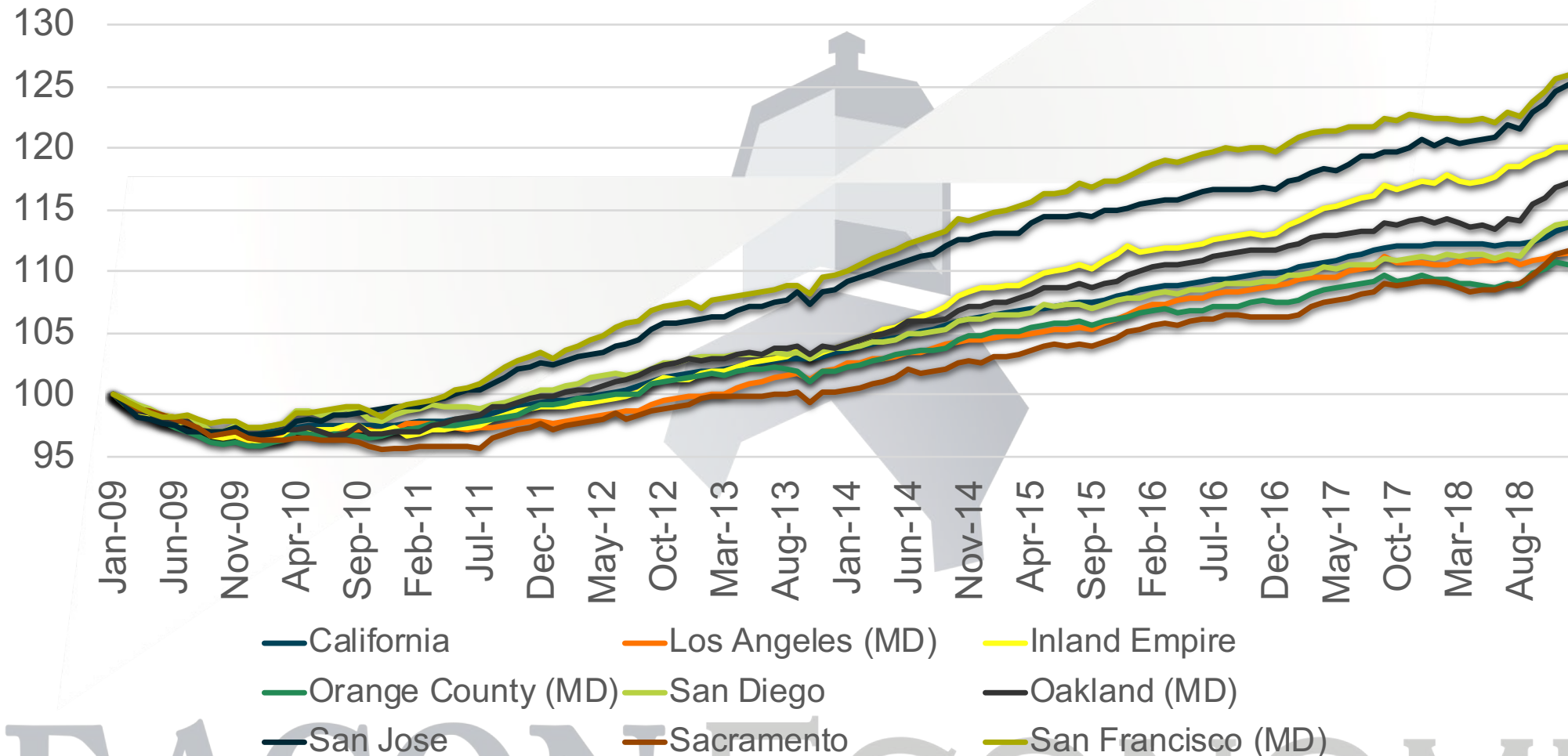
A) Coastal SC	1)	31.8%
B) Central Coast	2)	34.2%
C) Bay Area	3)	40.4%
D) Inland NC	4)	52.6%
E) Inland SC	5)	81.0%

	Jun-18	20 Yr Ch	20 Yr Gr	Sh State
California	18,527.3	3,355.4	22.1%	
Los Angeles (MD)	4,919.9	685.2	16.2%	20.4%
Inland Empire	1,949.6	657.5	50.9%	19.6%
San Diego	1,526.5	312.5	25.7%	9.3%
Orange County	1,560.5	225.4	16.9%	6.7%
Sacramento	1,033.3	225.0	27.8%	6.7%
<i>East Bay (MD)</i>	1,362.9	179.2	15.1%	5.3%
<i>San Francisco (MD)</i>	994.3	141.2	16.6%	4.2%
<i>San Jose</i>	1,050.5	103.6	10.9%	3.1%
Bakersfield	351.2	90.0	34.5%	2.7%
Fresno	416.0	77.6	22.9%	2.3%

# Local Employment Base



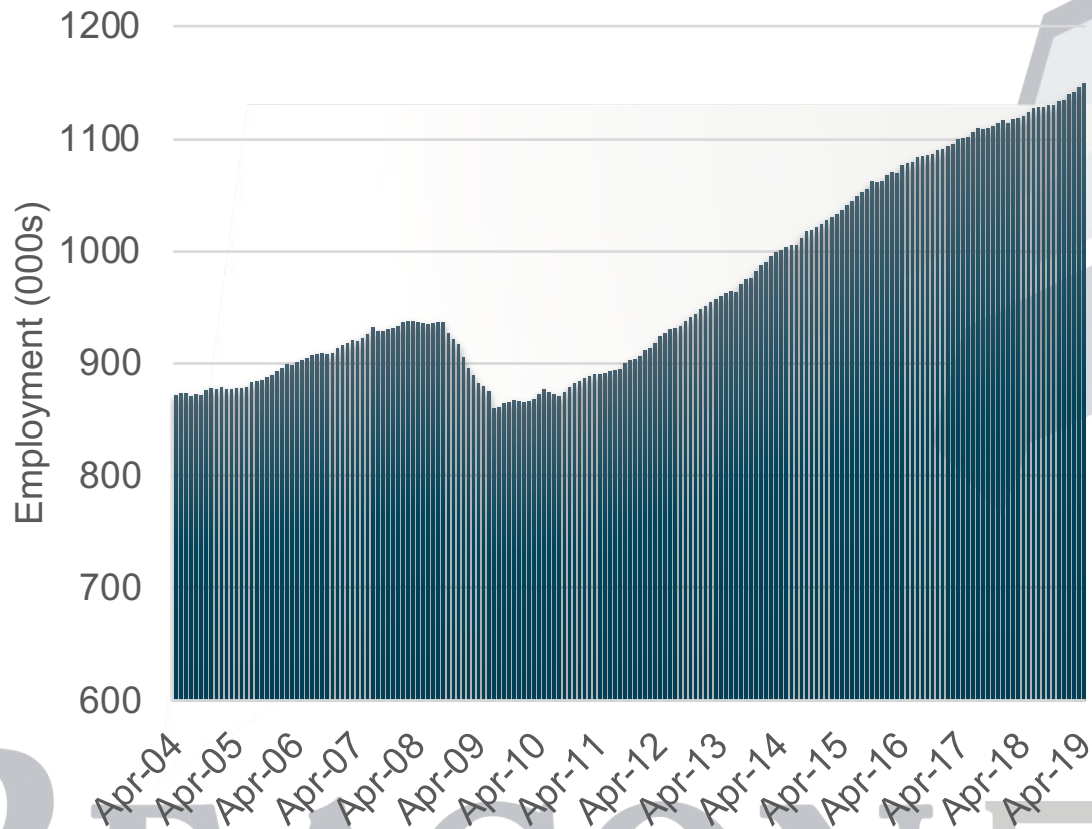
## Indexed Payroll Job Growth 09-19



# Employment



**Total Nonfarm Employment  
San Jose**



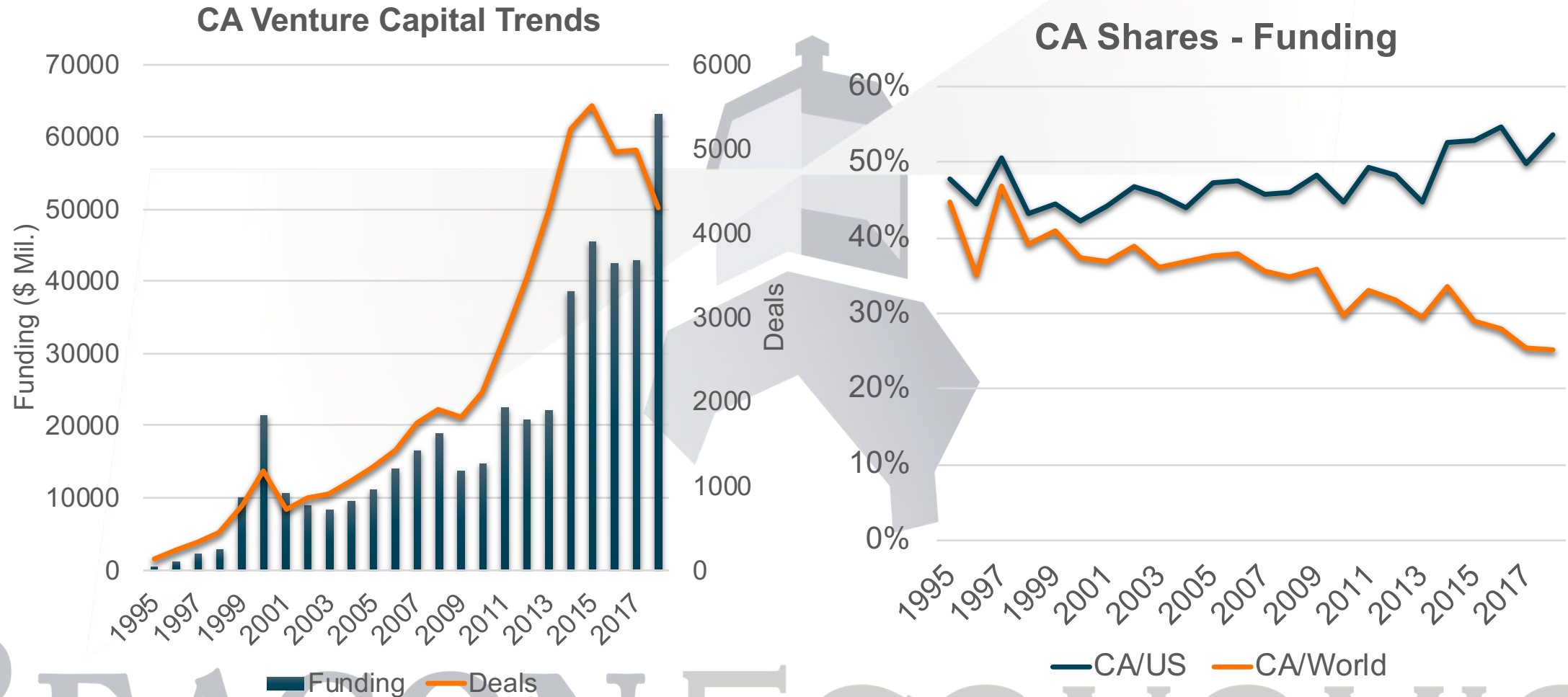
	April 2019	2018/19 % Growth	2017/18 % Growth	LQ
<b>Total Nonfarm</b>	<b>1,148.7</b>	<b>2.6</b>	<b>1.8</b>	<b>1.0</b>
Prof/Sci/Tech	158.9	2.7	0.1	1.8
Logistics	133.6	-0.3	-0.7	0.7
Hospitality	108.3	3.3	2.6	0.8
Government	99.2	2.9	1.2	0.6
Information	98.8	10.3	8.4	2.7
Retail Trade	86.0	-0.4	0.2	0.8
Admin Support	61.9	-0.3	-4.1	0.8
Construction	50.1	0.7	1.4	0.9
Finance	37.9	3.2	1.1	0.7
Wholesale Trade	31.8	-0.4	-4.5	0.7
Other Services	28.6	-1.2	-0.4	0.8
Management	19.0	-1.1	1.6	1.1
Real Estate	15.5	3.2	2.7	0.8

# Industry Breakdown (4-Digit), Q3-2018



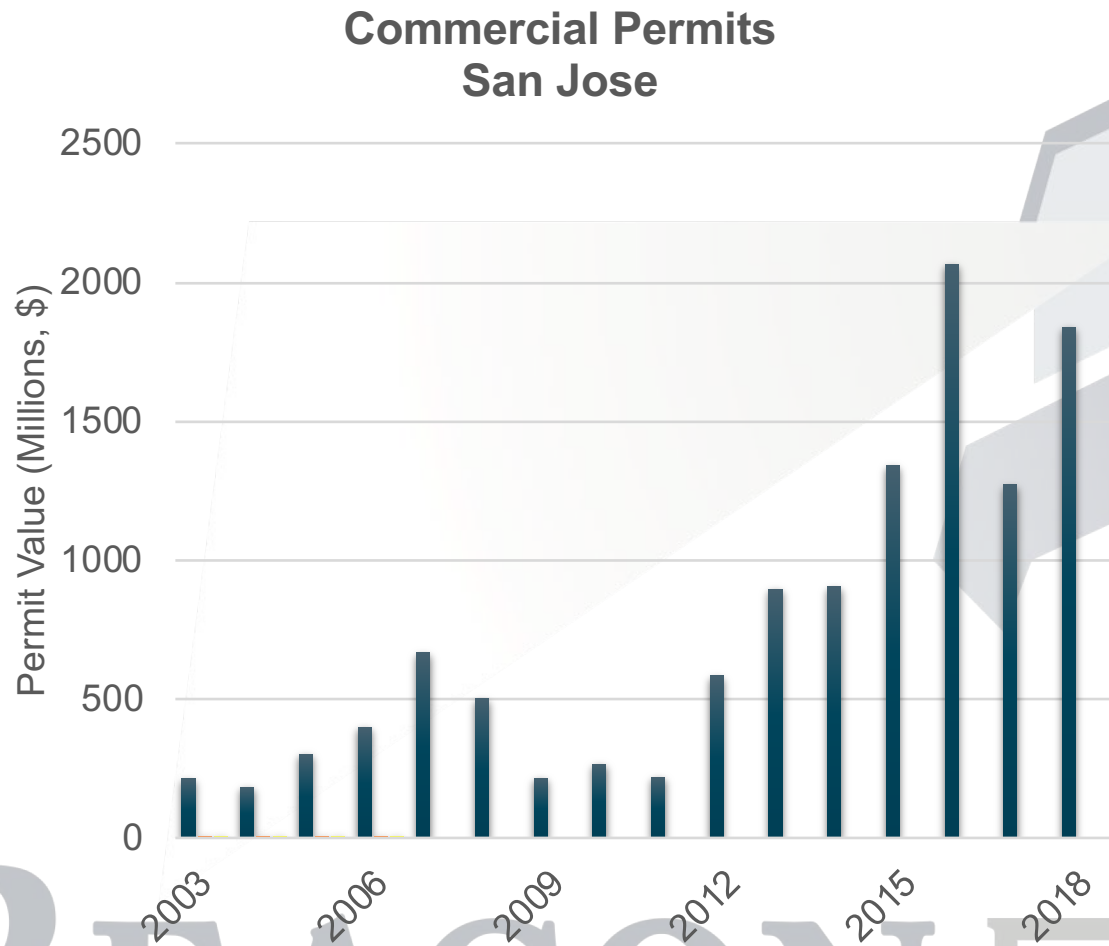
Industry	Employment	Annual Avg. Wage	Year over Year % Growth (Employment)	
			2017/18	2016/17
<b>Total Private</b>	<b>1,031,200</b>	<b>\$130,330</b>	<b>2.3%</b>	<b>2.1%</b>
Computer Systems Design	81,830	\$210,570	4.2%	6.9%
Restaurants/Other Eating Places	68,370	\$26,550	0.2%	1.9%
Computer/Peripheral Equipment	53,850	\$248,100	8.7%	-1.9%
Other information services	50,980	\$351,070	6.2%	17.8%
Semiconductor/Electronic mfg.	41,590	\$250,690	1.2%	1.0%
Individual/Family services	31,030	\$19,400	3.4%	8.3%
General Medical/Surgical hospitals	28,860	\$118,080	4.8%	2.1%
Software Publishers	24,180	\$323,070	11.6%	15.5%
Employment Services	22,810	\$61,120	0.9%	-8.0%
Management of Companies/Enterprises	19,180	\$245,770	37.6%	9.2%

# Venture Capital Trends



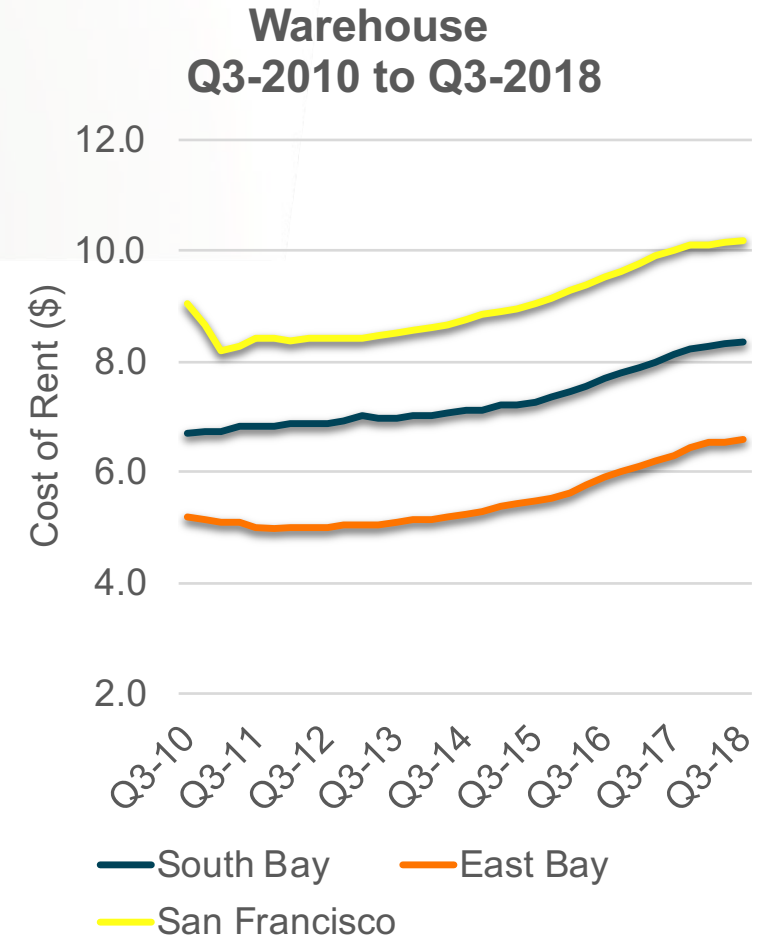
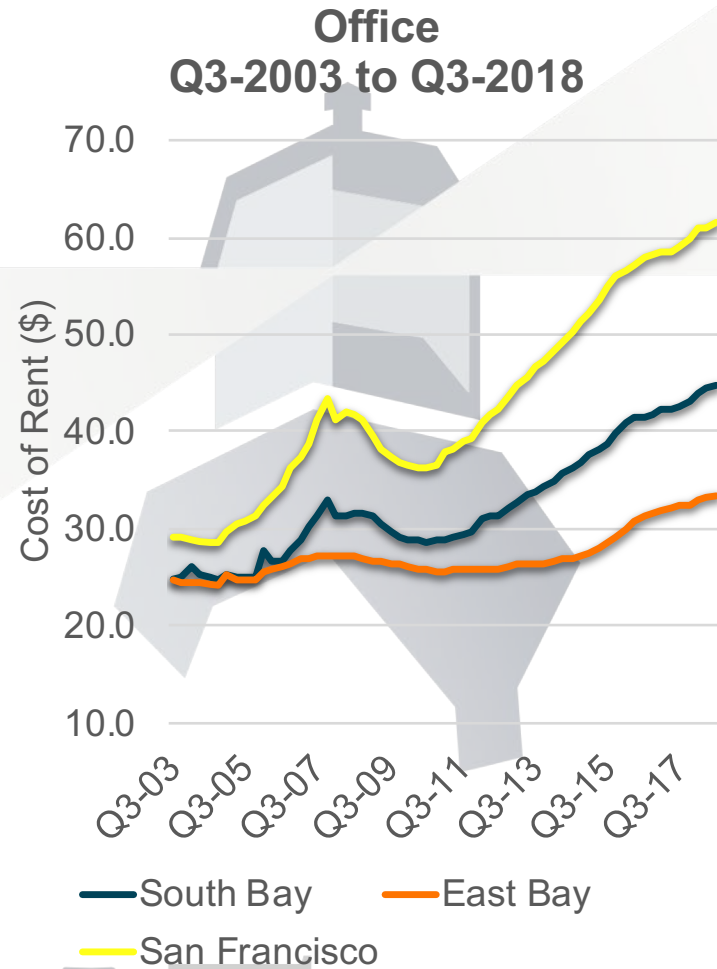
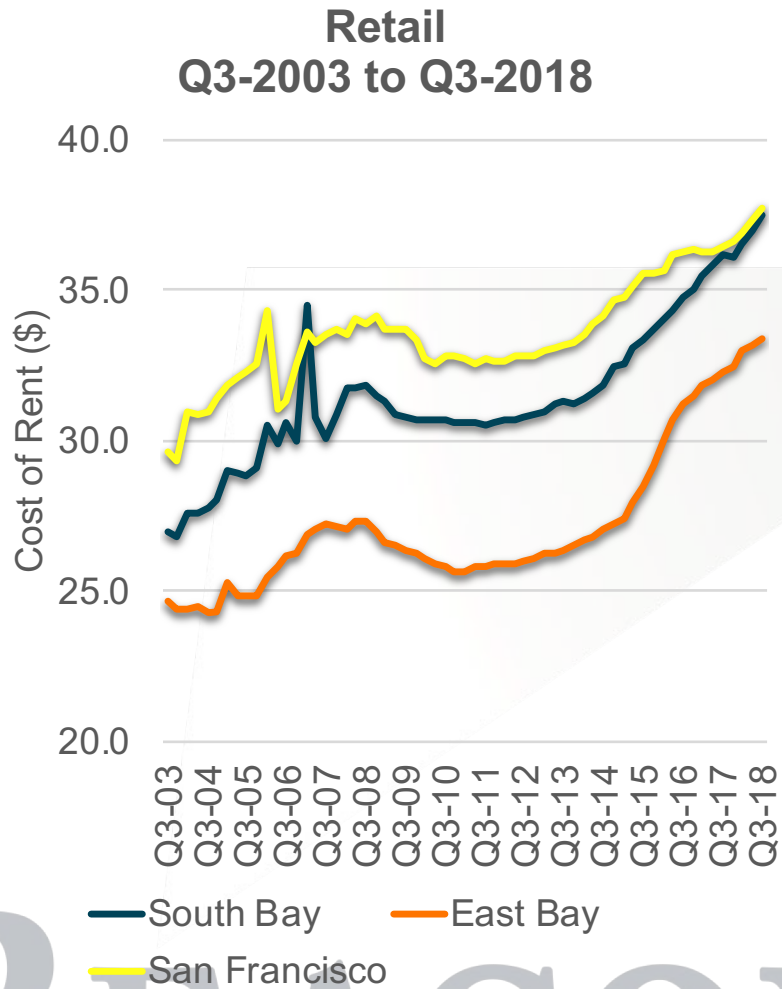


# Nonresidential Real Estate

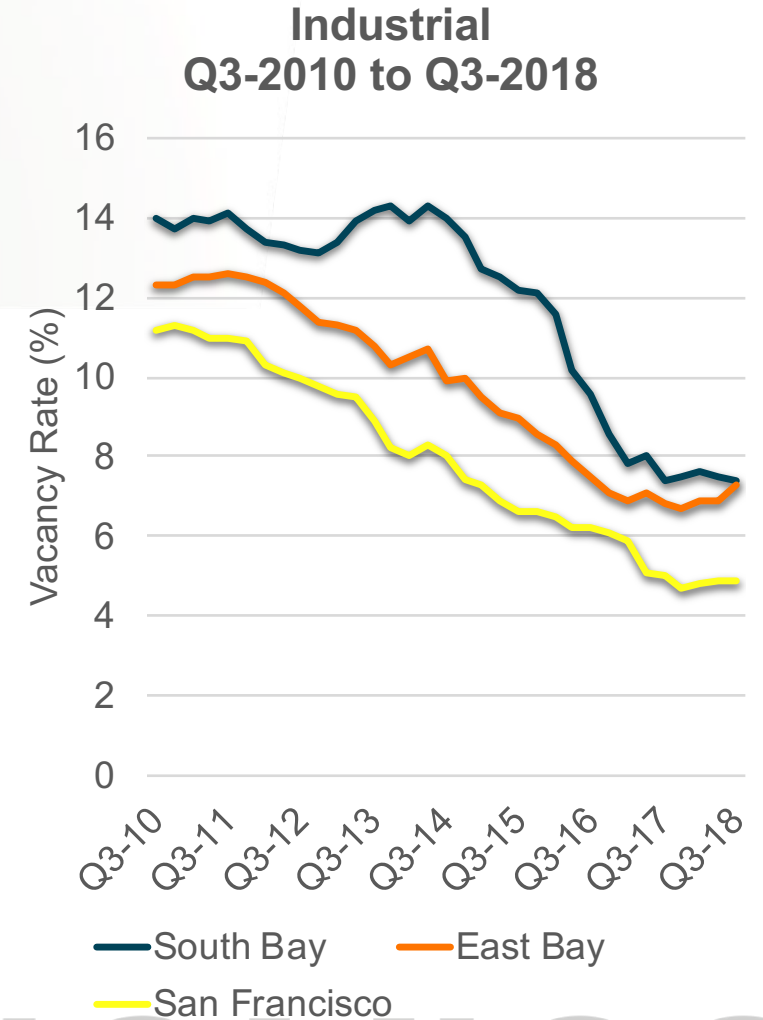
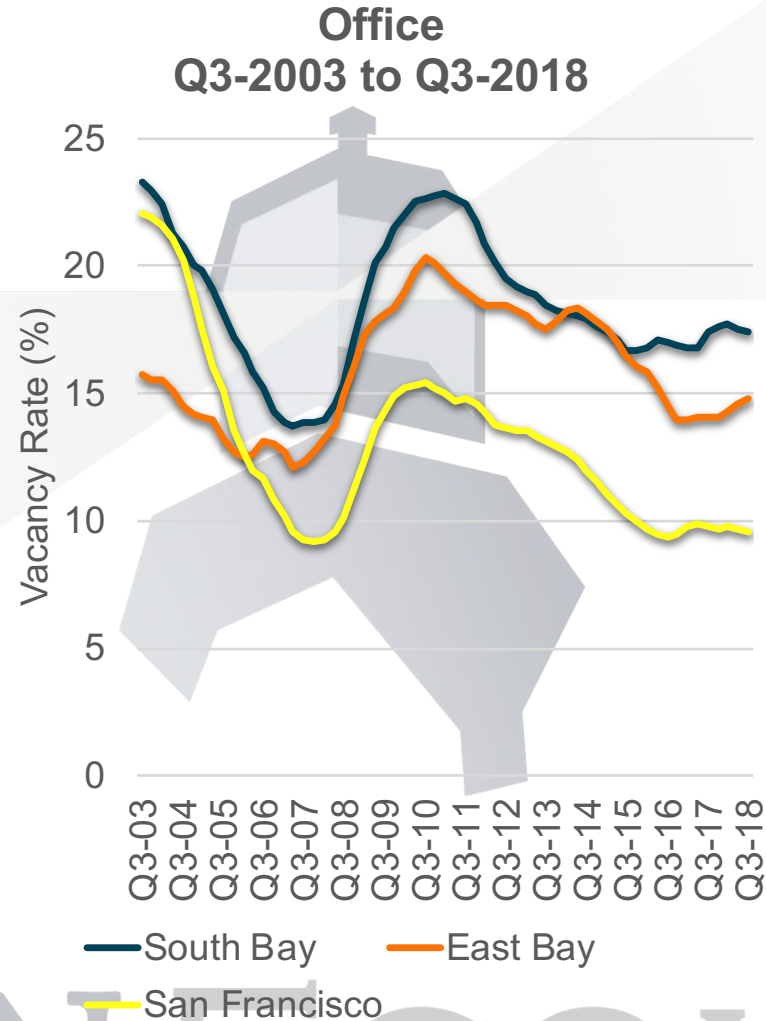
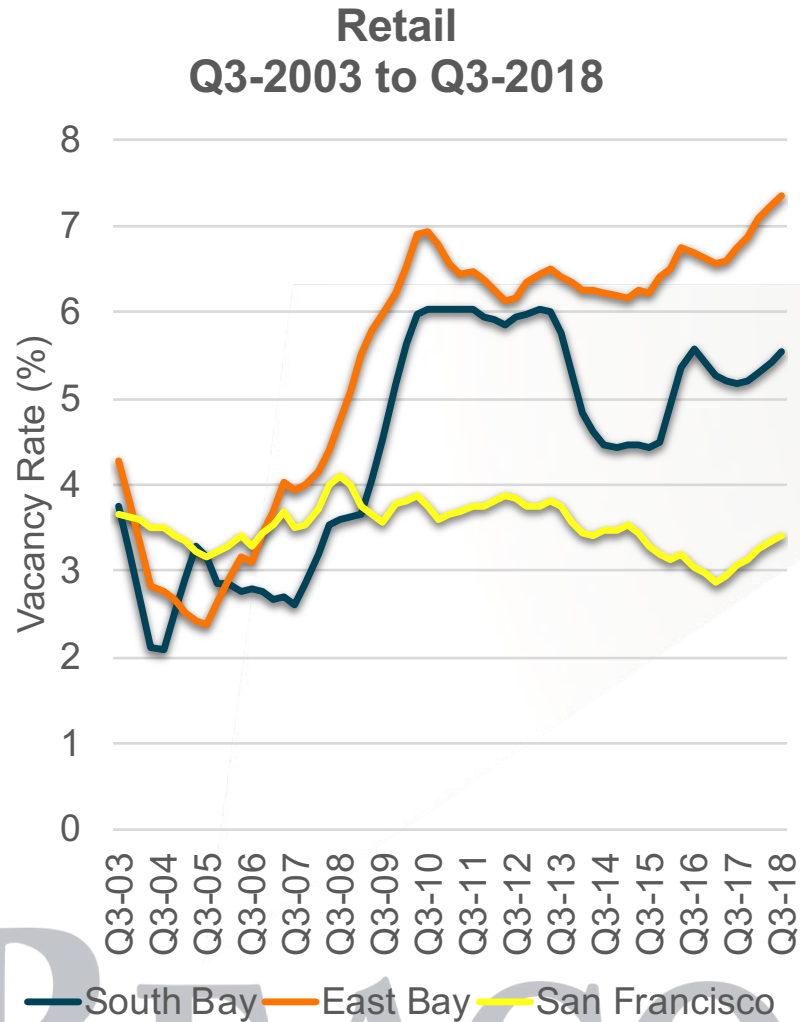


Permit Type	Permit Values (Millions, \$)	
	2018	2017
Alterations	2,038	1,771
Commercial	1,837	1,270
Office	934	264
Hotel	278	144
Industrial	33	119

# Rents



# Vacancy Rates



# State Job Growth



## California Non Farm Payroll Growth (yoy)

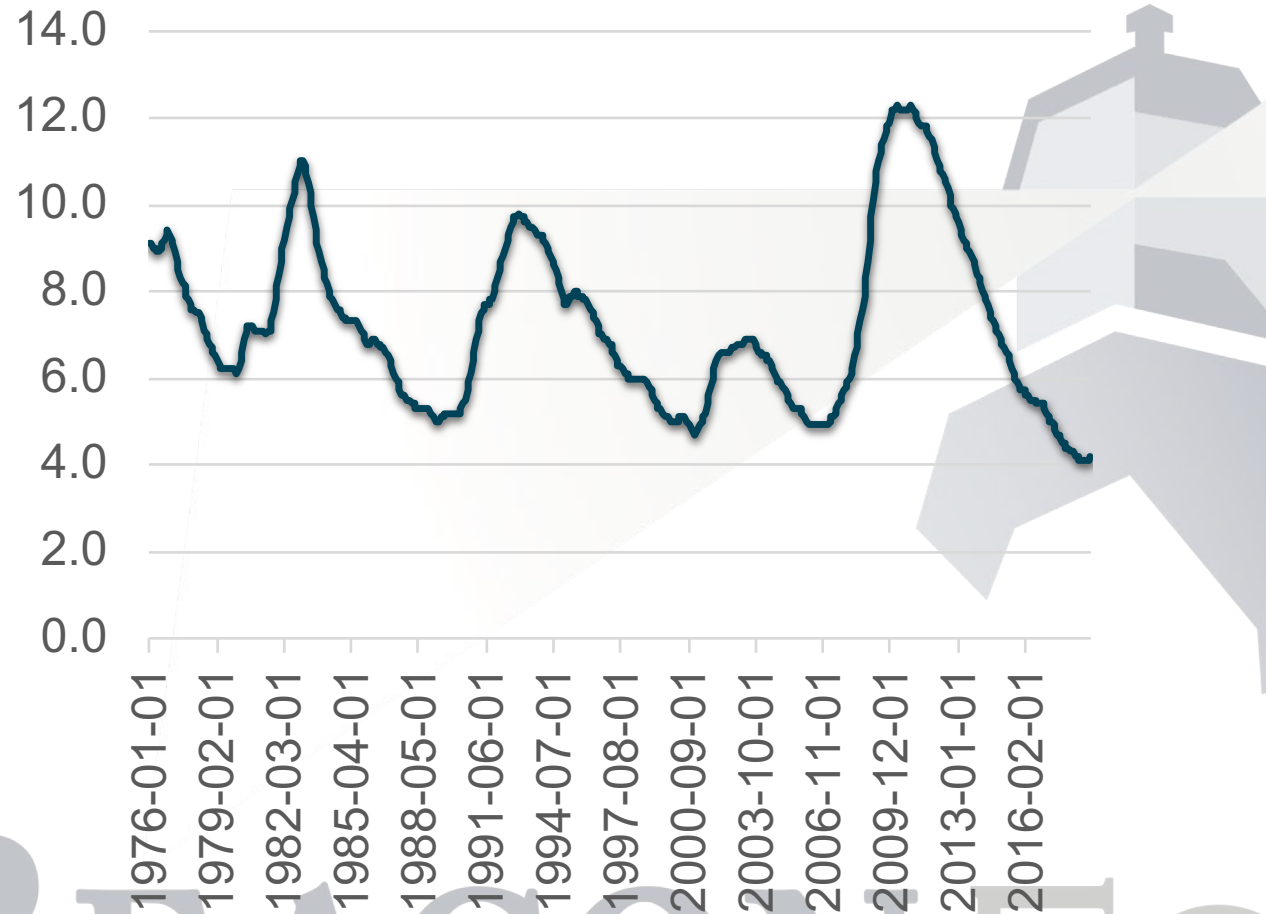


	Mar-19	18-19	17-18
San Francisco	1174.8	3.8%	2.4%
Fresno MSA	363.9	3.7%	2.8%
Sacramento	1017.7	2.8%	3.0%
<b>San Jose</b>	<b>1146.2</b>	<b>2.5%</b>	<b>1.7%</b>
Bakersfield MSA	270.8	2.3%	2.4%
Santa Barbara	187.2	2.2%	1.3%
Salinas MSA	146.1	2.1%	4.5%
Oakland	1194.5	1.5%	1.9%
Inland Empire	1512.5	1.2%	3.8%
San Diego	1497.4	1.2%	2.5%
Los Angeles	4532.7	0.7%	1.8%
Orange	1657.2	0.6%	2.6%
Ventura	310.4	0.6%	1.9%
Modesto MSA	179.1	0.5%	2.8%
Stockton MSA	241.1	0.4%	3.8%
Santa Rosa MSA	208.3	0.1%	1.4%

# California Labor Markets



## California Unemployment Rate



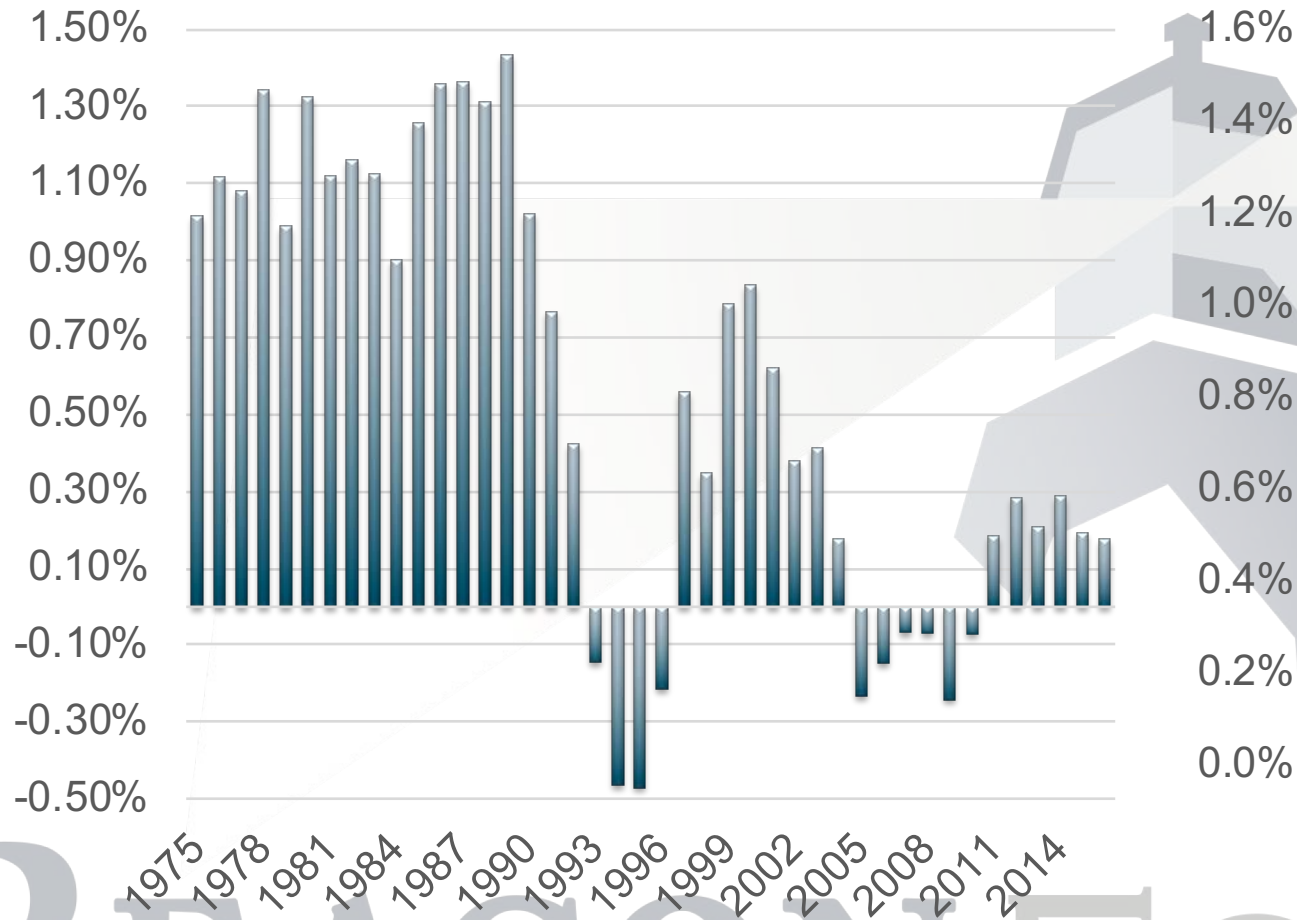
Chico	Fresno
Ventura	San Jose
Merced	East Bay (MD)
Redding	Sacramento
Stockton	Vallejo
Inland Empire	Hanford
California	Salinas
Yuba	San Francisco (MD)
Modesto	Los Angeles (MD)



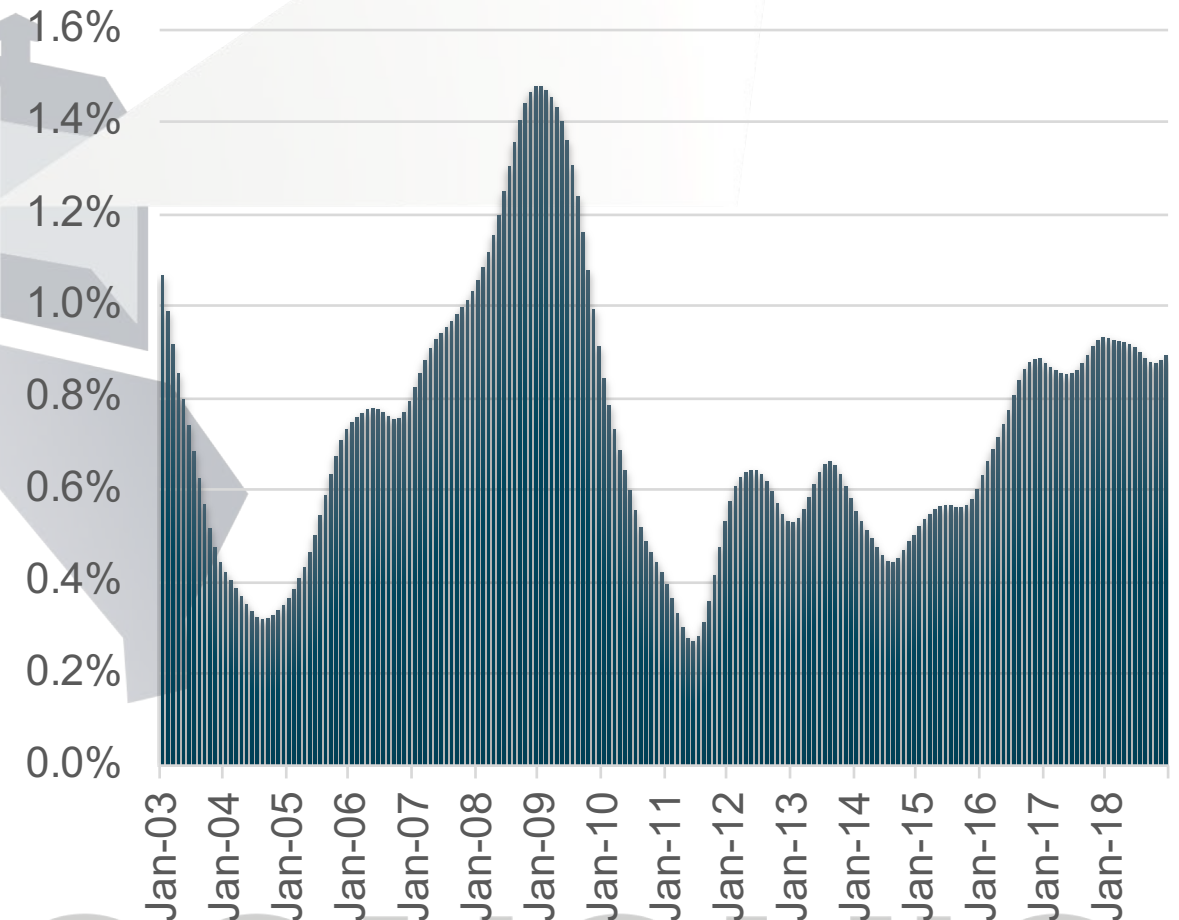
# California Labor Markets



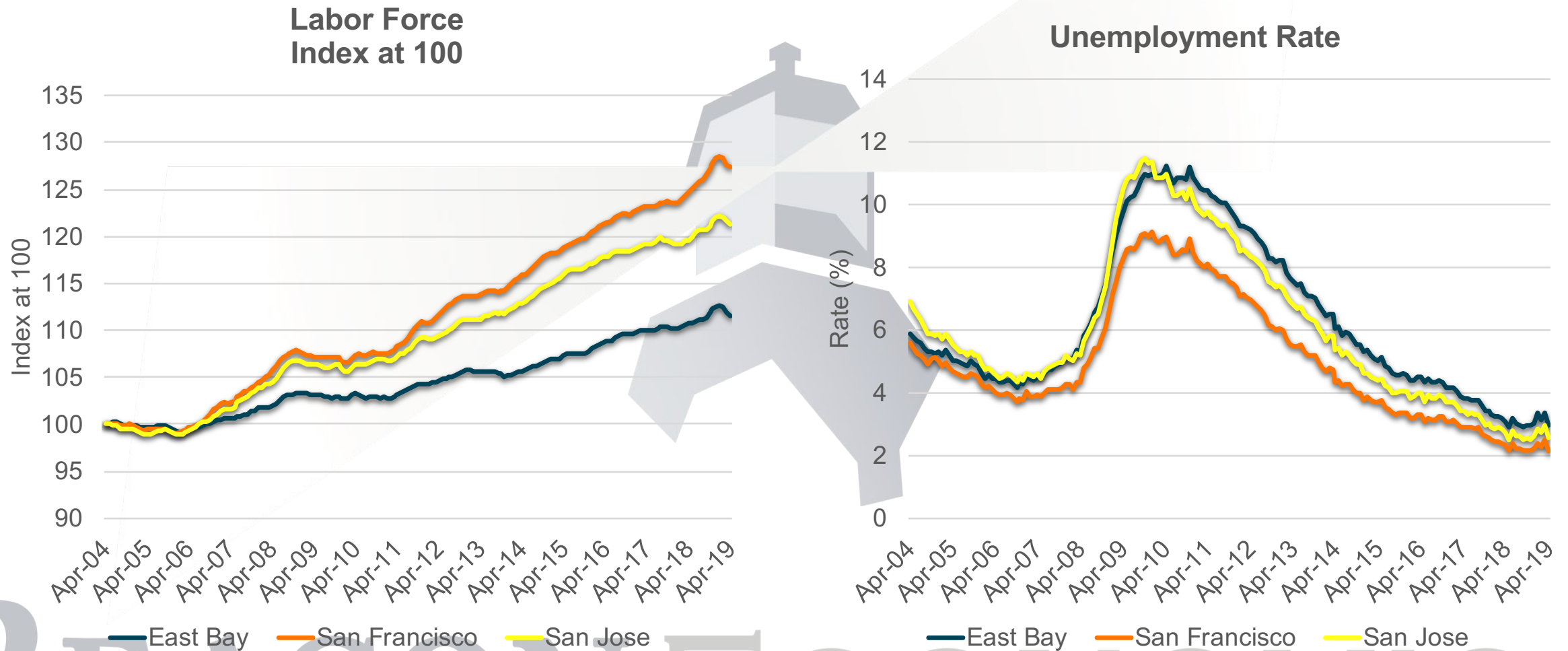
## Net Migration as a % of Pop



## California Labor Force Growth (LR)



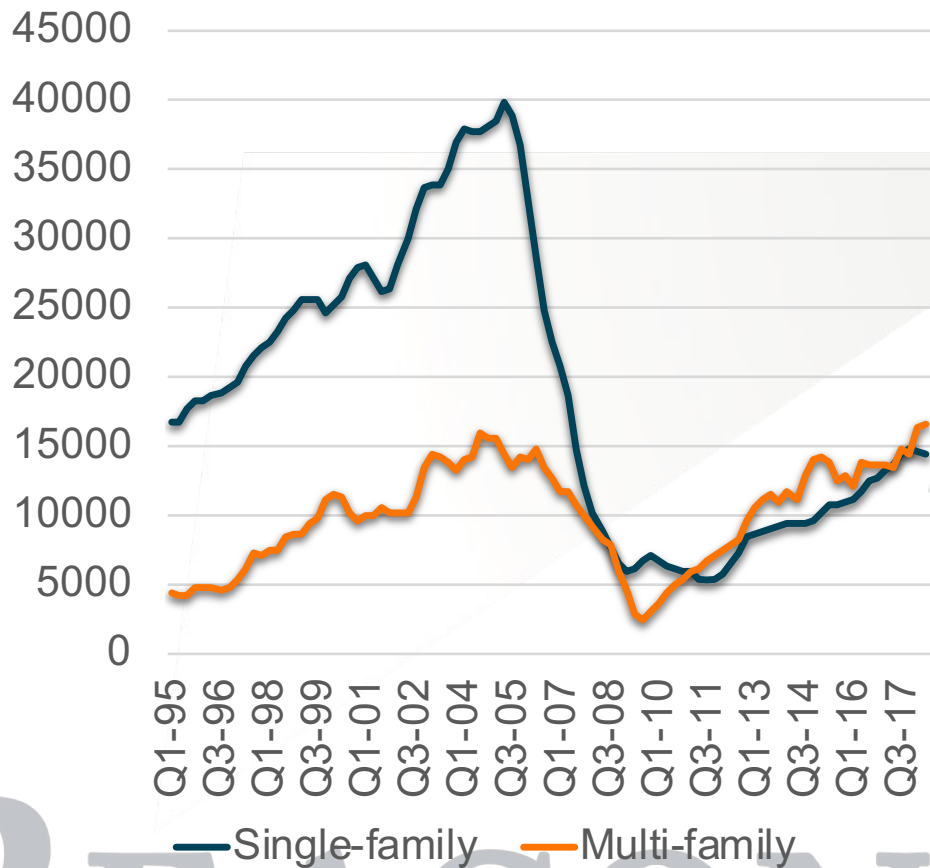
# Labor Force and Unemployment



# New Housing Supply



New Home Permits



## How Much Housing Needed?

Housing Needed to maintain  
2% State Job Growth

### Method 1

Total	722,022
Per Year	206,674
Current	111,185
Shortfall	100,489

### Method 2

Total	911,001
Per Year	263,667
Current	111,185
Shortfall	157,482

## Backlog

Avg Growth	291
Avg Vacancy	676
<b>Total</b>	<b>967</b>

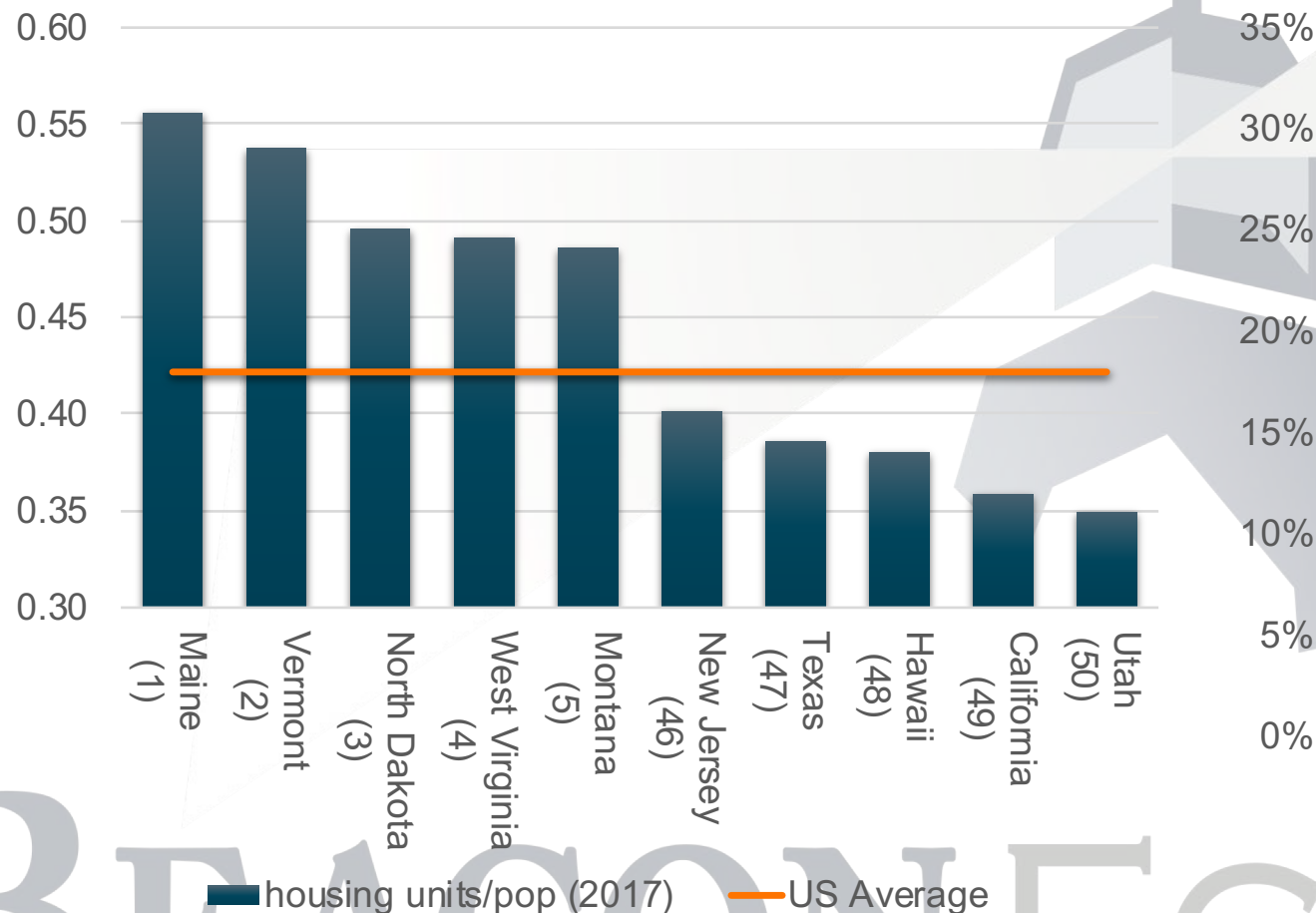
High Growth	1,408
Avg Vacancy	676
<b>Total</b>	<b>2,084</b>

Texas Growth	1,849
Avg Vacancy	676
<b>Total</b>	<b>2,525</b>

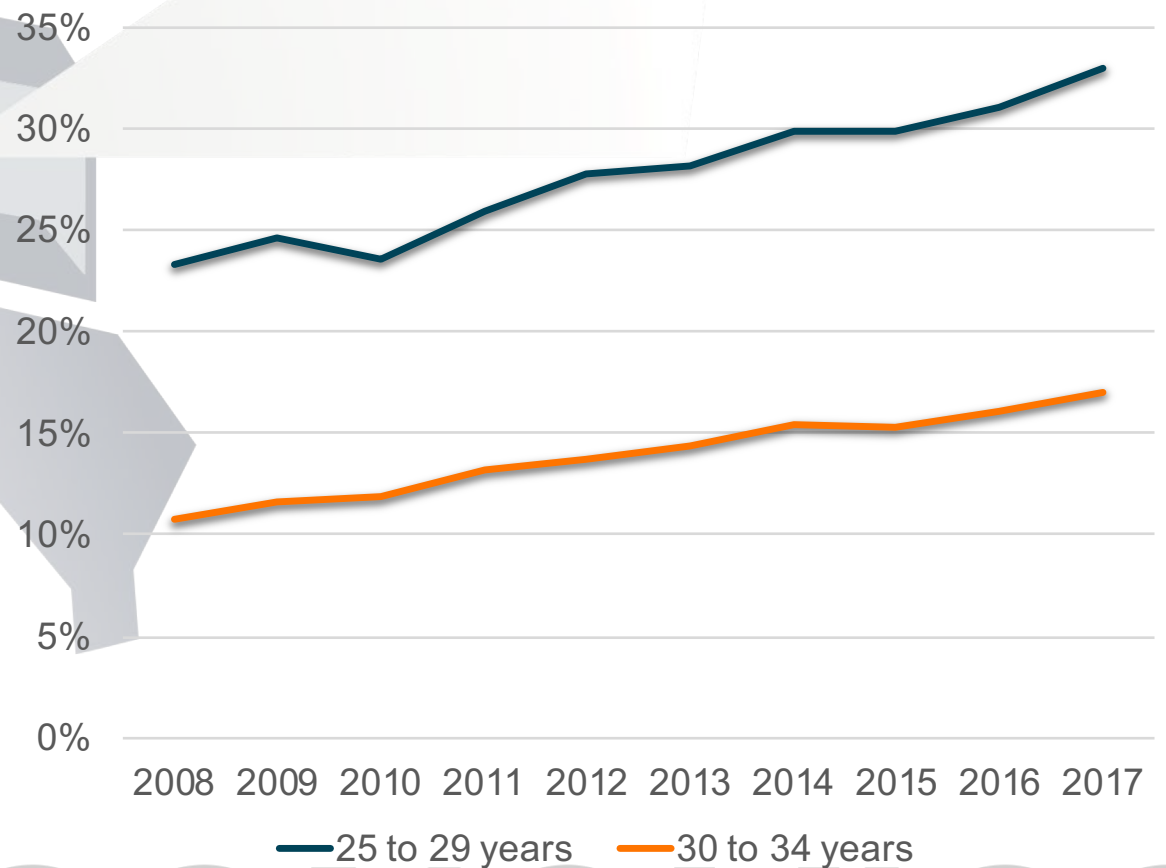
# California = 2<sup>nd</sup> Lowest Housing Unit to Population Ratio



Housing Units per Capita (2017) - Top 5 and Bottom 5 States)



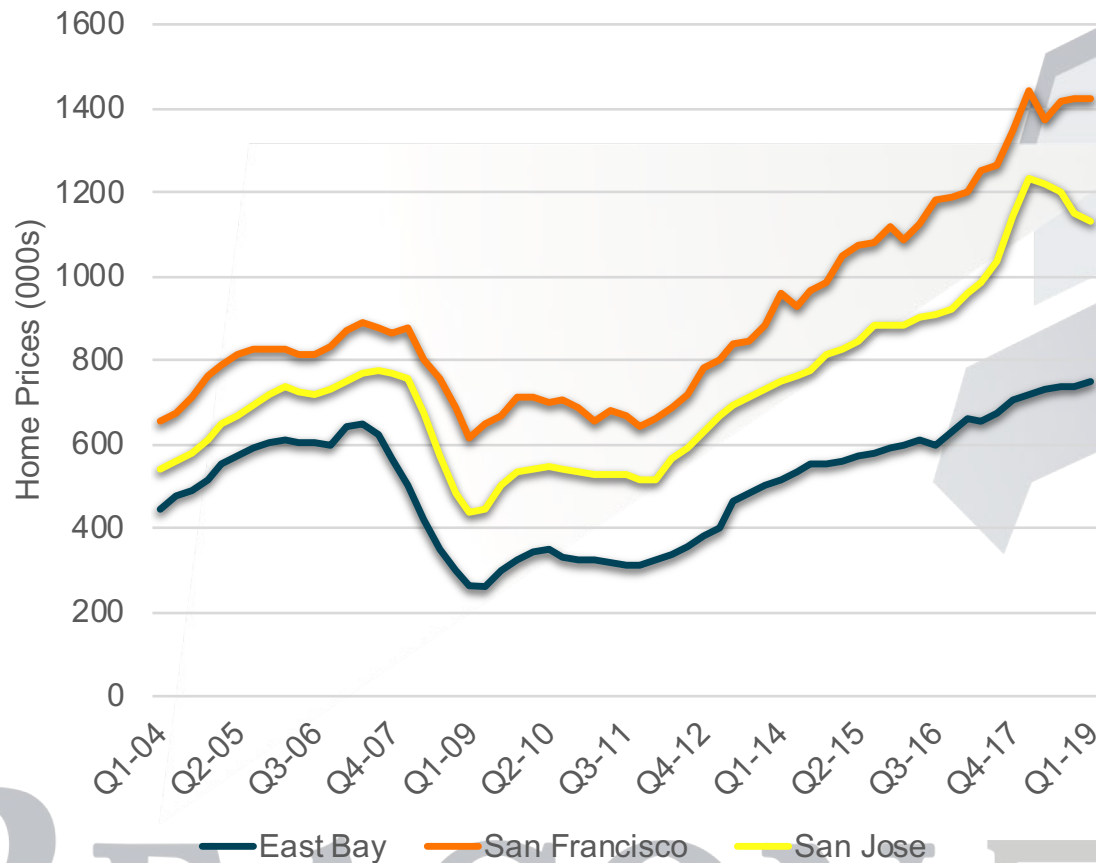
Percent of Adults by Age Group Living With Parents - California



# Residential Real Estate

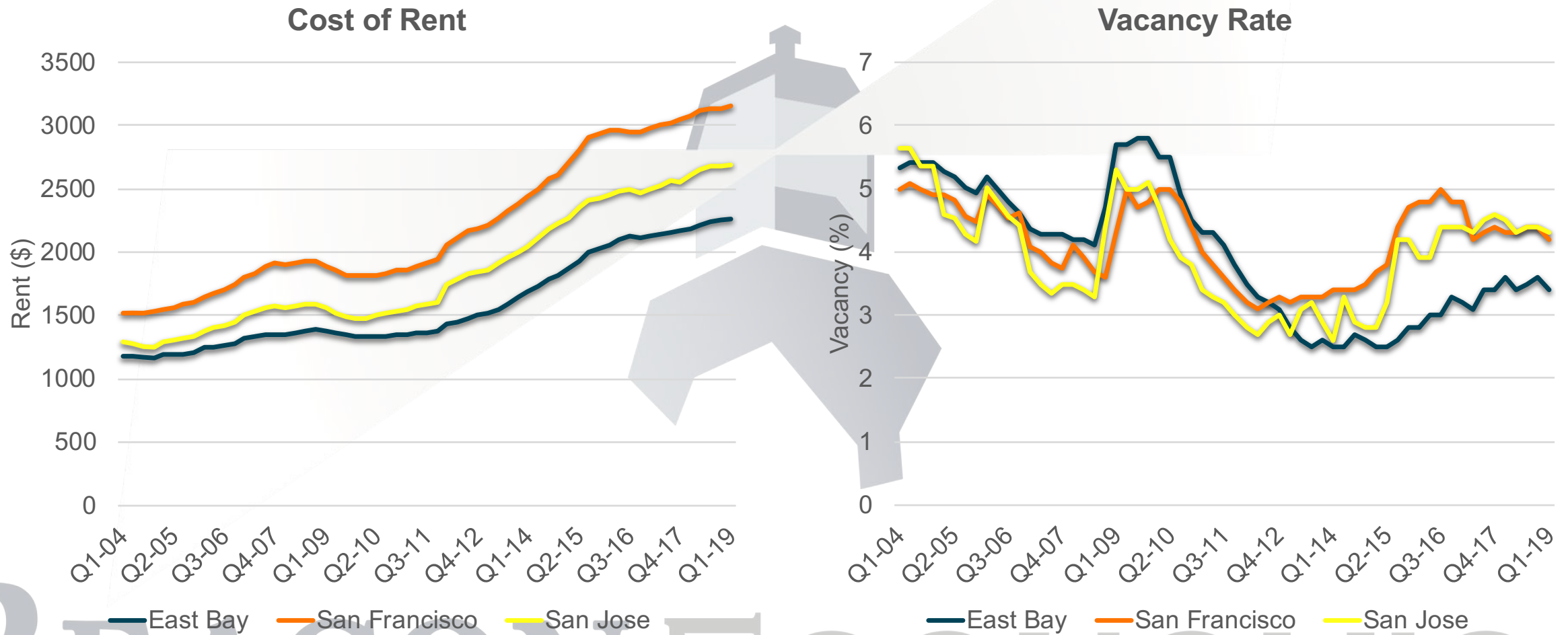


## Median Home Prices



City	Q1-2019 (Millions, \$)	Year over Year % Growth
Sunnyvale	1.7	-15.6%
Santa Clara	1.3	-13.6%
San Jose	1.0	-6.4%
San Juan Bautista	0.7	6.1%
Hollister	0.6	6.5%

# Apartments

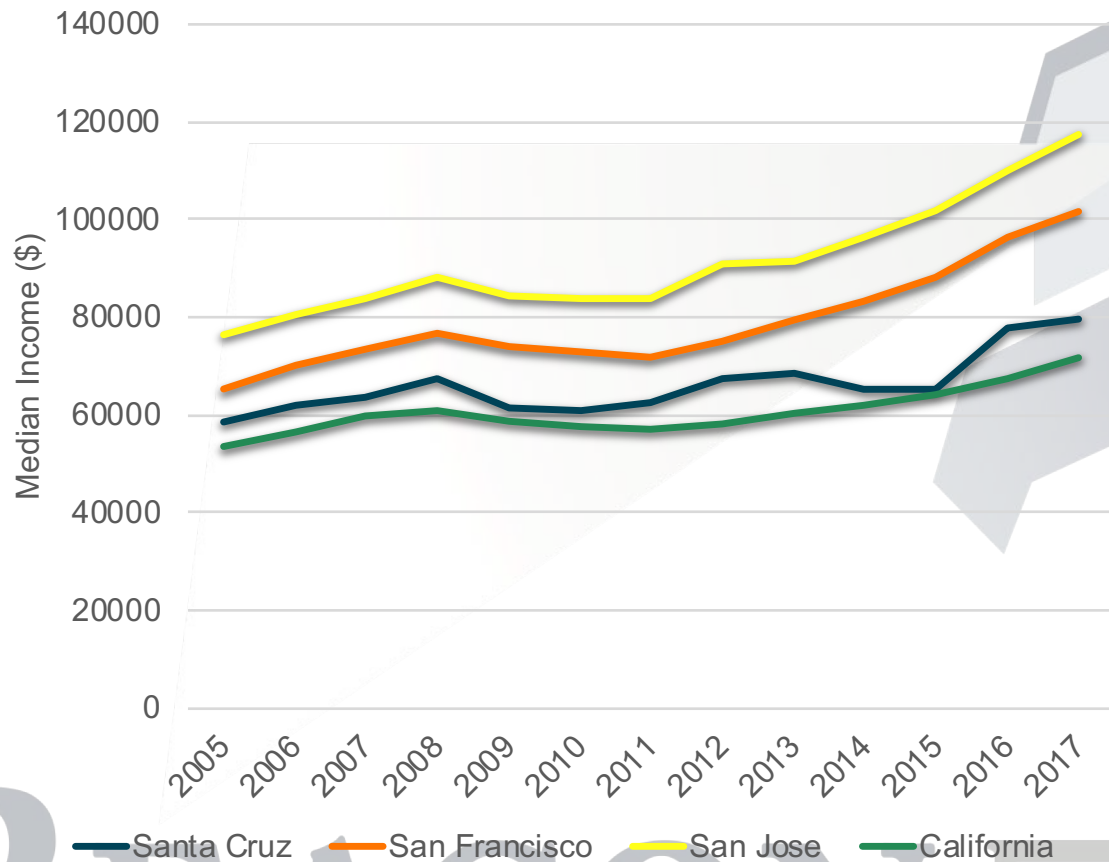




# Household Income and Median Earnings

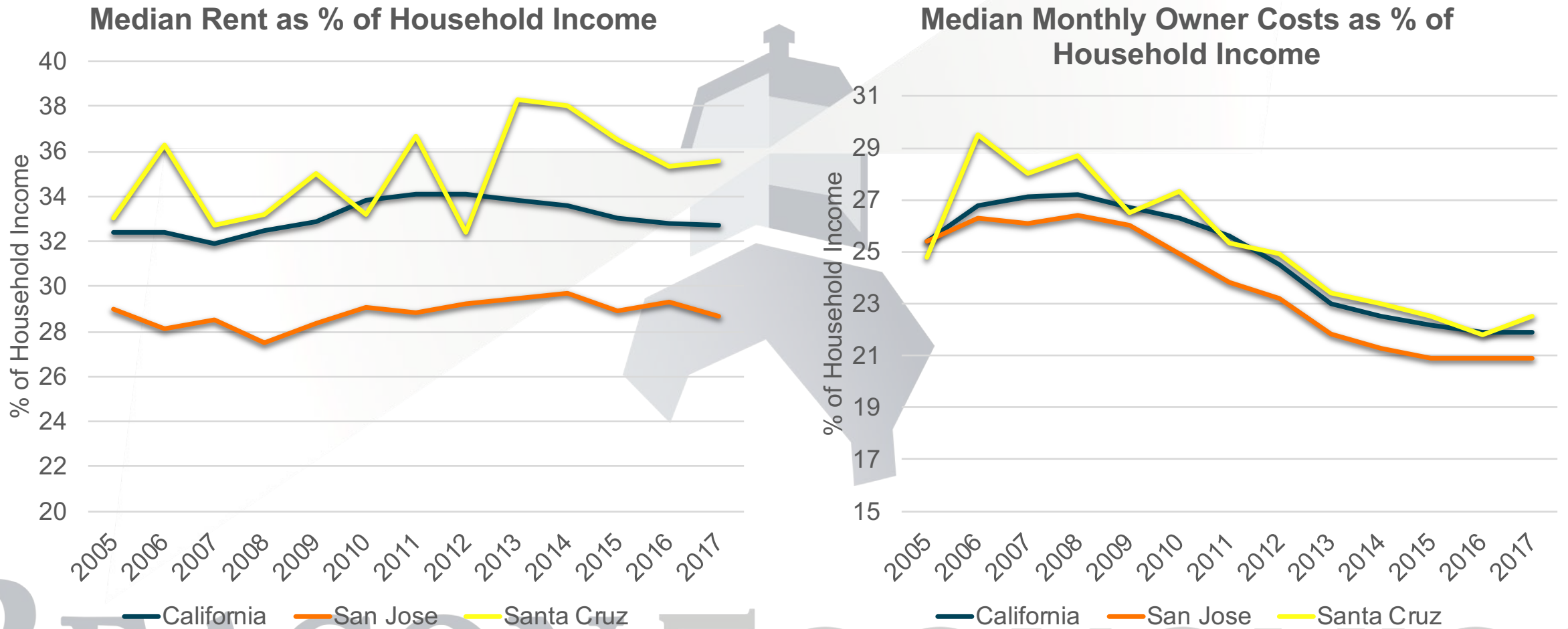


## Median Household Income

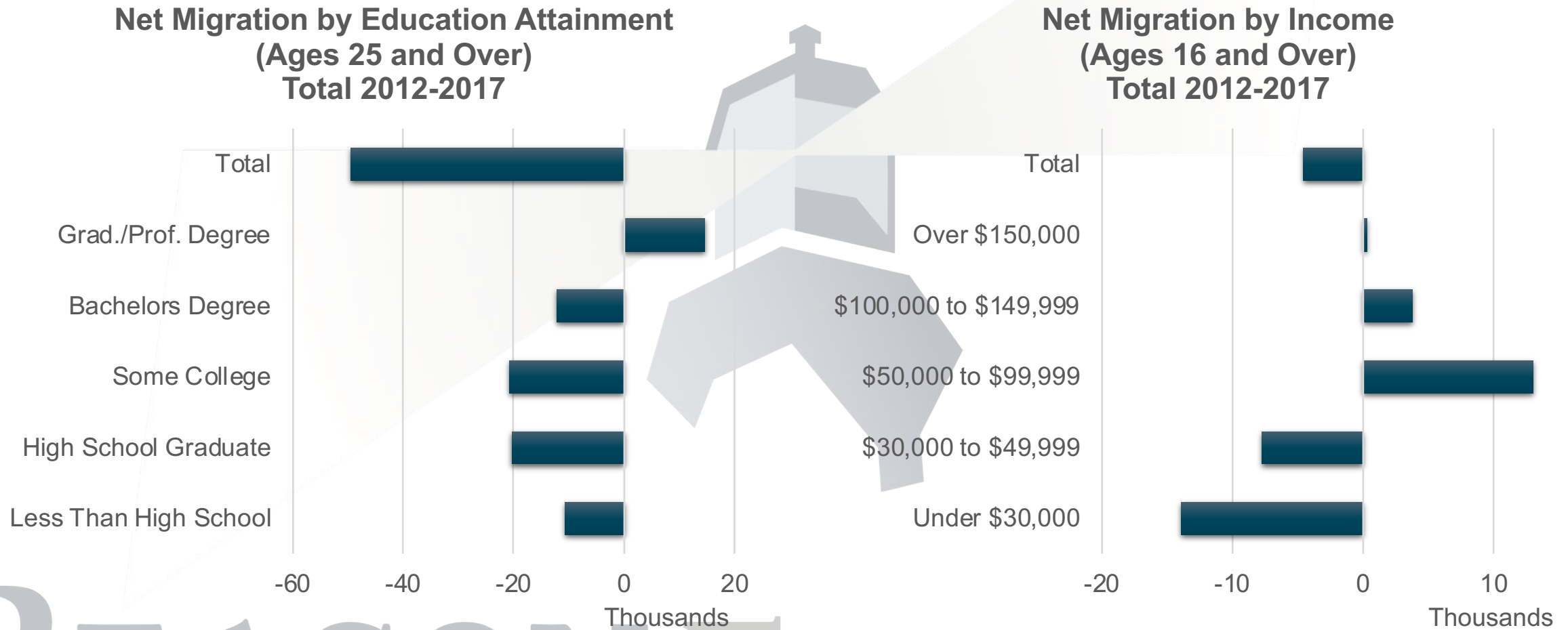


Education Level	2017 Earnings		5-Year % Change	
	San Jose	CA	San Jose	CA
Total	60,465	41,122	18.5%	14.2%
Less than HS	27,371	22,648	32.0%	21.3%
HS Grad	34,653	30,918	18.8%	14.8%
Some College	45,659	38,296	12.6%	7.8%
Bachelors	81,401	60,940	14.6%	14.9%
Grad Degree	117,146	85,555	15.7%	11.6%

# Housing Burden



# Migration Patterns – Santa Clara County

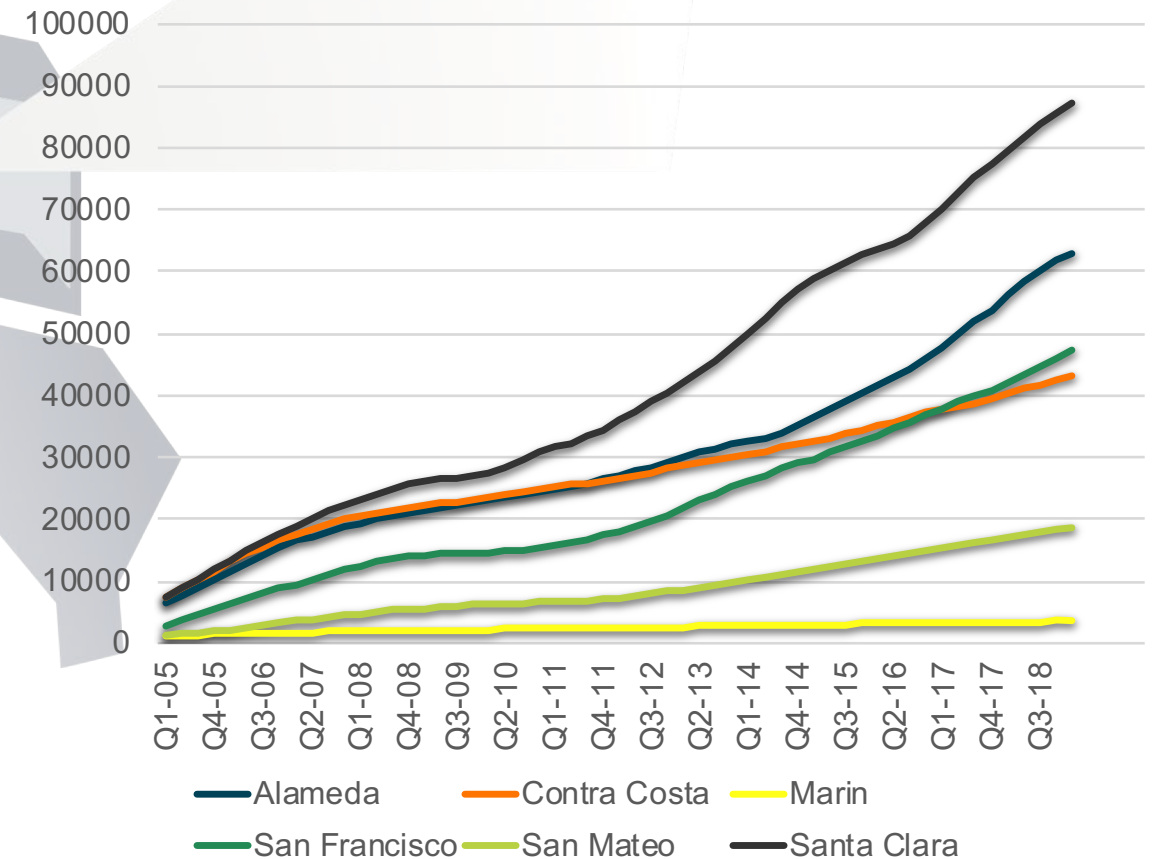


# Labor Force and Housing



City/County	2018 Housing Units	5-Year % Growth
<b>Santa Clara County</b>	<b>667,970</b>	<b>4.5%</b>
<b>San Mateo County</b>	<b>278,044</b>	<b>2.0%</b>
<b>San Benito County</b>	<b>18,935</b>	<b>4.7%</b>
San Jose	335,164	4.9%
Sunnyvale	59,242	4.1%
Santa Clara	48,144	5.4%
Mountain View	35,841	5.0%
Palo Alto	29,189	2.6%
Milipitas	21,643	8.6%
Cupertino	21,031	0.0%
Campbell	17,868	4.9%

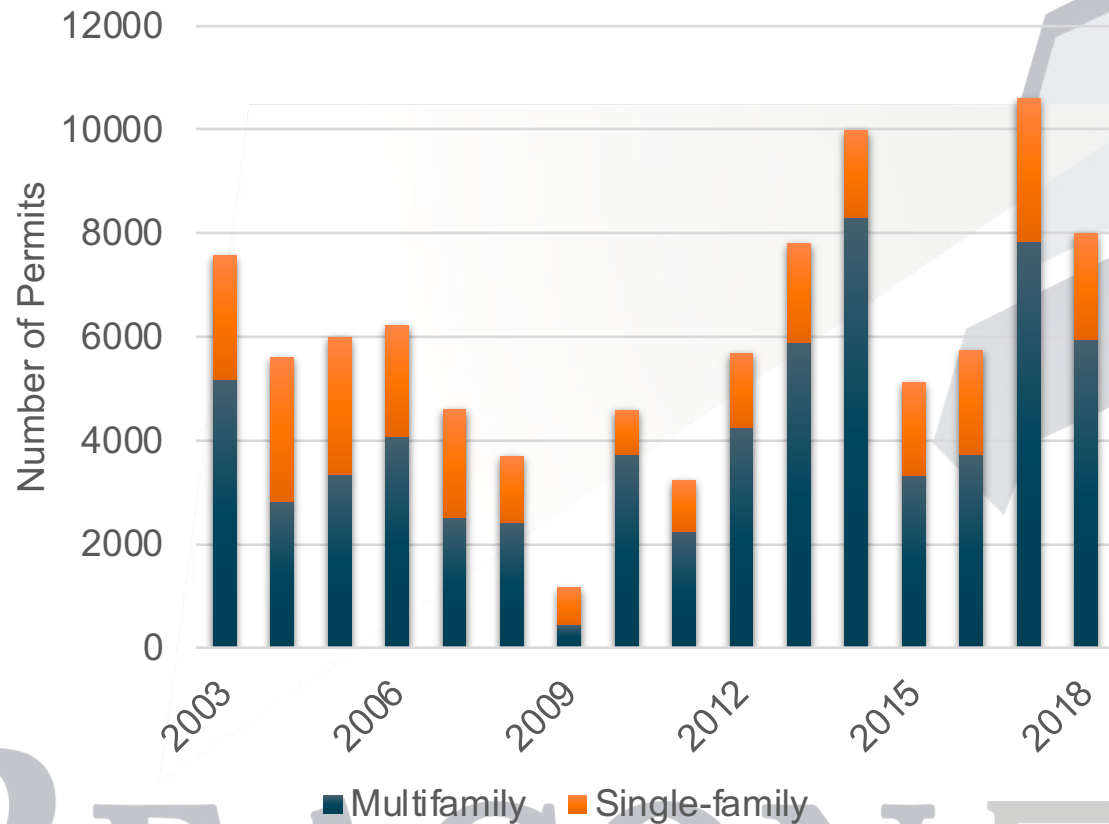
## Cumulative Housing Permits



# Residential Real Estate



**Residential Permits  
San Jose**



	Payroll	Permits	Ratio
East Bay MD	111700	36866	3.03
San Fran MD	144700	24390	5.93
San Jose MSA	112800	28282	3.99
	LF	Permits	Ratio
East Bay MD	47400	36866	1.29
San Fran MD	66500	24390	2.73
San Jose MSA	43000	28282	1.52
East Bay MD	2.36		
San Fran MD	2.18		
San Jose MSA	2.62		

# Commuters



From Santa Clara	2017	5-Year Change
San Mateo	51,500	7,870
Alameda	41,770	5,350
San Francisco	28,230	17,740
Santa Cruz	4,180	-10
Contra Costa	2,370	-2,480
Out of State	2,300	-160
Los Angeles	840	-320
San Joaquin	740	260
San Bernardino	460	40

To Santa Clara	2017	5-Year Change
Alameda	80,790	5,490
San Mateo	65,020	10,830
San Francisco	26,950	1,500
Santa Cruz	18,540	-2,220
Contra Costa	17,460	3,560
San Joaquin	11,590	3,430
Solano	4,070	2,560
Merced	4,010	200
Monterey	3,800	-1,610

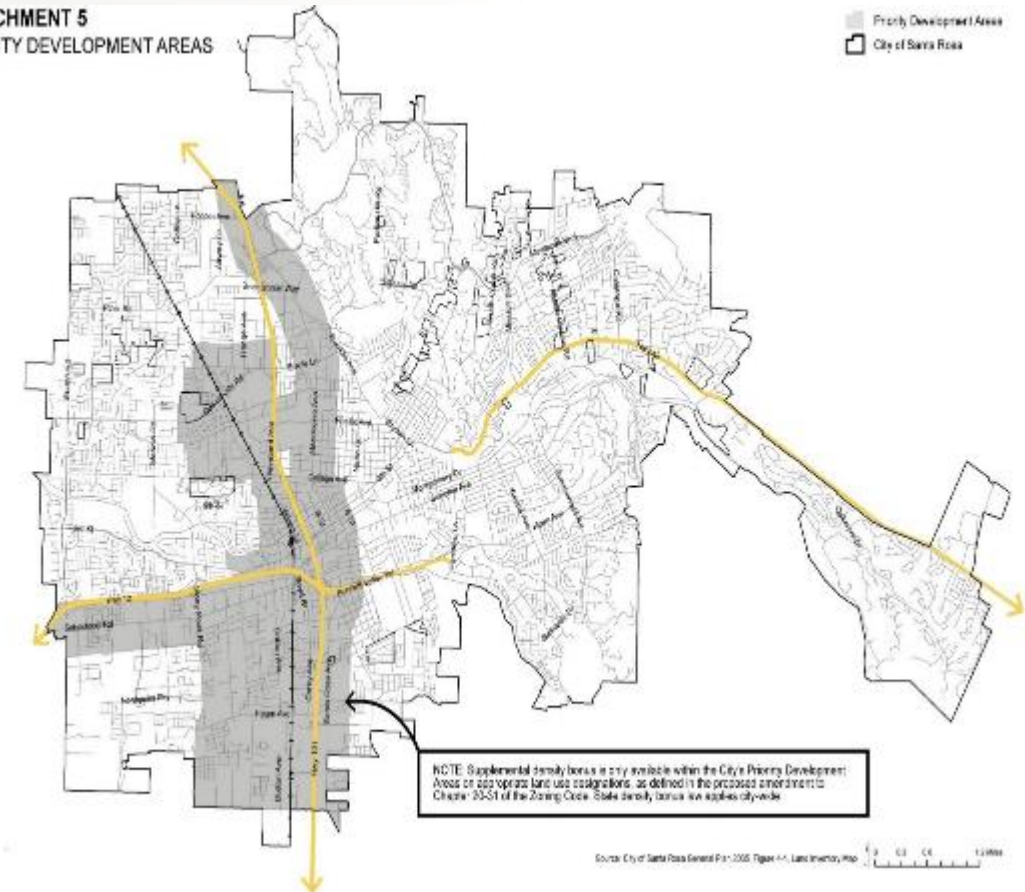


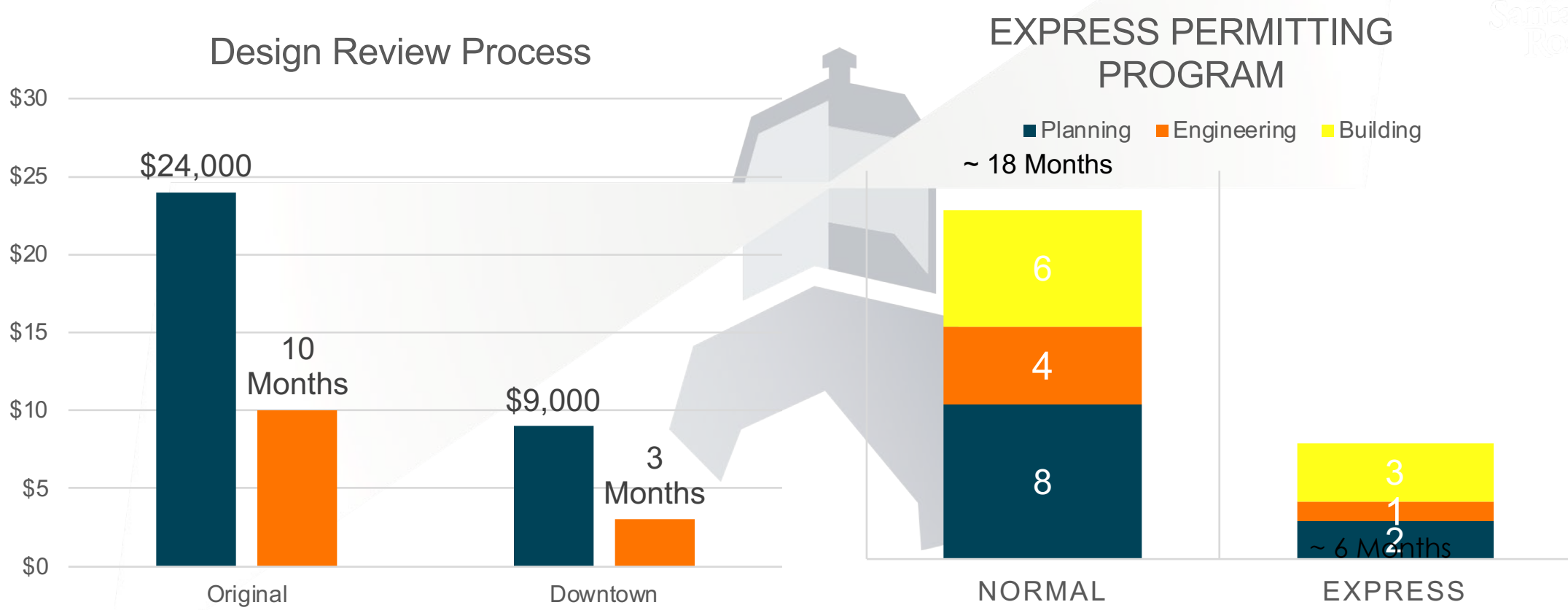
# SUPPLEMENTAL DENSITY BONUS

## Allow up to 100% Bonus

- Project Eligibility Requirements:
  - ✓ Achieves 35% State Bonus and
  - ✓ Located within a Priority Development Area or Station Area and
  - ✓ Located within appropriate General Plan Land Use Designation
- Density above 35% granted for:
  - ✓ Affordable Housing or
  - ✓ Affordable Housing and Community Benefits

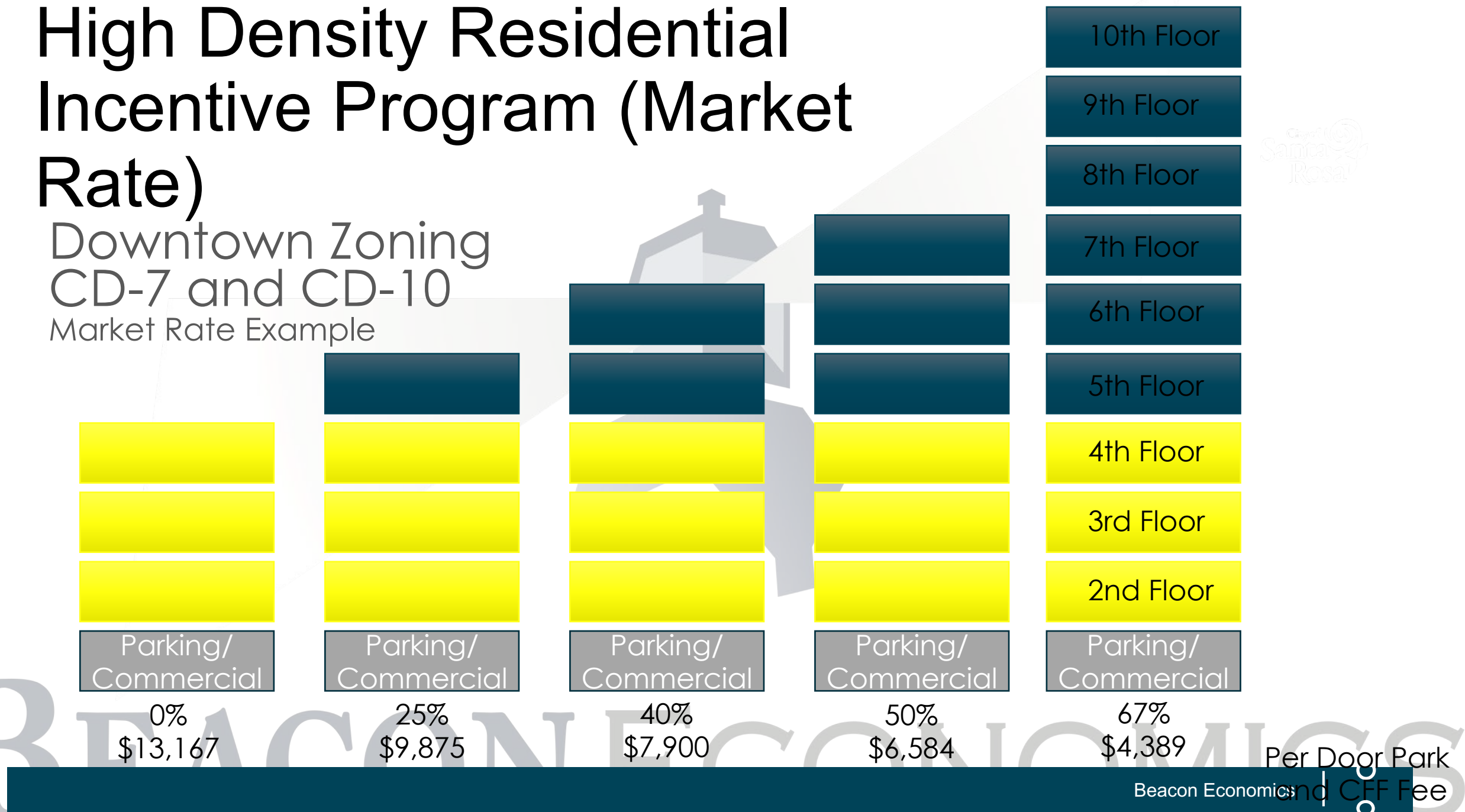
ATTACHMENT 5  
PRIORITY DEVELOPMENT AREAS





# High Density Residential Incentive Program (Market Rate)

Downtown Zoning  
CD-7 and CD-10  
Market Rate Example



# Why the problem? Incentives



	Hypothetical City		Full Service - with 6% UUT	
	Single-family Residential	Multi-family Residential	Industrial	Retail
CITY EXPENDITURES				
Police Department	9,000	42,750	4,950	14,063
Fire Department	6,040	28,690	3,322	9,438
Public Works	1,200	5,700	1,320	3,750
Planning & Community Devlpmt	800	3,800	880	2,500
Parks & Community Services	2,600	12,350	429	1,219
Library	1,500	7,125	n/a	n/a
General Government	2,540	12,065	1,298	3,688
TOTAL EXPENDITURES	\$ 23,680	\$ 112,480	\$ 12,199	\$ 34,656
NET	\$ 11,520	\$ (37,258)	\$ 12,704	\$ 81,465

# The Big Picture



## ■ Positives: It will be a good year

- GDP Growth Outlook for 2019: 2%+
- Labor markets to remain tight
- Rising wages to put pressure on profits
- Exports, business investment continue to grow
- Inflation to remain constrained
- Interest Rates Still Low
- Lending constrained, but commercial markets steady
- Debt Levels still safe
- Where people move (want to move) will drive regional growth

## ■ Negatives: Problems Growing

- Labor shortages will be an issue
- Local housing supply tightening
- Will the Fed continue to tighten, invert the yield curve?
- Equity markets behaving oddly
- Federal deficit widening sharply
- Bank lending still constrained
- Political uncertainty to dominate headlines
- Critical Policy Issues Remain Undiscussed
- Miserabilism warping our sense or reality

# The Great Disconnect



- What we are worried about

The Number of Jobs  
Who pays for Healthcare  
Tax Levels  
Income Inequality  
Funded Govt. Liabilities  
Business Investment  
Inflation  
The Cost of Housing

- What we should be worried about

The Number of Workers  
What are we paying for?  
Tax Structure  
Wealth Inequality  
Unfunded Govt. Liabilities  
A Lack of Public Investment  
Slow Bank Lending  
The Supply of Housing



# What can Beacon do for you?



## *Connect with us.*

To view again or download this presentation and for further information, go to: **www.BeaconEcon.com**

## *Continue the conversation.*

Contact **Dr. Chris Thornberg** directly at **chris@beaconecon.com** or **310.571.3399**

## *Let's discuss your goals and needs.*

Beacon has **6 Practice Areas** covering a range of services and products.

## *Our 6 Practice Areas*



*Housing, Land  
Use, & Real Estate  
Advisory*



*Sustainable  
Growth and  
Development*



*Economic &  
Revenue  
Forecasting*



*Economic, Fiscal  
and Social Impact  
Analysis*



*Regional and Sub-  
Regional Analysis*



*Litigation and  
Testimony*

# Portfolio Spotlight



## *Regional and Sub-Regional Analysis*

Beacon conducts analysis at an international, national, state, county, and city level -- and even down to the zip code, pending data availability. We analyze data on **Employment, Industry, Real Estate, and Consumption.**

### *Past Clients:*

- City and County of Los Angeles
- City and County of Riverside
- East Bay Economic Dev. Agency



## *Impact (Economic, Fiscal, Social) & EB5 Analysis*

Beacon has evaluated the impact of entities **like universities, music festivals, infrastructure projects, and real estate development projects.** Beacon has also conducted impact analyses that combine more than one of the above like that of **L.A's Olympic bid.**

### *Past Clients:*

- University of Southern California
- Metropolitan Water District
- LA 2024 Olympic Bid Committee



## *Sustainable Growth & Development*

Beacon conducts industry and policy analysis on topics like **green innovation, tech and workforce development, and industry sector strategies.** Beacon has strong in-house expertise around **housing policy** and **economic development** support.

### *Past Clients:*

- California Apartment Association
- Long Beach Downtown Dev. Corp.
- Santa Cruz Workforce Dev. Board



## *Housing, Land Use, & Real Estate Advisory*



## *Economic & revenue forecasting*



## *Litigation and testimony*



Thank You

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