

# The Economic Outlook

Focus on California

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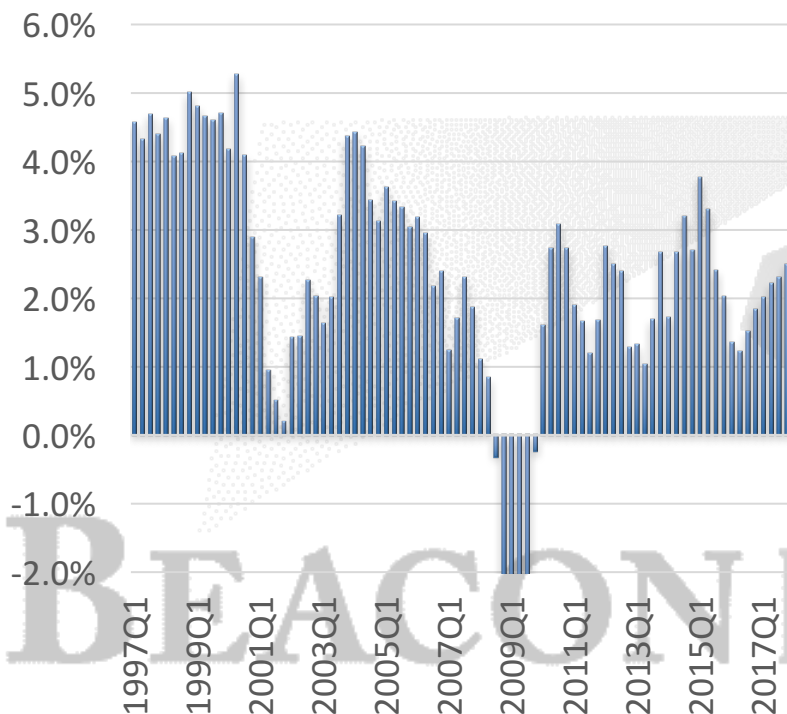
CON ECONOMICS

# Good, Bad, Ugly

- **The Good: Meet the new economy, same as the old economy**
  - 2017 solid year for growth: looked a lot like 2013-2014
  - 2018 likely to be better: good momentum with fiscal stimulus
  - Still a low chance of recession in next 24 months
- **The Bad: Economic Brakes / Signs of New Imbalances**
  - Labor shortage Issues (particularly in California)
  - Aggressive Fed: rising rates, flattening yield curves
  - Sharp growth in government deficits about to begin
  - Consumer savings rate declining again
  - Another market bubble starting to form
- **The Ugly: Politics going in the wrong direction**
  - Little effort to deal with underinvestment in infrastructure, rising wealth and income inequality, healthcare cost inflation, housing
  - A complete breakdown in basic norms of political leadership

# GDP Growth: 2017 back to 3%

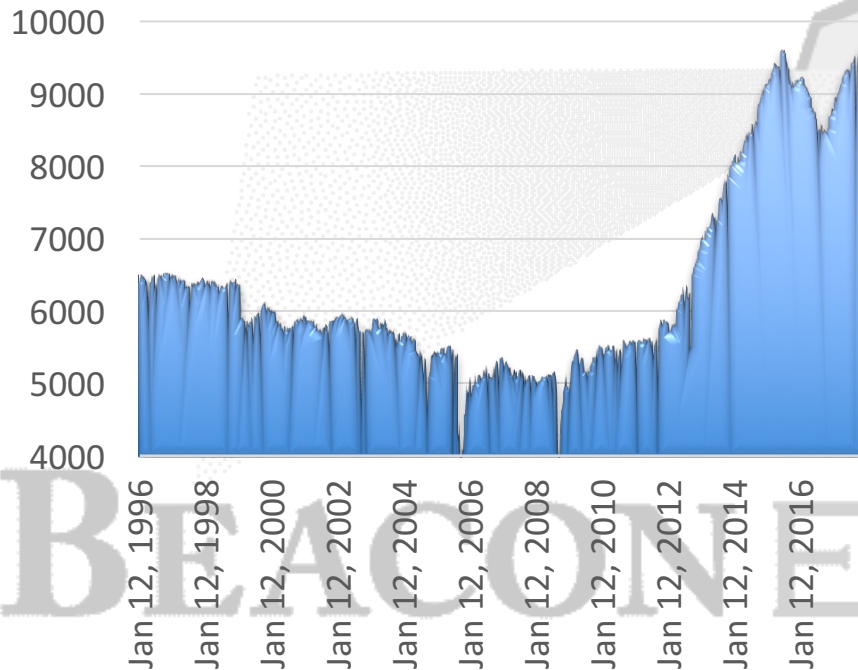
Real GDP Growth (Y-o-Y)



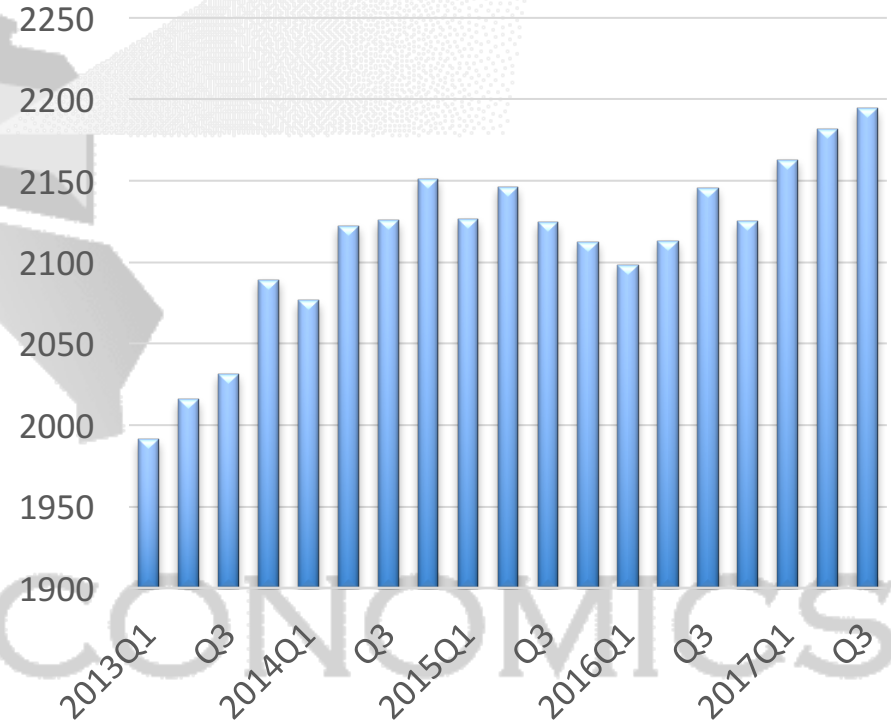
	2013	2014	2015	2016	2017
GDP	2.68	2.73	2.00	1.85	2.73
FD	1.68	3.45	2.70	2.19	2.79
PCE	1.37	2.40	2.04	1.93	1.95
Fixed Inv	<b>0.83</b>	<b>0.95</b>	<b>0.40</b>	<b>0.18</b>	<b>0.86</b>
Struct	0.16	0.26	-0.28	0.10	0.07
Equip	0.39	0.24	0.21	-0.22	0.52
IPP	0.09	0.26	0.13	0.21	0.20
Res	0.20	0.20	0.35	0.09	0.08
Invent	0.62	-0.15	-0.02	-0.02	-0.11
Net exports	0.38	-0.57	-0.68	-0.31	0.05
Government	-0.53	0.09	0.28	0.07	0.12

# Oil and Exports

Weekly US Oil Production to  
December



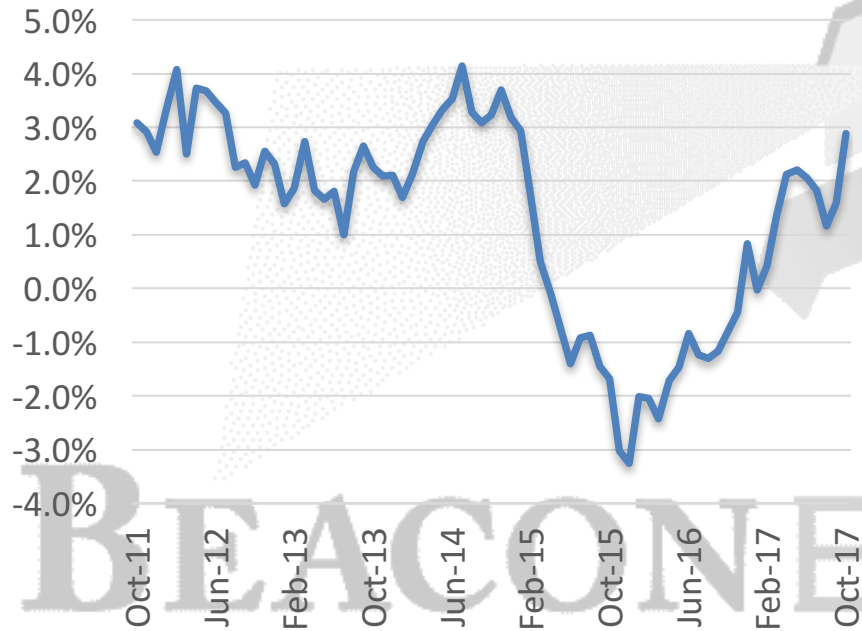
US Exports (Real)



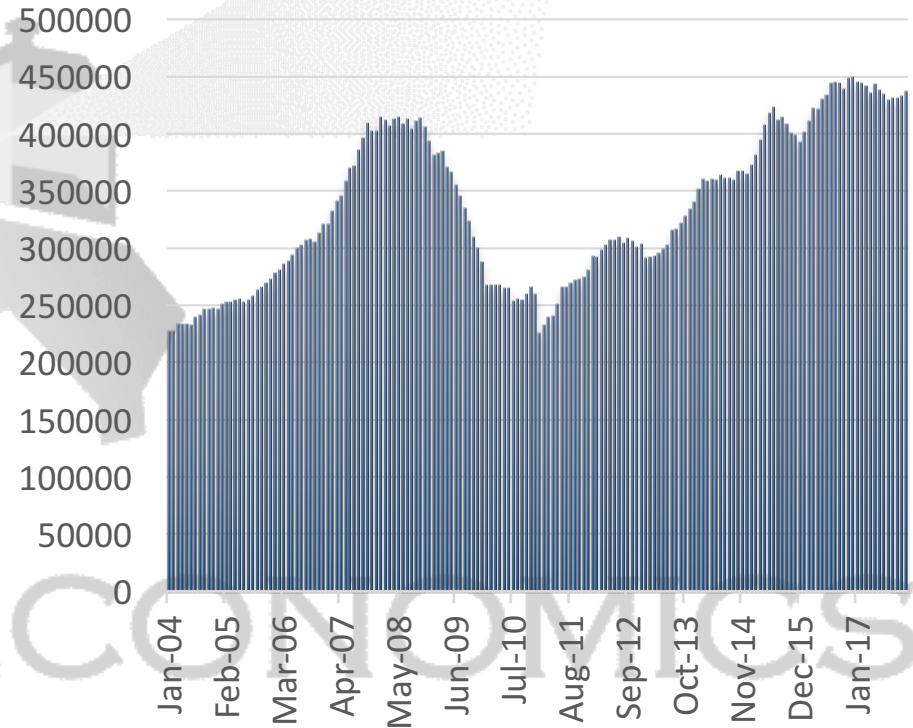


# Industrial Stats

Industrial Production (Y-o-Y Growth)  
to Oct

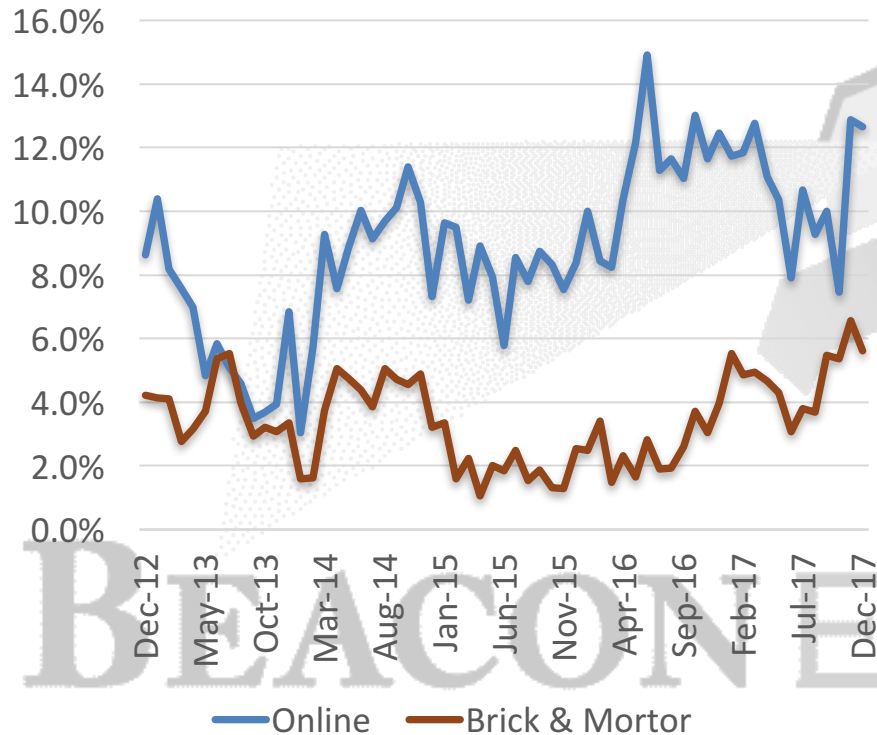


Non Residential Construction Spending

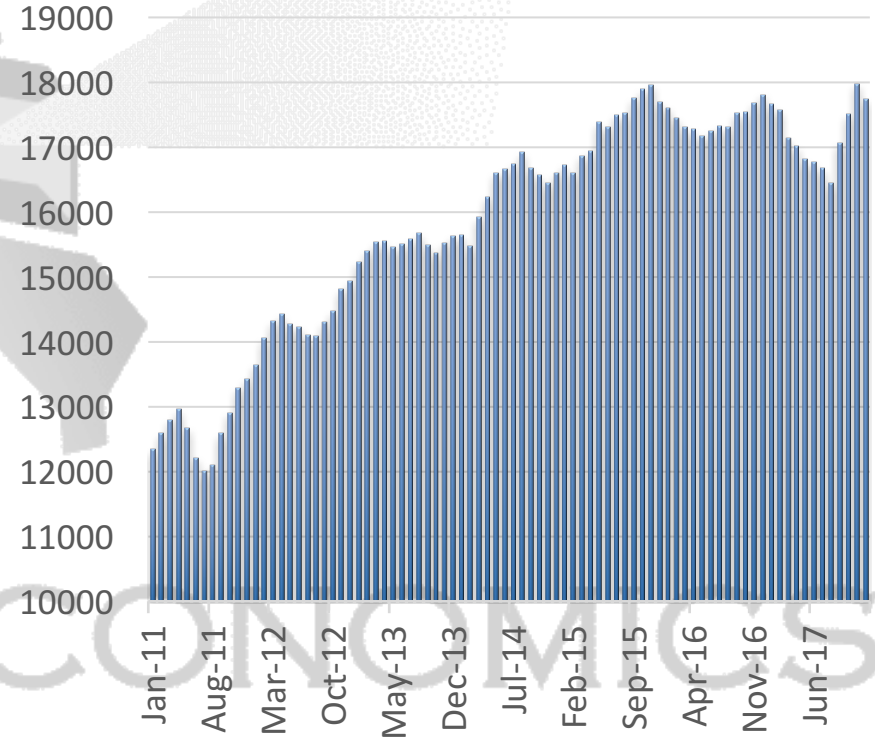


# Retail Sales

## Retail Sales (Y-o-Y to Dec)

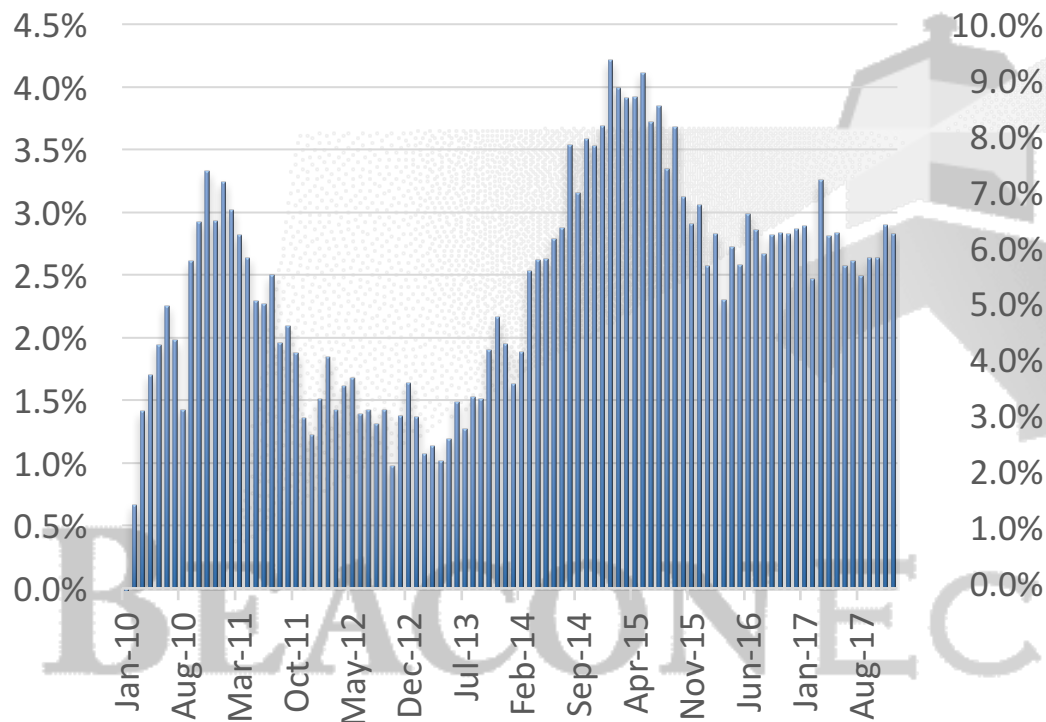


## Auto Sales SAAR



# Consumer Spending

Y-o-Y Growth Real Consumer Spending

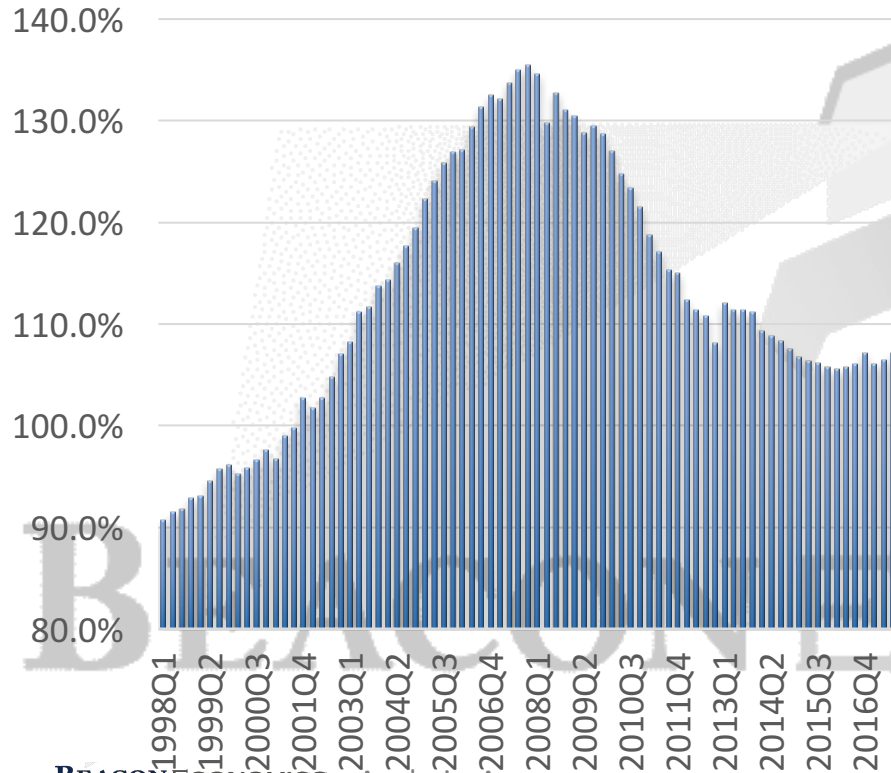


Consumer Savings Rate (% of DPI)

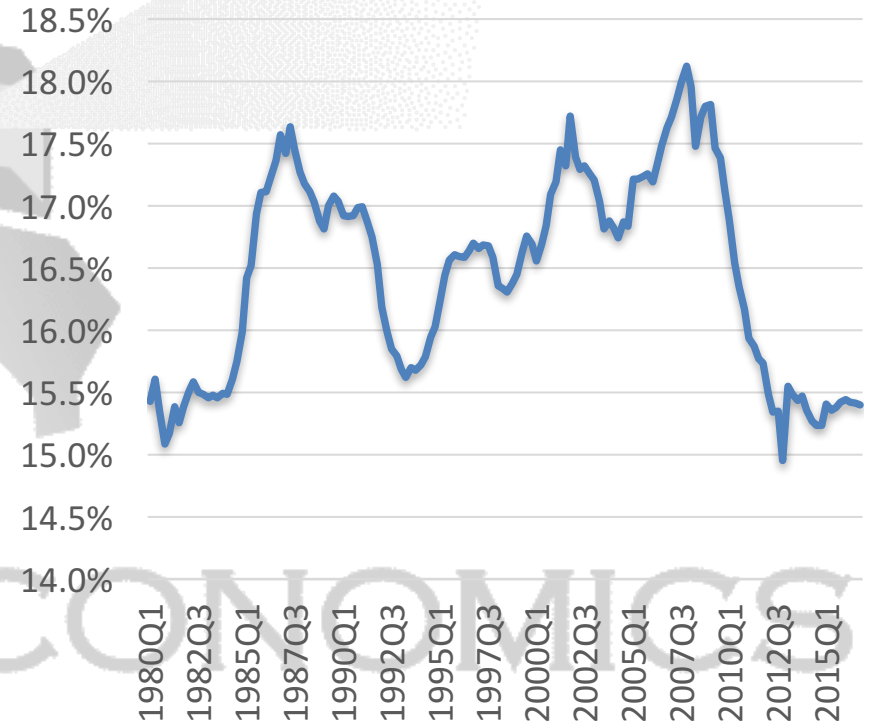


# No Debt Overhang

## Debt to DPI Income

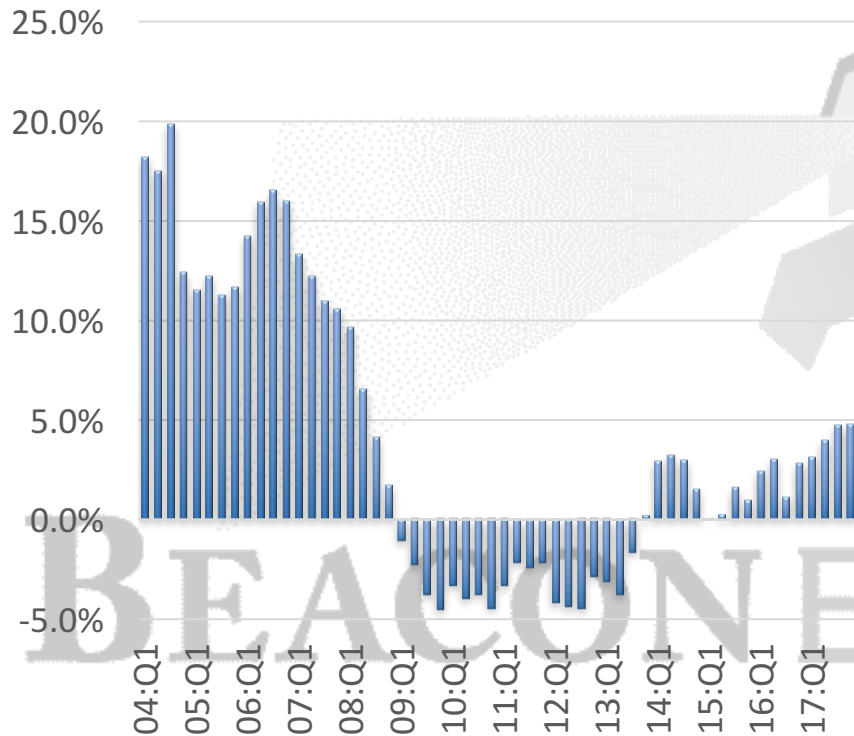


## Household Financial Obligation Ratio

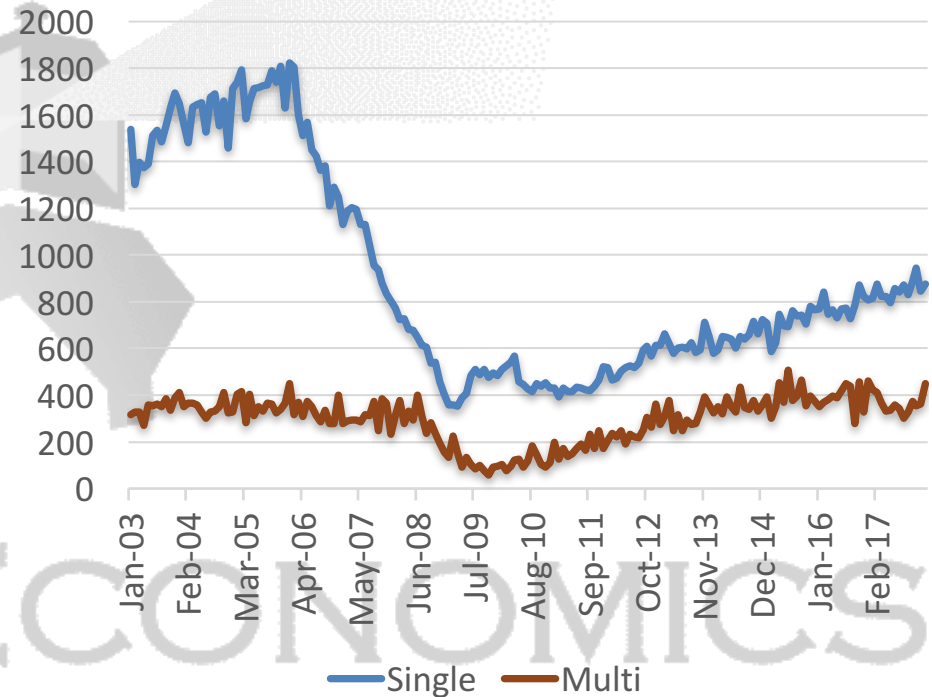


# Mortgage Debt/ Construction

## Y-o-Y Growth Mortgage Debt

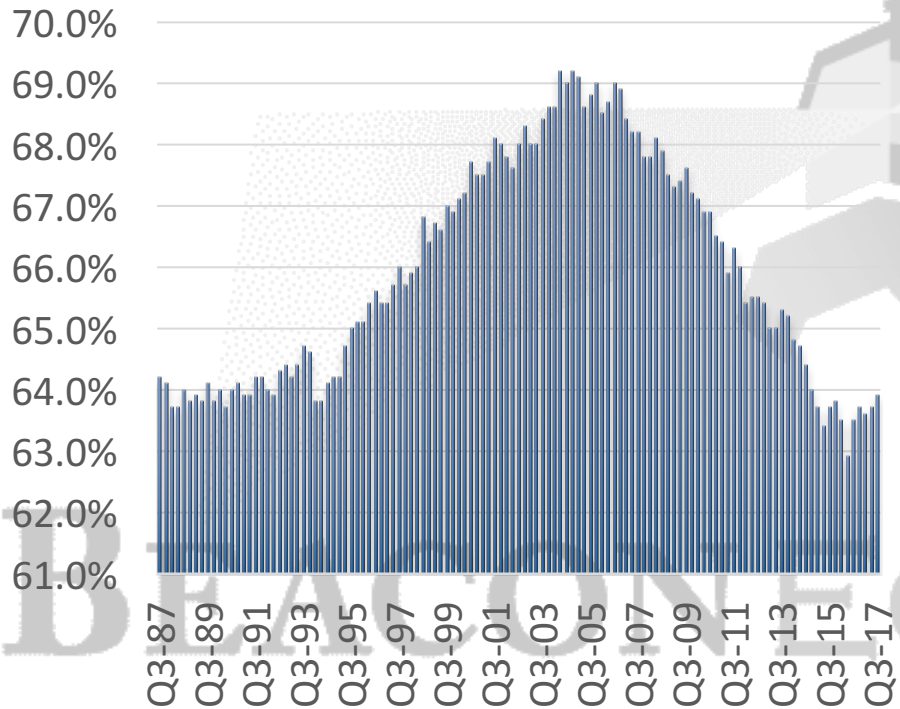


## Housing Starts

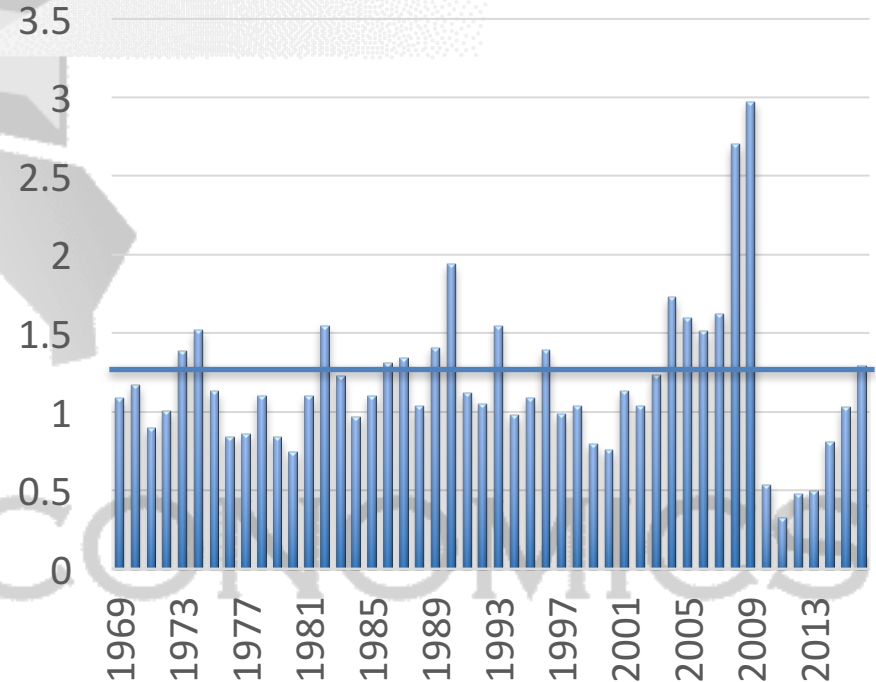


# Pace of Construction

## Home Ownership



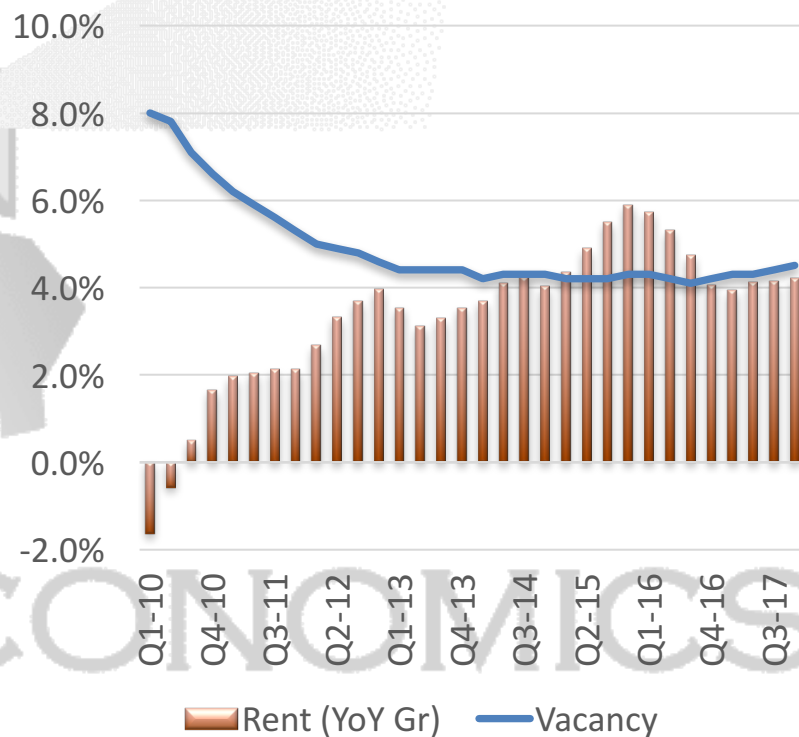
## Single Family Starts per New Household



# Housing Costs

	2016	2017		2016	2017
WA-Seattle	10.6%	12.7%	NC-Charlotte	5.9%	6.4%
NV-Las Vegas	5.6%	10.2%	<b>Comp-20</b>	<b>5.0%</b>	<b>6.4%</b>
CA-San Diego	5.8%	8.1%	<b>National</b>	<b>5.2%</b>	<b>6.2%</b>
CA-San Francisco	5.6%	7.7%	AZ-Phoenix	5.1%	6.0%
CO-Denver	8.3%	7.2%	NY-New York	2.1%	5.9%
MI-Detroit	6.6%	7.1%	MN-Minn	5.4%	5.4%
TX-Dallas	8.1%	7.1%	GA-Atlanta	5.8%	5.0%
OR-Portland	10.2%	7.1%	OH-Cleveland	4.0%	4.7%
MA-Boston	4.4%	6.9%	FL-Miami	6.4%	4.4%
FL-Tampa	7.8%	6.9%	IL-Chicago	2.9%	4.1%
CA-Los Angeles	5.5%	6.5%	DC-Wash	2.1%	3.1%

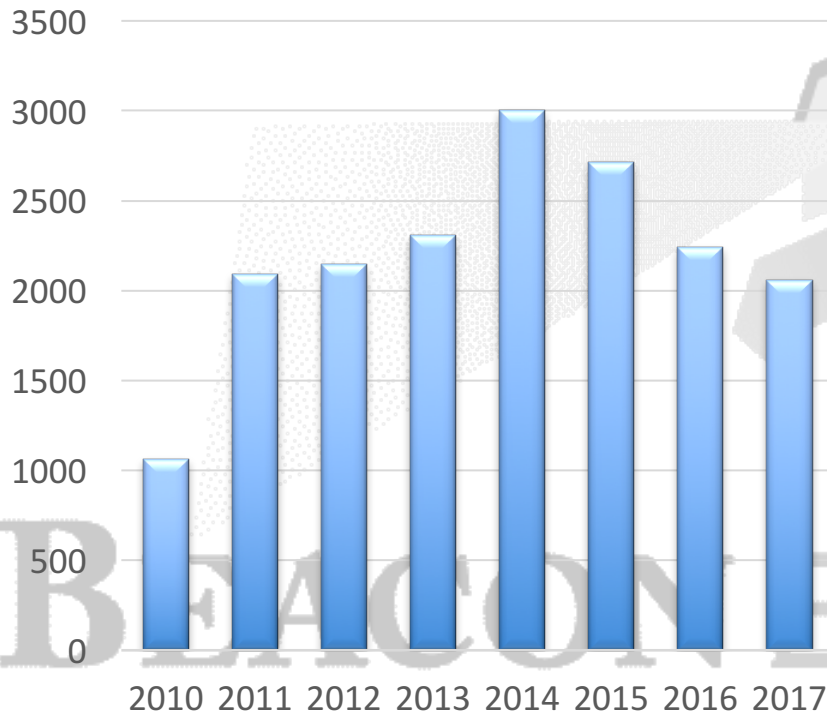
US Rental Markets (REIS)



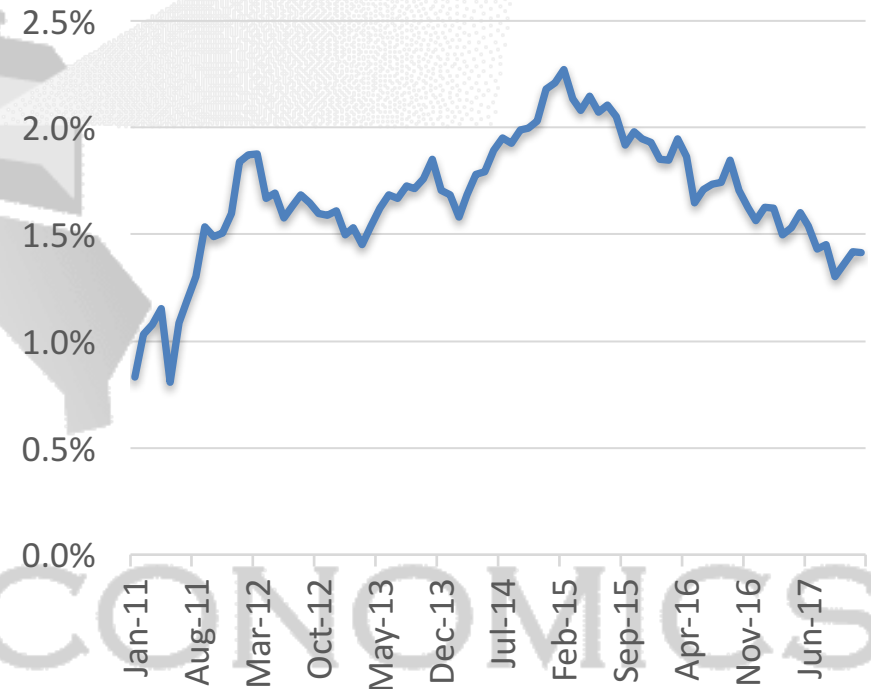


# Labor Markets

Net Change Payroll Jobs



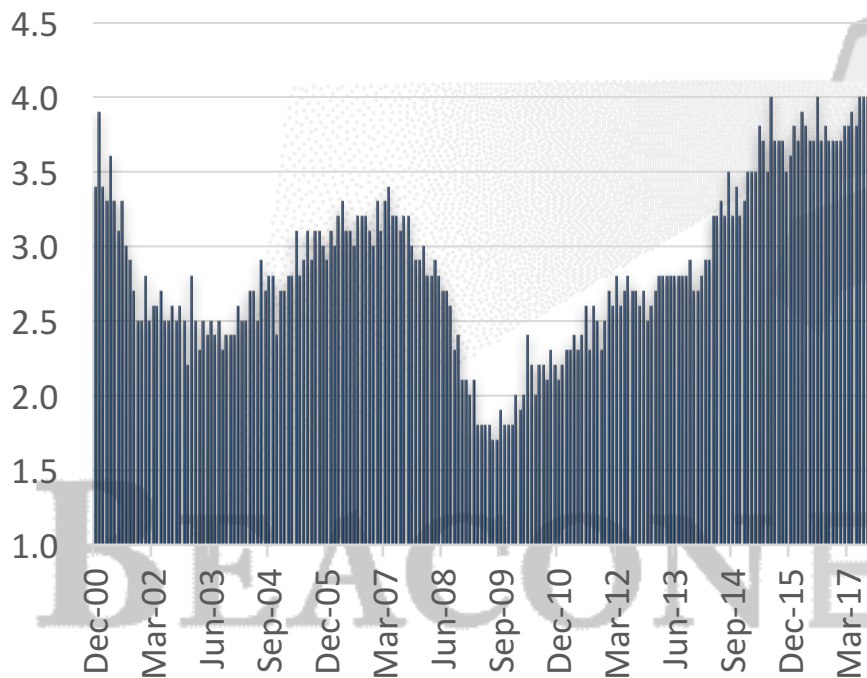
Growth Payroll Employment (Y-o-Y)



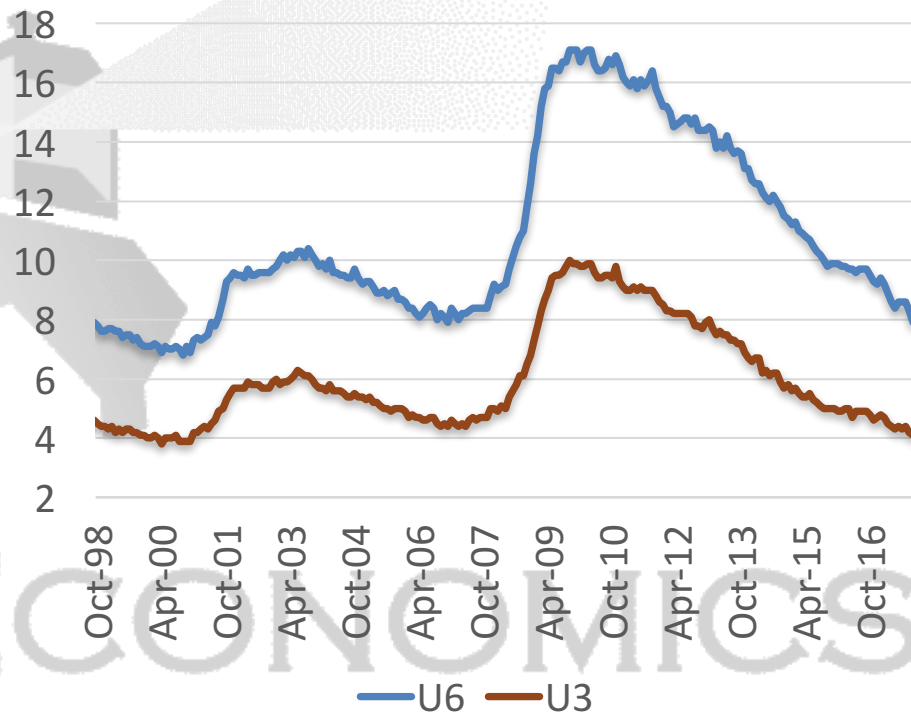


# Why Slowing Job Growth?

JOLT Job Openings Rate  
(% of Jobs)

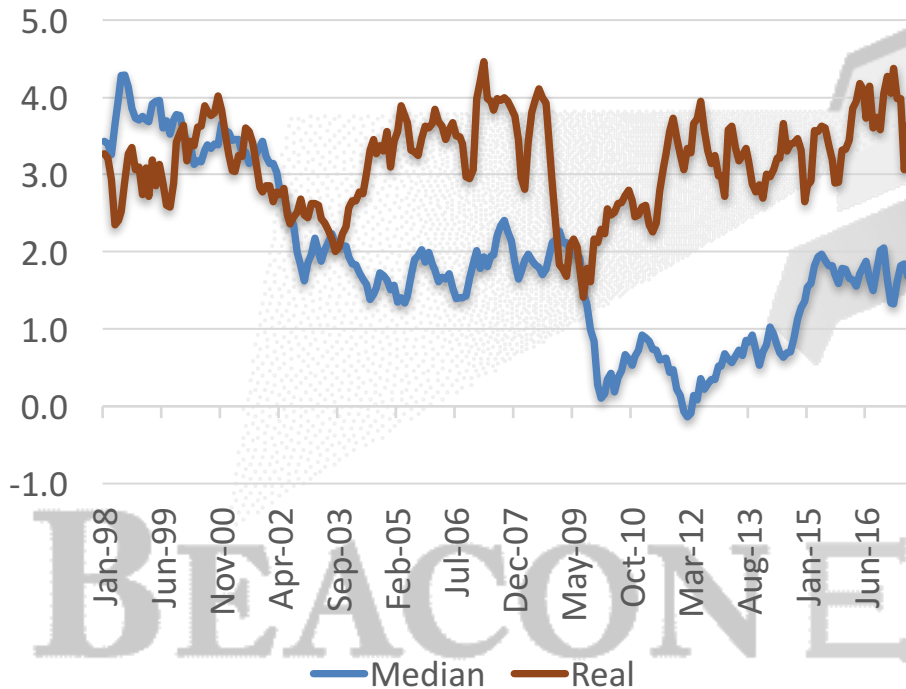


Unemployment

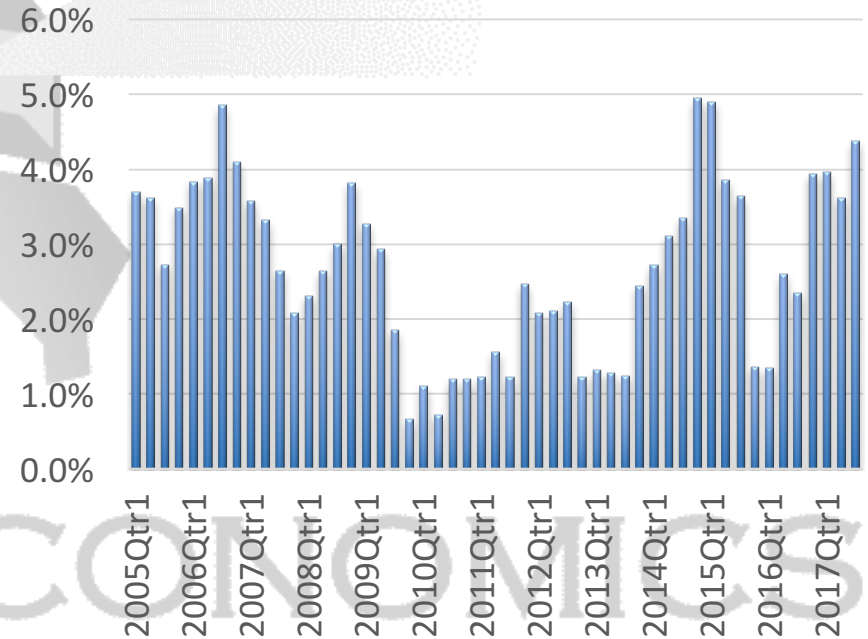


# Consequences

## Real Wage Gains

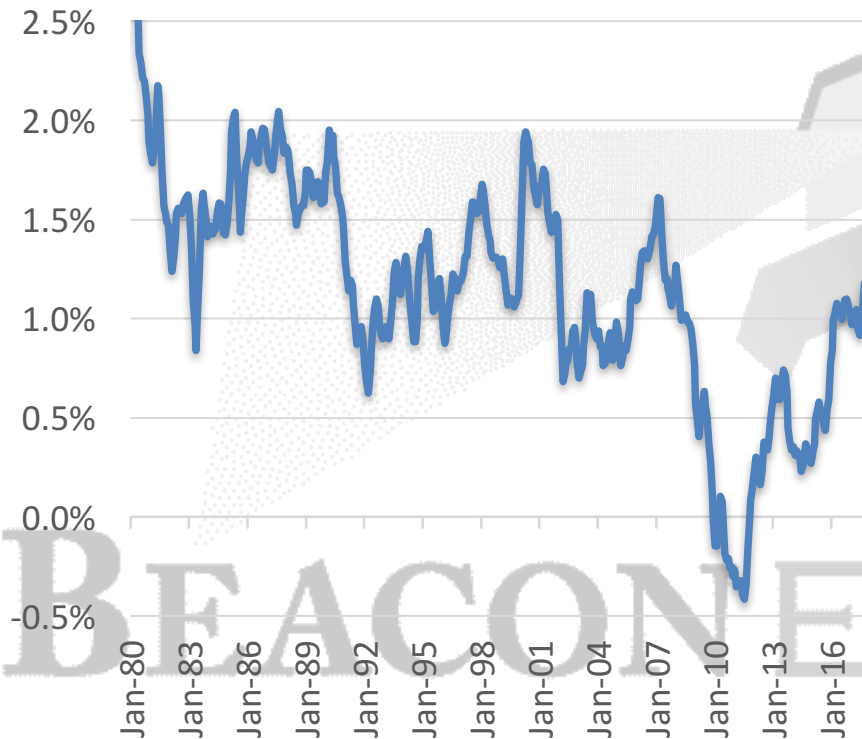


## Growth in Average Cost per Employee Hour

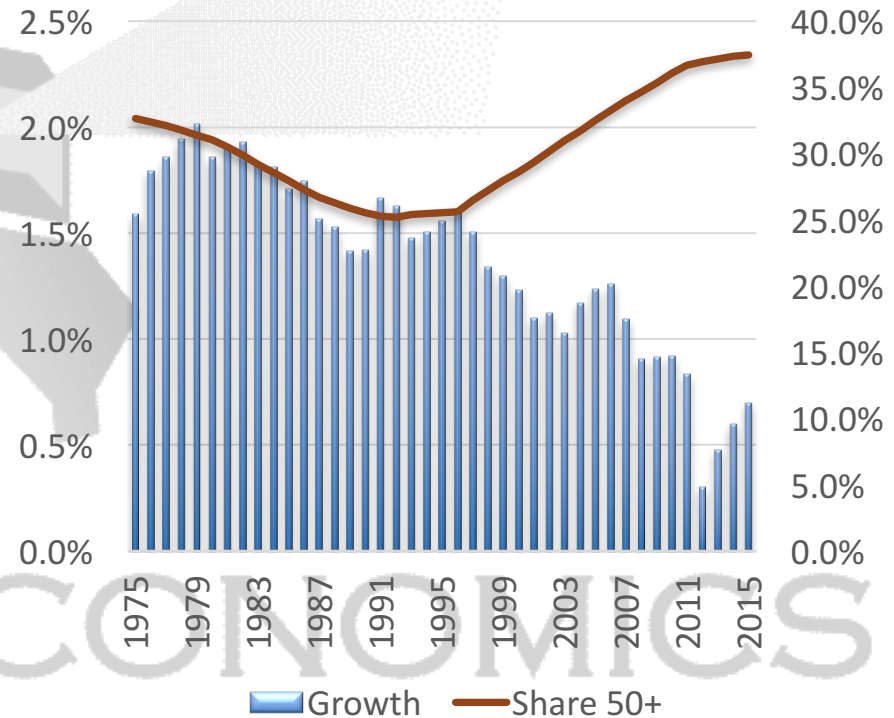


# Workforce Growth

## Labor Force Growth

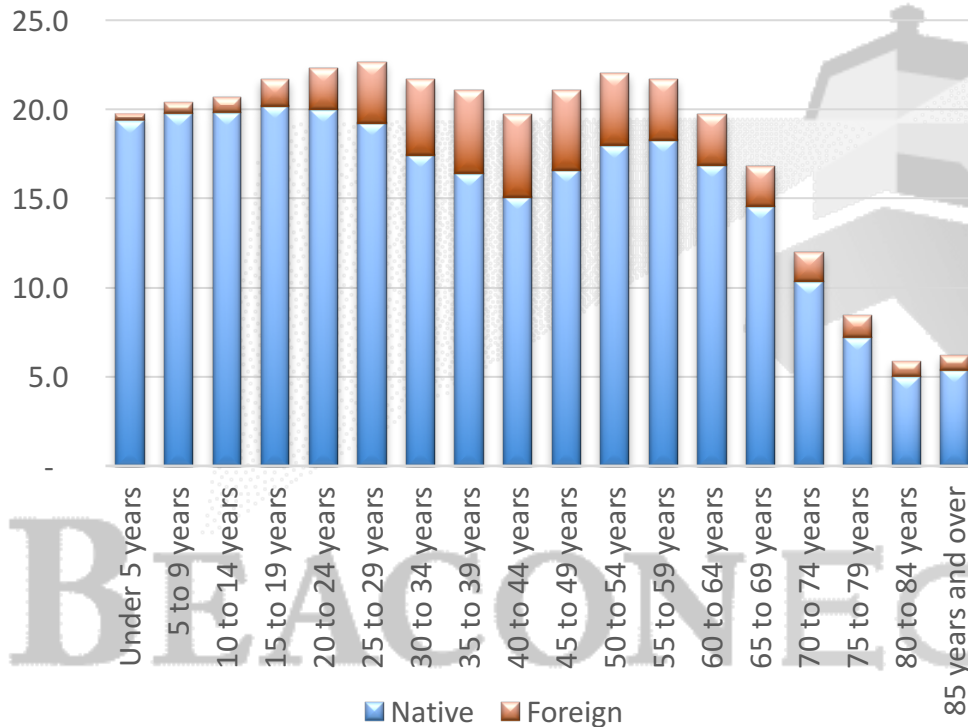


## US Population of 25-64 Year Olds

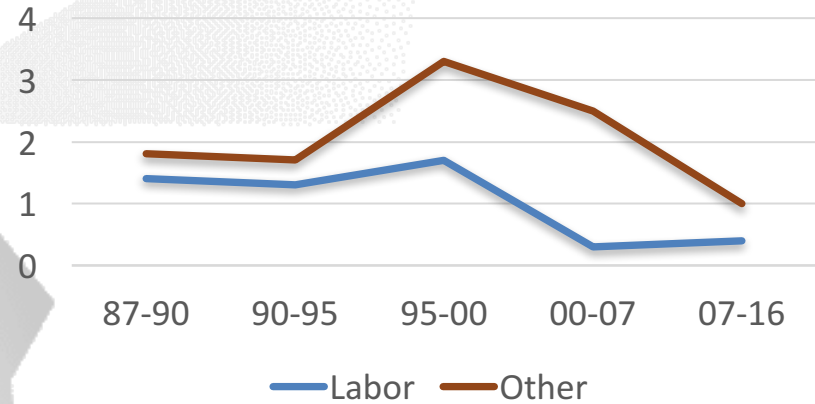


# Demographic Limits

2016 Population by Age by Nativity (Millions)



Sources of Growth



	87-00	00-17	Diff
<b>Total</b>	<b>3.82</b>	<b>2.01</b>	<b>-1.80</b>
Labor	1.48	0.36	-1.12
All Else	2.34	1.66	-0.68

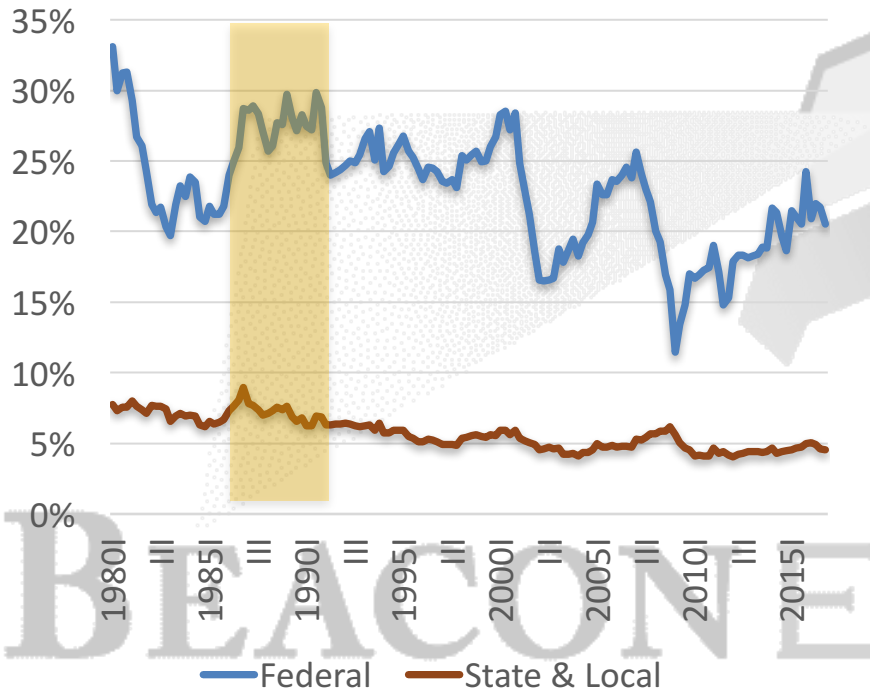
# The Cure for Secular Stagnation

**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>

# Tax Reform vs Tax Cuts

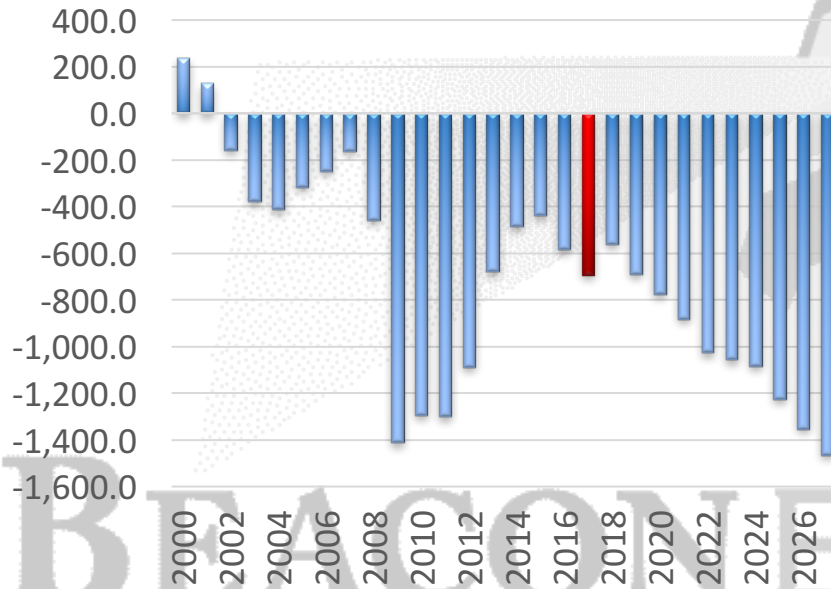
US Corporate Taxes as % Profit



- A. Most corporations and households will pay less in taxes
- B. The plan will give a small short term boost to the economy
- C. The plan is regressive
- D. Will add \$1.5 trillion to \$3.5 trillion to the debt over 10 Years

# Implications

**CBO: Past and Projected Federal Budget Gap**



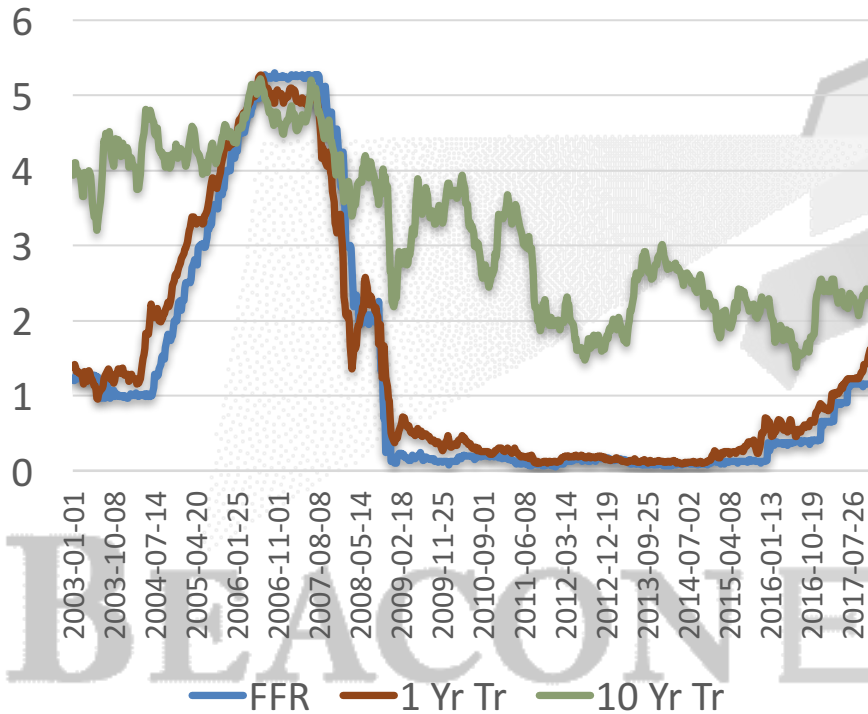
**Real Average Net Worth by Bracket**

	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%

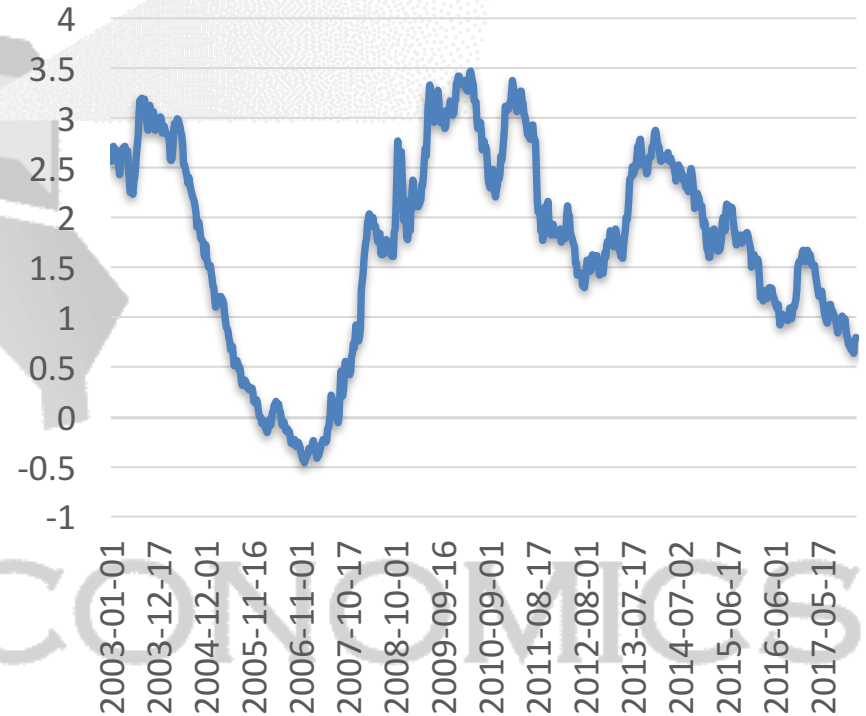


# Fed Tightening

## Interest Rates



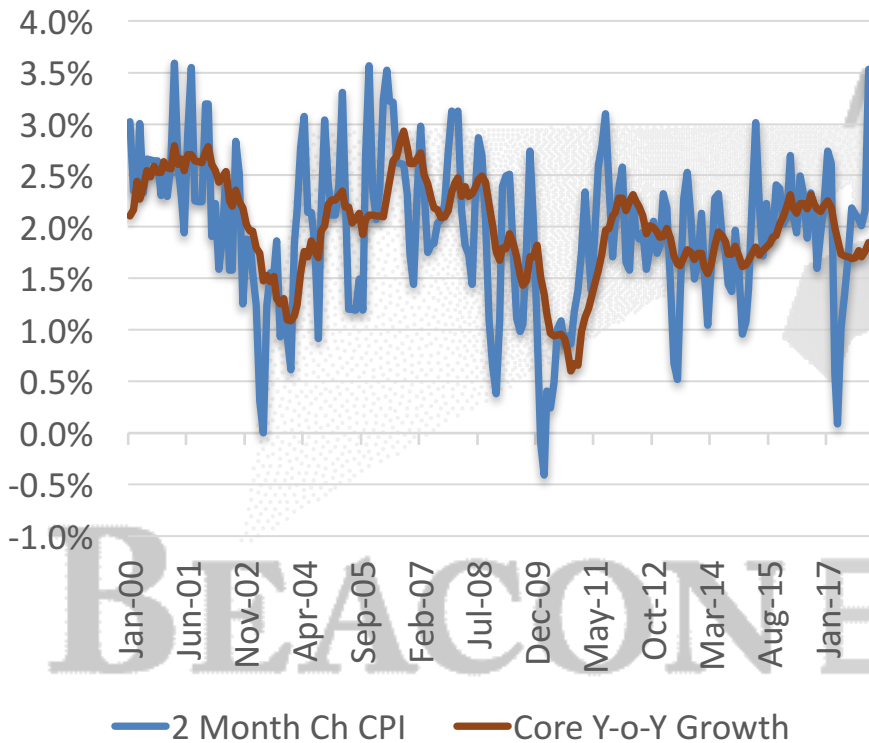
## 10-1 Year Rate Spread



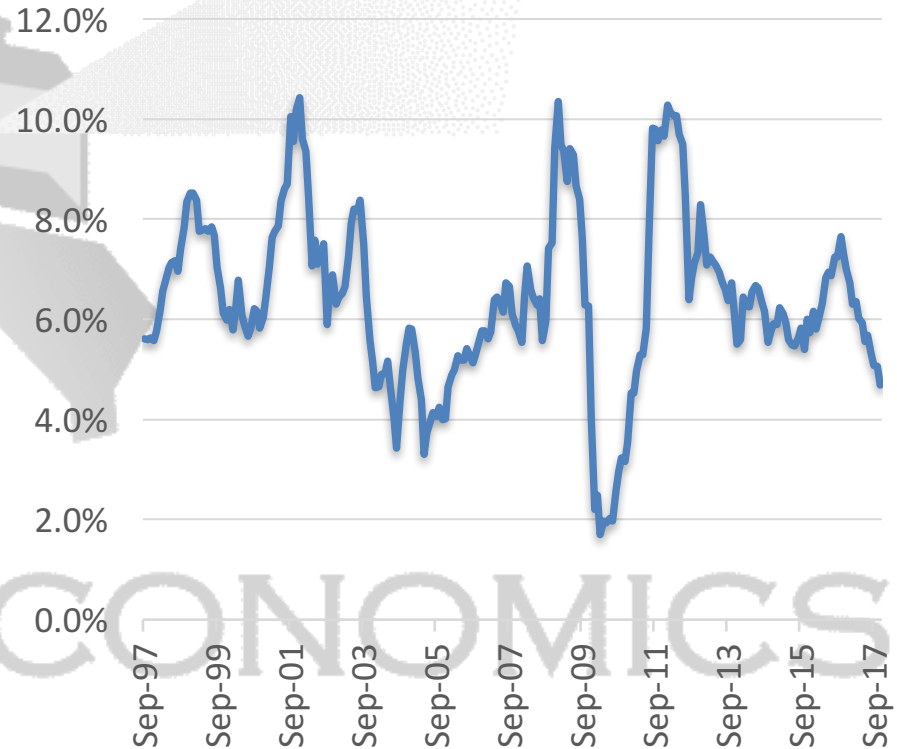


# Inflation Risks?

## Core Inflation Trends 2 Month vs Y-o-Y

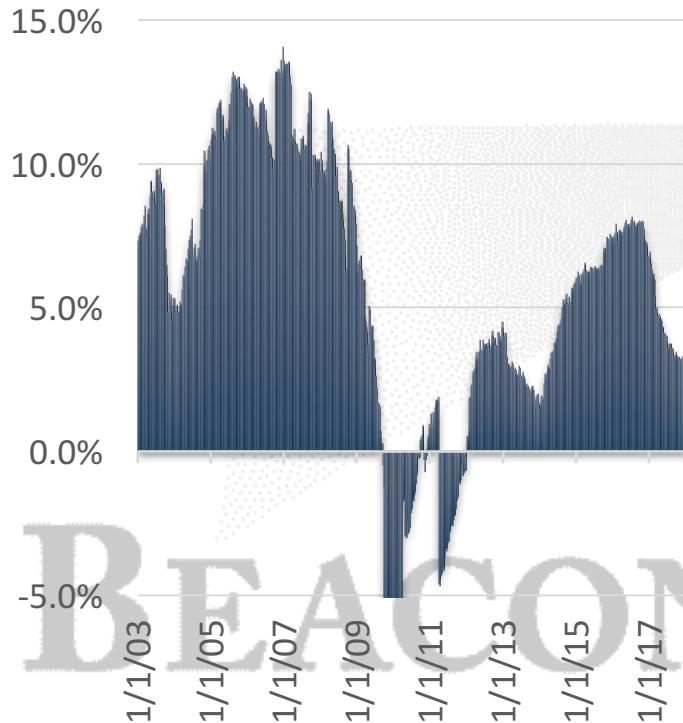


## M2 Growth Y-o-Y



# Slow Bank Lending

Growth in Direct Bank Loans



Net % Banks Responding Yes

Demand

Standards

2016Q4 2017Q4 2016Q4 2017Q4

auto loans

16.7

5.0

3.3

9.8

credit card loans

14.9

0.0

0.0

9.1

construction & land development

10.1

-10.0

27.5

2.9

commercial real estate

4.3

-5.6

18.8

4.2

**multifamily residential structures**

**2.9**

**-18.1**

**42.0**

**22.2**

C&I loans from large Firms

-5.9

-11.3

1.5

-8.5

C&I loans from small firms

-1.5

-2.9

-1.5

-8.8

QM jumbo mortgage loans

19.0

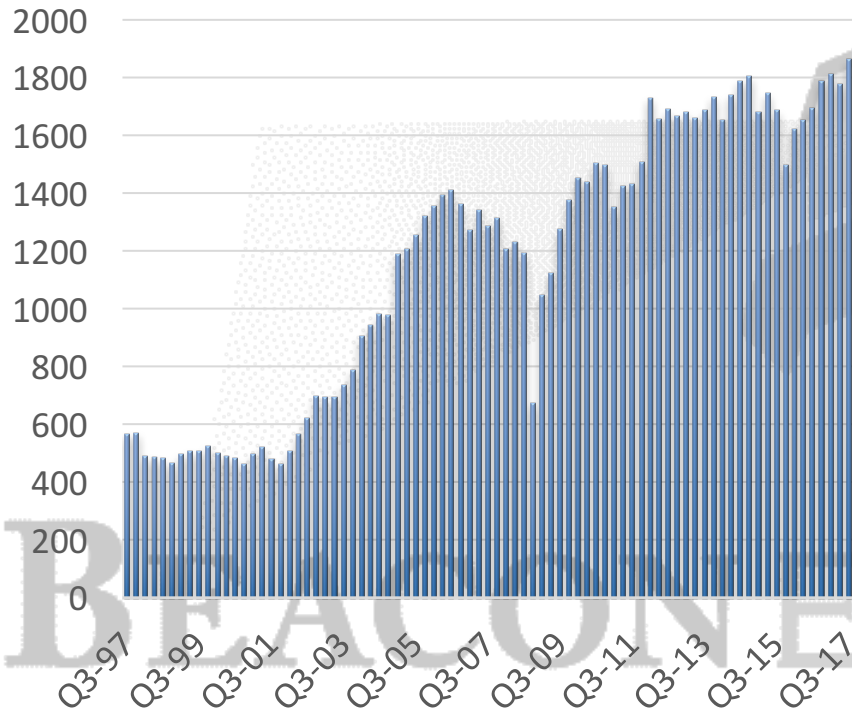
-10.9

-6.3

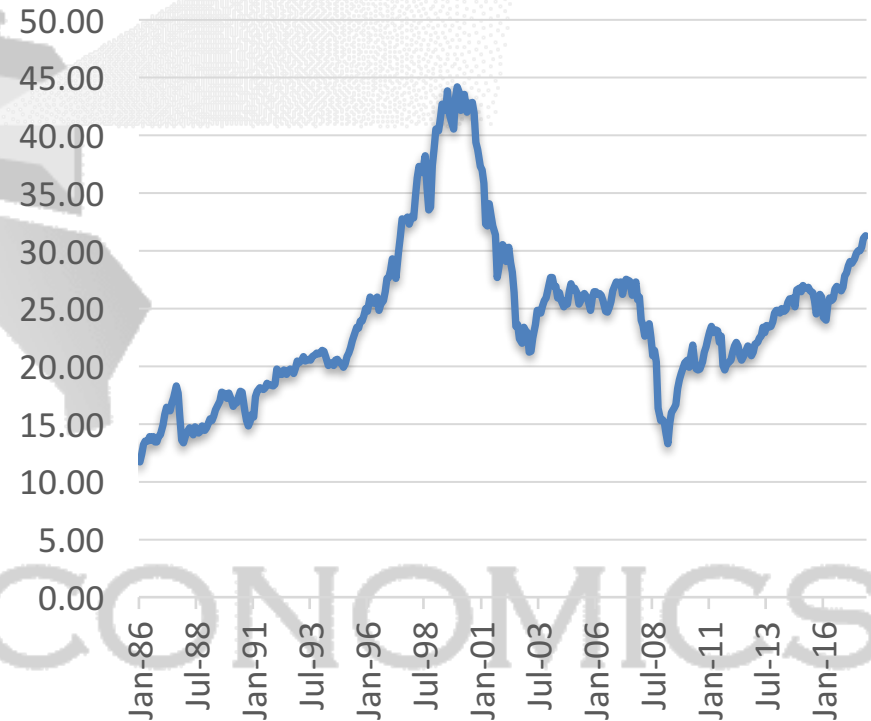
-6.2

# Another Bubble?

## Corporate Profits and Growth

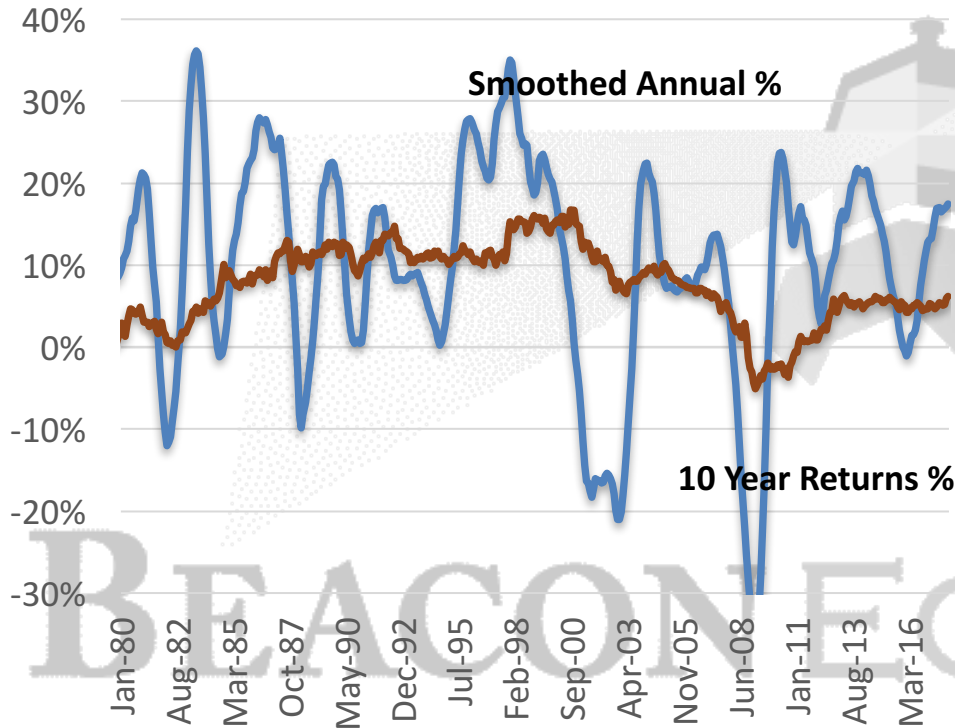


## Shiller P/E Ratio

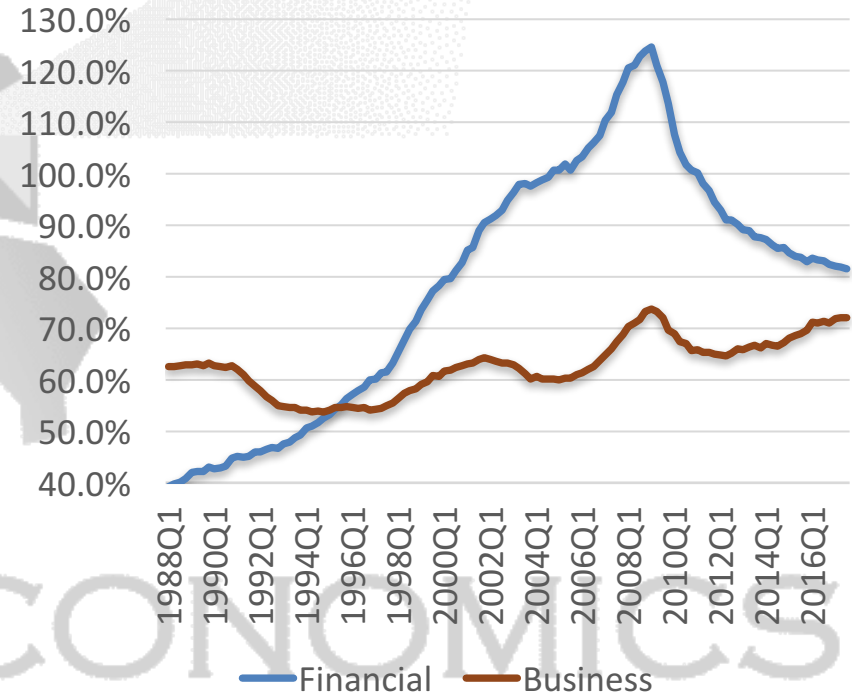


# Market correction? Not yet.

## Nominal Stock Market Growth (S&P 500)



## Debt to GDP Ratios

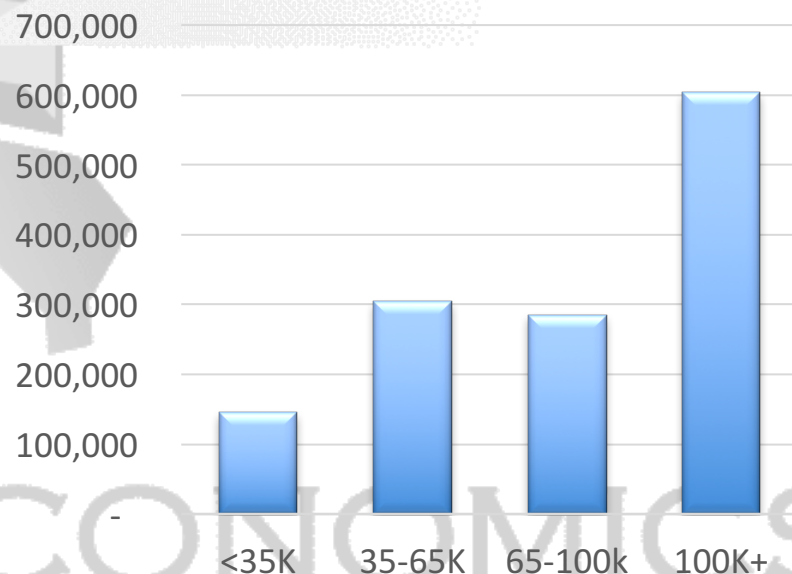


# State Economic Performance

## 5 Year Change in Payroll Jobs by State

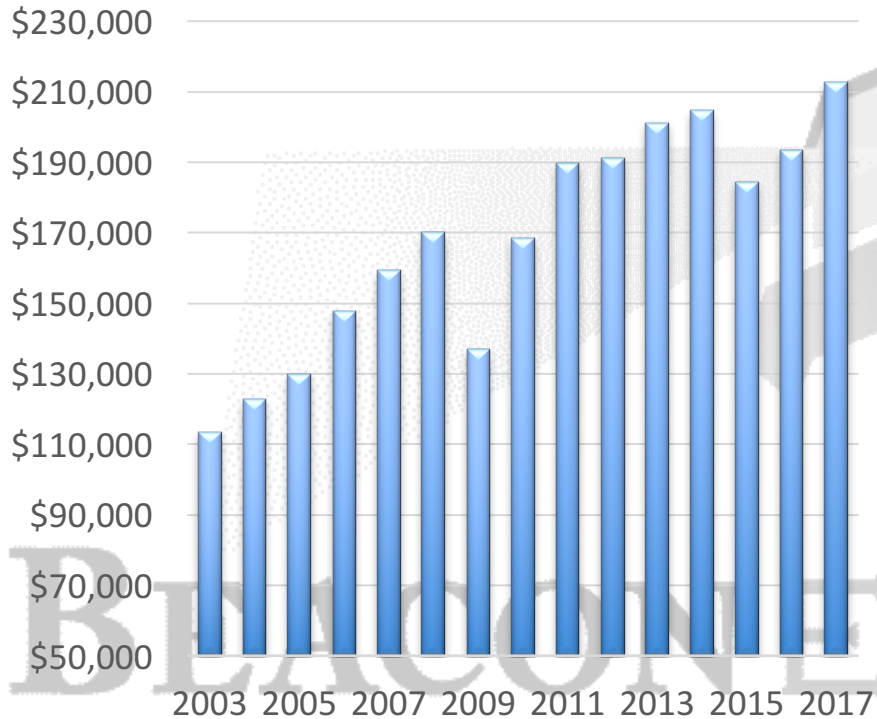
	New Jobs	Ann Gr	US Share
<b>Utah</b>	<b>226</b>	<b>3.5%</b>	<b>1.8%</b>
<b>Nevada</b>	<b>188</b>	<b>3.1%</b>	<b>1.5%</b>
Florida	1,207	3.1%	9.5%
<b>Idaho</b>	<b>96</b>	<b>3.0%</b>	<b>0.8%</b>
<b>Colorado</b>	<b>344</b>	<b>2.9%</b>	<b>2.7%</b>
<b>Oregon</b>	<b>228</b>	<b>2.7%</b>	<b>1.8%</b>
<b>Washington</b>	<b>401</b>	<b>2.7%</b>	<b>3.2%</b>
<b>California</b>	<b>2,038</b>	<b>2.7%</b>	<b>16.1%</b>
Georgia	521	2.5%	4.1%
<b>Texas</b>	<b>1,425</b>	<b>2.5%</b>	<b>11.2%</b>
<b>Arizona</b>	<b>298</b>	<b>2.3%</b>	<b>2.3%</b>
South Carolina	220	2.3%	1.7%
Tennessee	314	2.3%	2.5%
North Carolina	421	2.1%	3.3%
<b>Montana</b>	<b>40</b>	<b>1.8%</b>	<b>0.3%</b>

## California: Change in Employment by Income (F.T.) 2012-2016

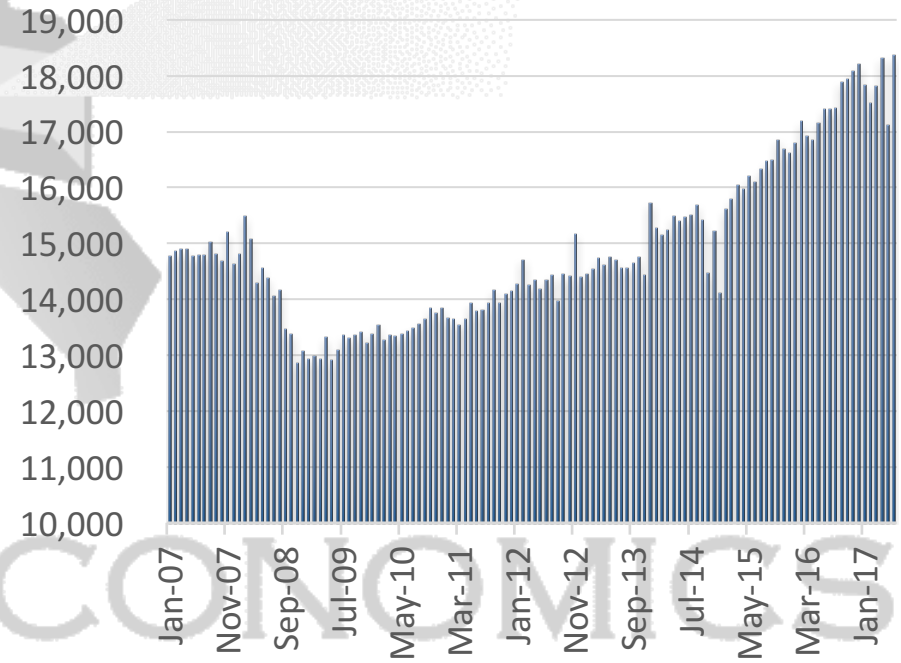


# Exports / Travel

## California Exports (Nominal)

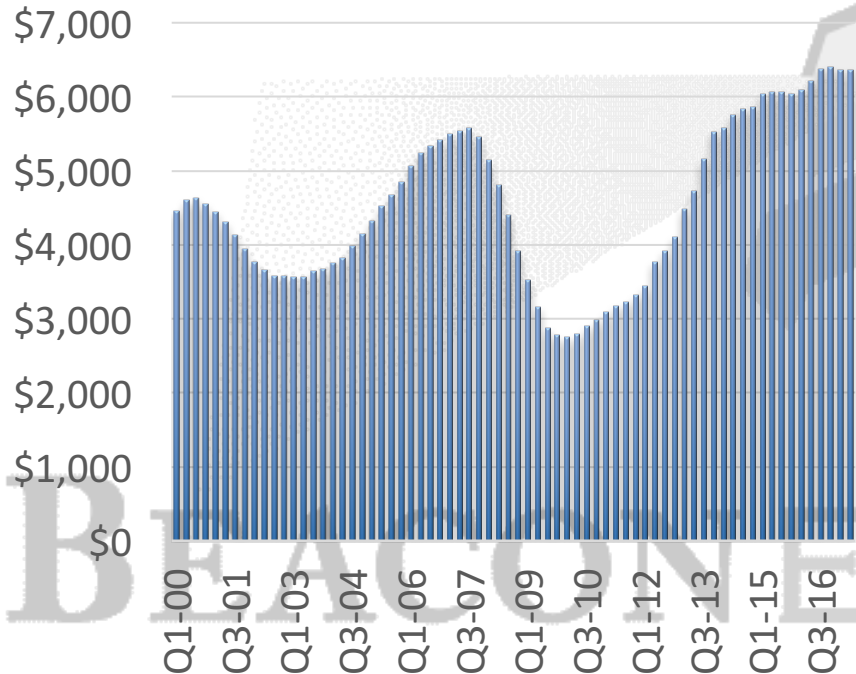


## California Airport Activity (Arrivals / Departures)

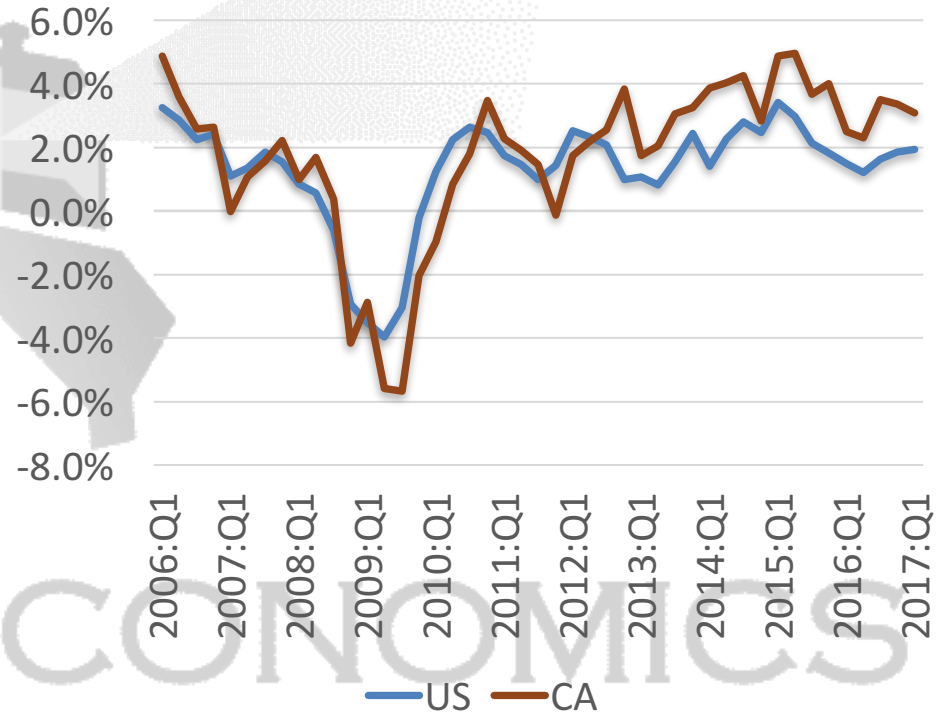


# Still Strong Indicators

## California Non Residential Permit Values



## Real GDP Growth (y-o-y)



# Nonresidential Real Estate Markets

Property	Inland Empire		Orange County		Los Angeles	
	Q3-17	YOY Change (%)	Q3-17	YOY Change (%)	Q3-17	YOY Change (%)
Cost of Rent						
Office	\$22.37	1.4%	\$32.18	2.2%	\$37.29	2.7%
Retail	\$22.58	2.9%	\$33.52	1.7%	\$32.40	1.4%
Warehou.	\$5.08	5.6%	\$6.98	4.3%	\$7.19	5.0%
Vacancy Rate						
Office	21.1%	-0.9%	16.0%	-0.1%	14.0%	0.5%
Retail	9.1%	-0.4%	5.3%	-0.1%	6.0%	-0.3%
Warehou.	7.0%	-0.6%	6.4%	-0.5%	5.1%	-0.5%



# Tax Revenues and Expenditures

## California Tax Revenues, Millions of Dollars

	2015-16	2016-17	2017-18*	2018-19**
Total Revenue	120445	123043	128950	134842
Personal Income Tax	79962	83393	88821	93593
Sales and Use Tax	25028	25727	24470	26151
Corporation Tax	10309	10992	10894	11224

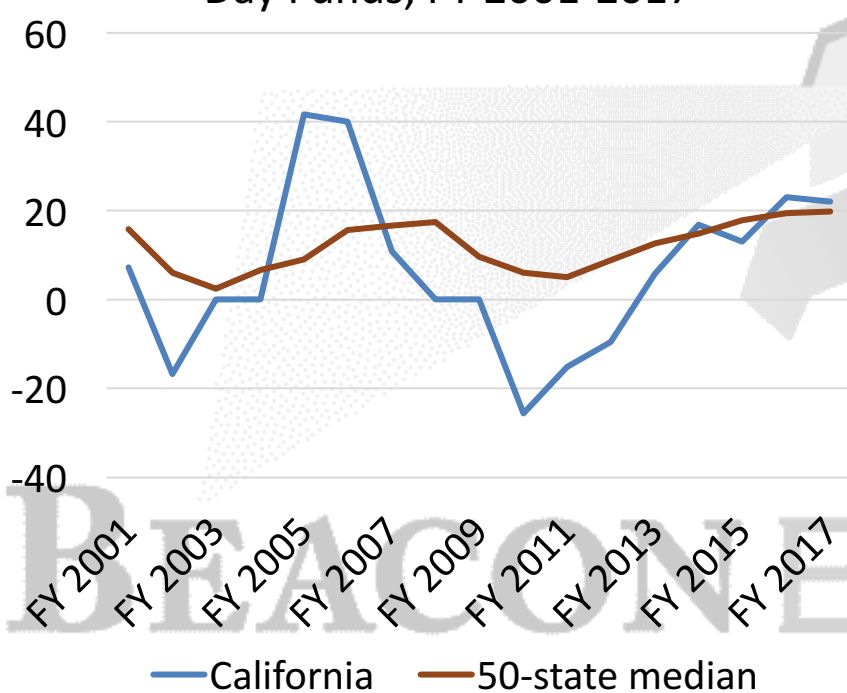
2017-18 YEAR-TO-DATE			
Forecast	Actual	Change	Percent Change
\$52,025	\$54,400	\$2,375	4.6%
14,972	14,937	-35	-0.2%
4,432	4,827	395	8.9%
1,156	1,241	85	7.3%
0	1	0	21.3%
83	85	1	1.7%
241	242	2	0.7%
39	41	2	5.2%
350	401	51	14.7%
\$73,297	\$76,174	\$2,877	3.9%

\*Denotes preliminary figures

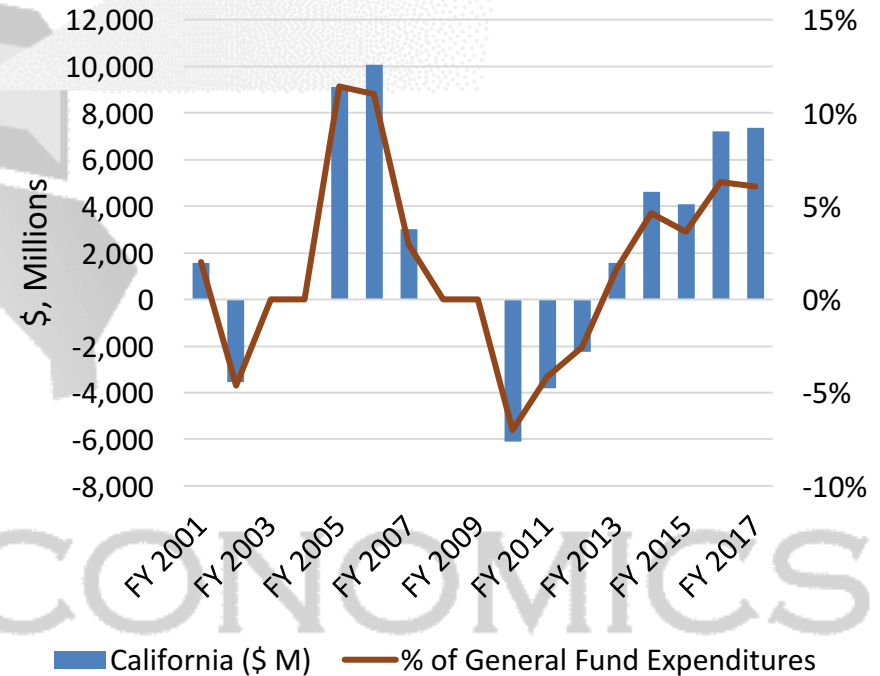
\*\*Denotes projection figures

# Rainy Day Funds

## Equivalent Operating Days of Rainy Day Funds, FY 2001-2017

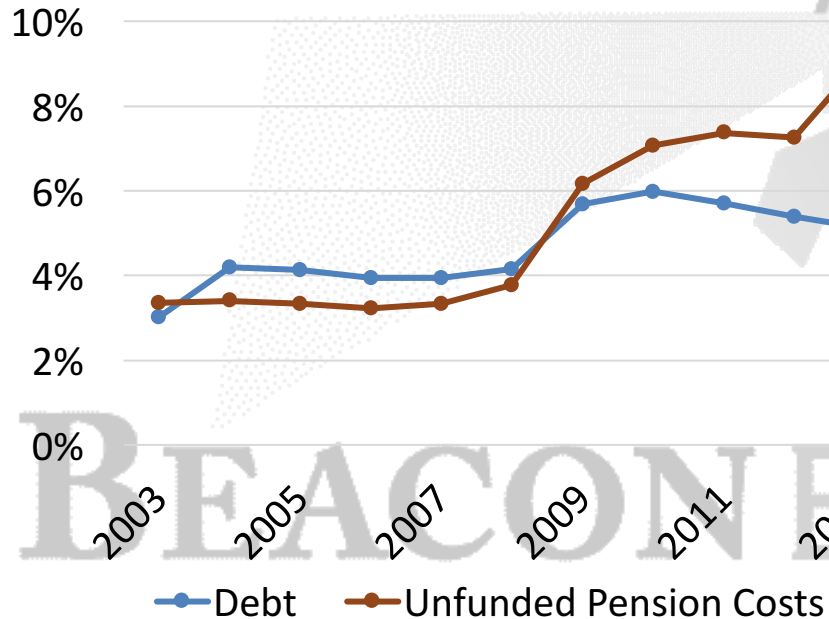


## California Rainy Day Fund

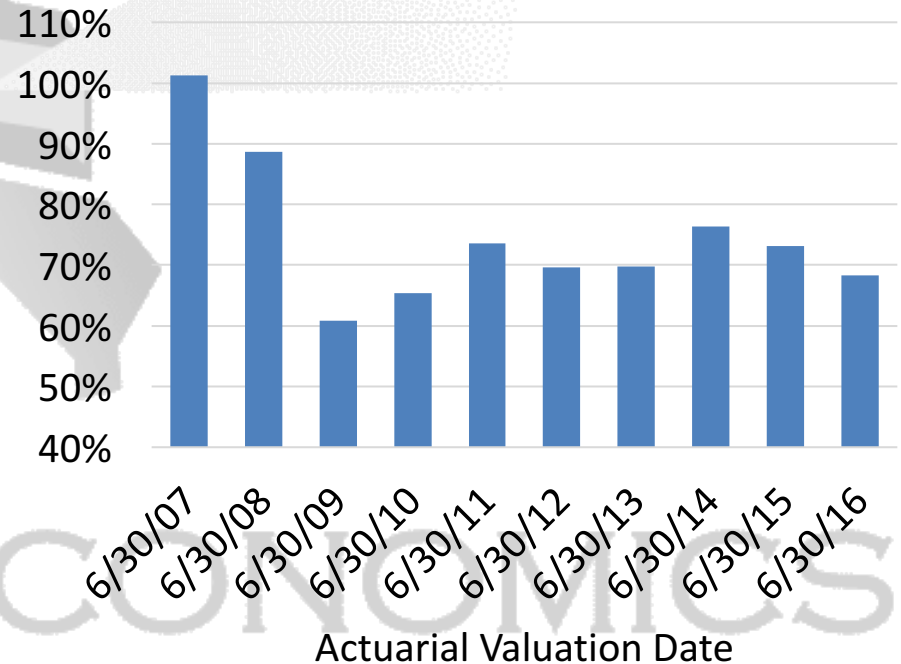


# Debt and Pension Liabilities

Debt and Unfunded Retirement Costs as a Share of CA Personal Income, 2003-2013

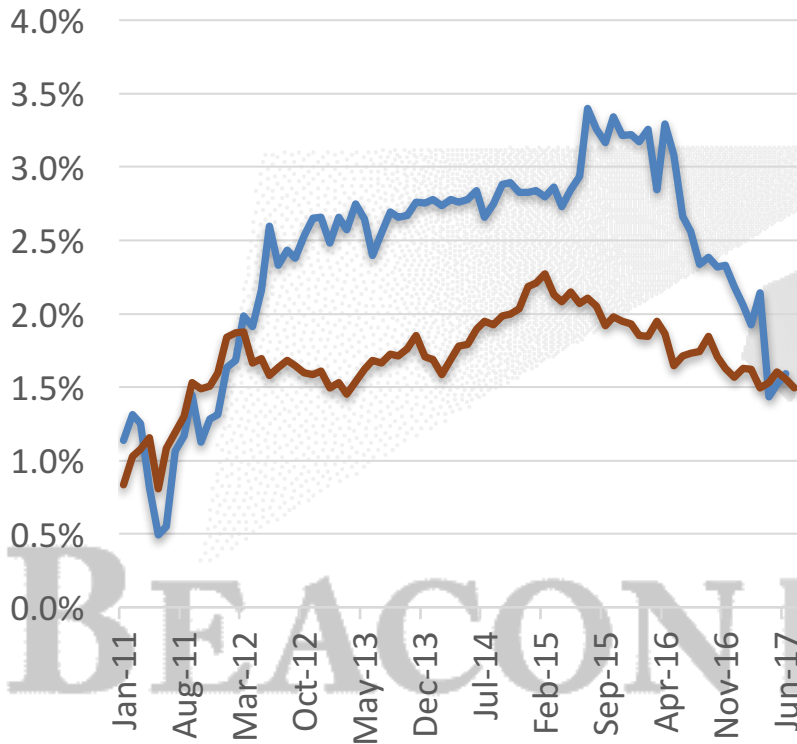


CalPERS (PERF Fund) Funded Ratio



# The Big Slowdown

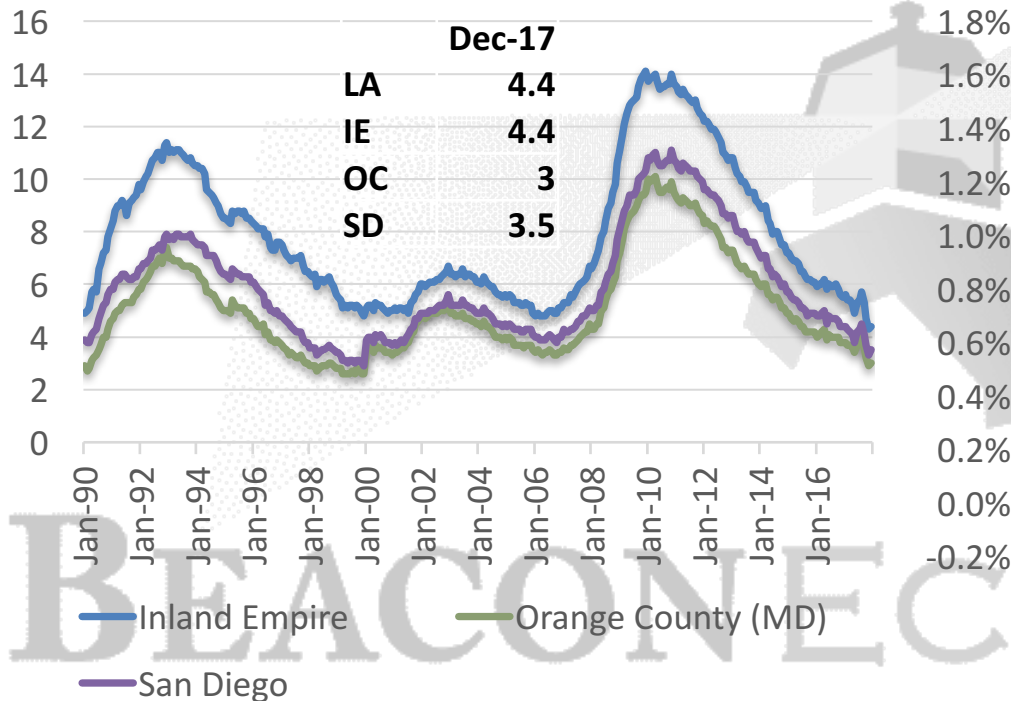
State and National Job Growth



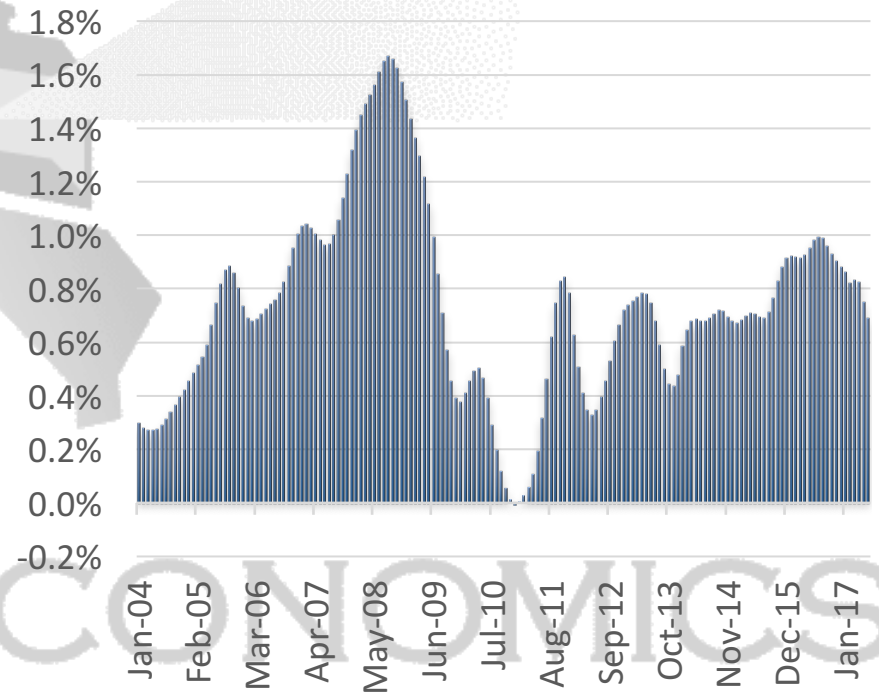
	Nov-17	14-15	15-16	16-17
Inland Empire	1,470,000	4.8%	3.4%	3.2%
Ventura	309,700	1.5%	1.5%	2.2%
Sacramento	978,700	3.5%	3.1%	2.1%
San Francisco	1,125,700	4.9%	3.3%	2.0%
Fresno	346,000	3.9%	3.2%	1.7%
San Jose	1,102,100	3.9%	2.8%	1.7%
Kern	260,400	-0.5%	-0.5%	1.6%
<b>San Diego</b>	<b>1,457,400</b>	<b>3.2%</b>	<b>2.3%</b>	<b>1.5%</b>
East Bay	1,162,400	3.5%	2.9%	1.4%
Stockton	231,300	4.3%	2.8%	1.4%
Sonoma	203,900	2.8%	1.6%	1.1%
<b>Orange</b>	<b>1,600,700</b>	<b>3.2%</b>	<b>1.6%</b>	<b>0.8%</b>
<b>Los Angeles</b>	<b>4,465,200</b>	<b>2.8%</b>	<b>2.3%</b>	<b>0.8%</b>

# Labor Supply Constraints

## Unemployment Rates

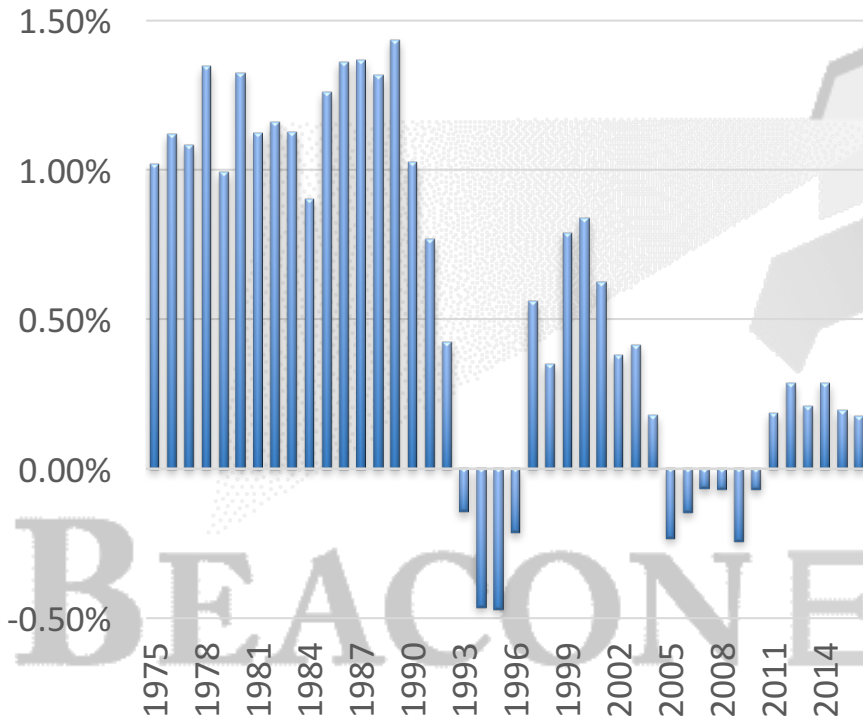


## California Labor Force Growth

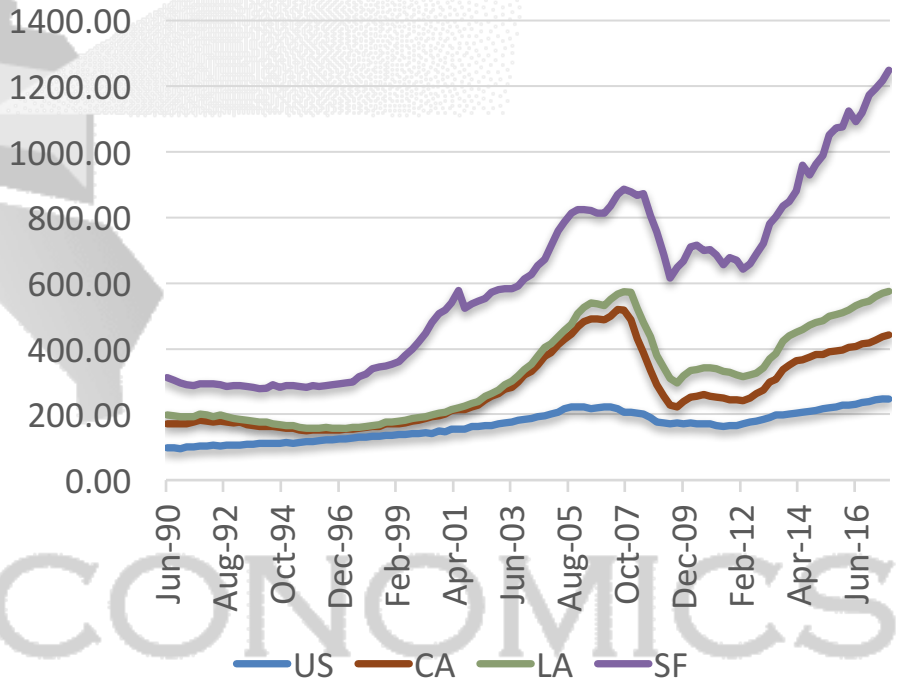


# Don't Go West, Young Man?

## Net Migration as a % of Pop



## Home Prices

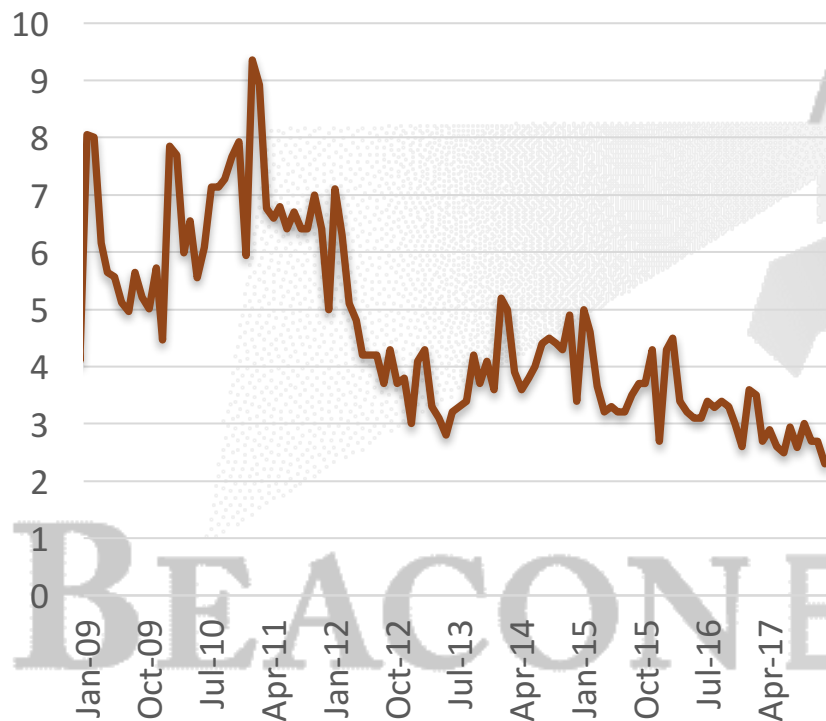


# The Upside of Labor Shortages

	Number (Mil)	Median Income 2016	Change 13-16	Unemp 2016	Change 13-16
Total	20.96	40,005	10.2%	5.5%	-3.0%
No High School	3.52	21,558	13.1%	8.2%	-3.7%
High School	4.26	30,231	10.9%	7.0%	-4.0%
Some College	6.14	36,985	3.1%	5.5%	-3.4%
Bachelor plus	7.03	60,121	9.4%	3.6%	-1.6%

# Residential Real Estate

## Housing Inventory



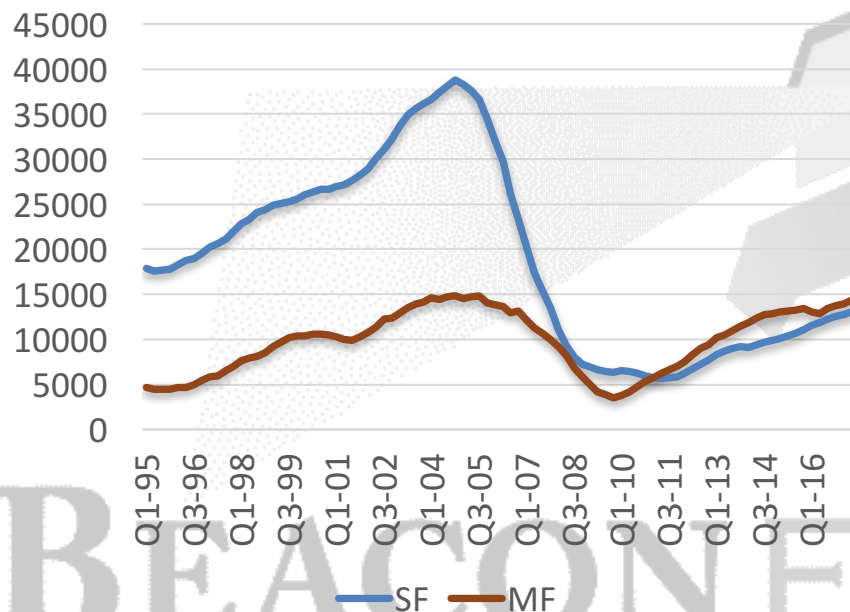
## California Home Prices, Q3-17

County	Median Price	YoY Growth (%)
Monterey	547,077	5.9%
Orange County	747,423	7.1%
Riverside	362,135	8.9%
San Bernardino	292,626	7.3%
San Diego	578,271	7.4%
San Francisco	1,274,218	4.2%
San Luis Obispo	575,459	8.5%
Santa Clara	1,058,524	14.5%
Los Angeles	588,466	8.0%



# New Housing Supply

**New Home Permits**



## How Much Housing Needed?

Housing Needed to maintain 2%  
State Job Growth

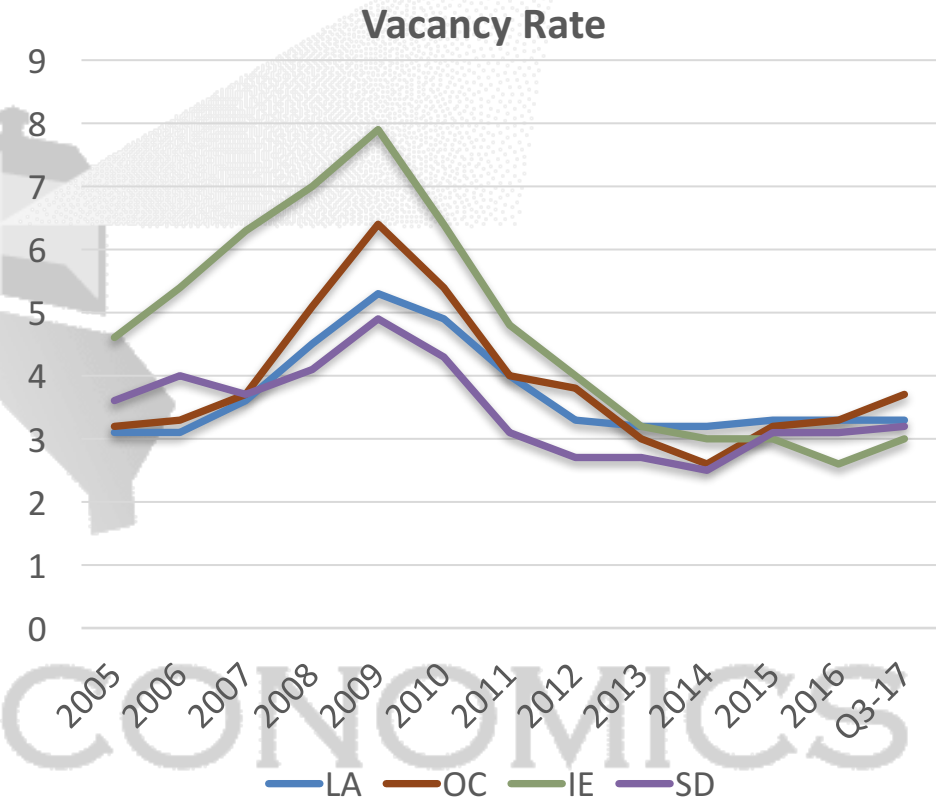
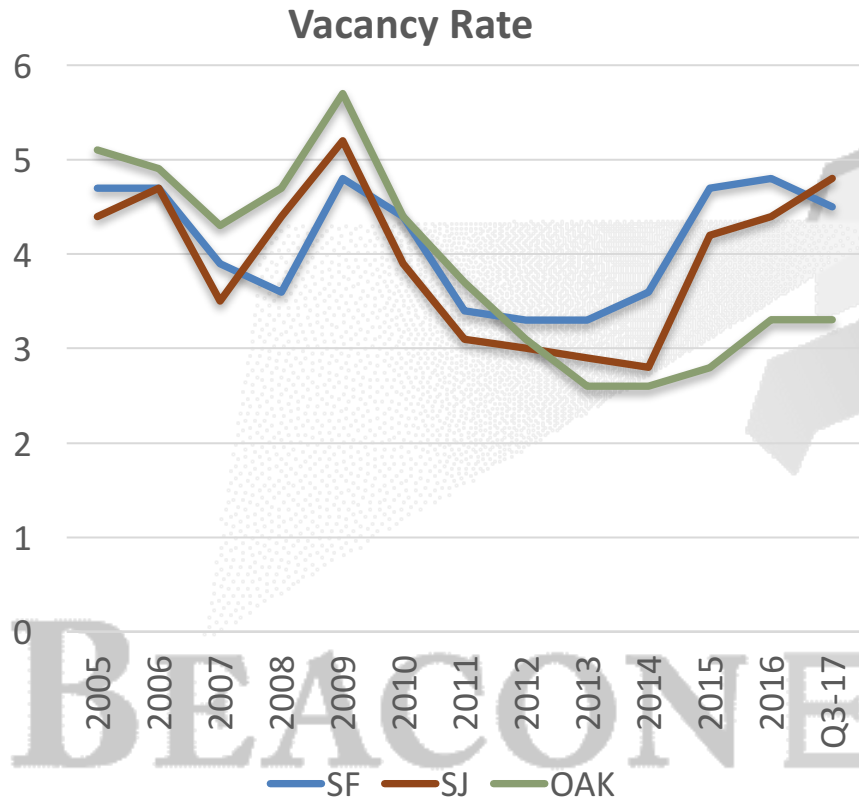
### Method 1

Total	722,022
Per Year	206,674
Current	106,185
Shortfall	100,489

### Method 2

Total	911,001
Per Year	263,667
Current	106,185
Shortfall	157,482

# Vacancies



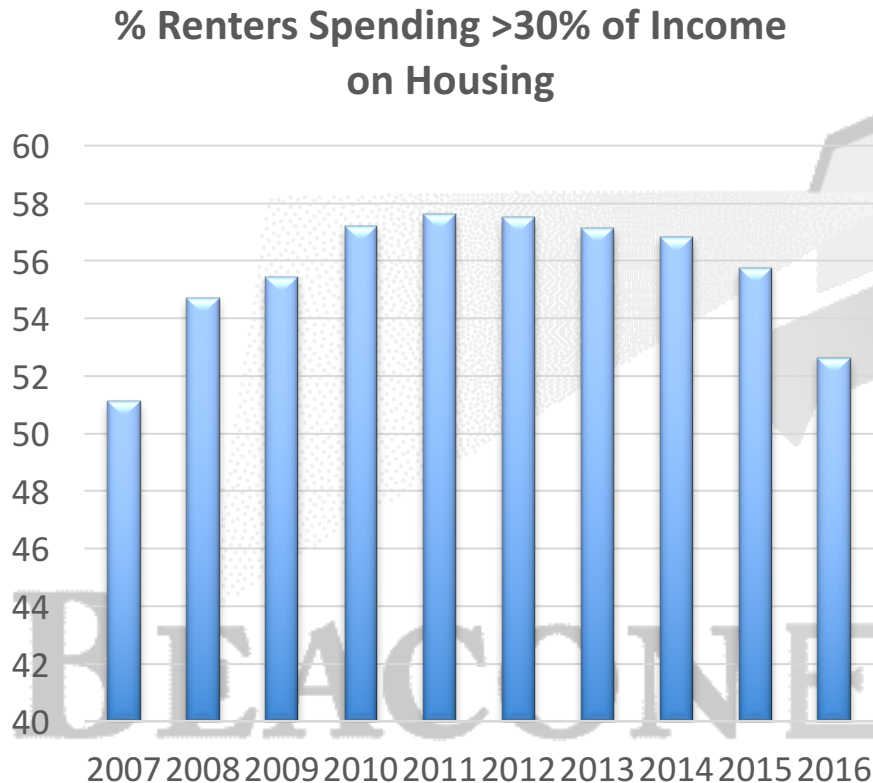
# Apartment Rents

## Apartment Markets, Rents

Metro	Cost of Rent, Q4-17		% Change since Q4-15	
	Class A	Class B/C	Class A	Class B/C
East Bay	2,599	1,938	5.2	6.3
Inland Empire	1,514	1,130	7.3	8.1
Los Angeles	2,479	1,575	10.9	10.6
Orange County	2,162	1,665	5.3	6.8
Sacramento	1,391	1,072	10.2	11.3
San Diego	2,111	1,437	6.9	7.5
San Francisco	3,728	2,333	3.4	0.2
South Bay	2,838	2,135	4.4	5.5

Source: Reis, Inc.

# Don't Just Focus on Affordable Rentals



CA	2014	2016	Change
Less than \$20k	92.7%	92.5%	-0.2%
\$20k to \$35k	89.0%	89.2%	0.2%
\$35k to \$50k	67.3%	71.9%	4.6%
\$50k to \$75k	41.1%	46.1%	5.0%
\$75k+	10.5%	11.8%	1.3%
All	56.8%	55.4%	-1.4%

# And it isn't just renters...

Share with Mortgage Burden $\geq 30\%$			
Metro	2005	2010	2015
Los Angeles	50.1	55.3	44.4
San Diego	49.4	51.5	41.3
Inland Empire	46.6	52.2	40.8
San Francisco MD	51.2	51.2	39.8
Orange County	46.5	51.3	39.5
East Bay	49.4	49.7	36.5
Phoenix	33.5	41.0	28.9
Dallas	34.0	32.8	26.8
Houston	33.8	34.7	25.5

# On the other side

	California	Alameda	Los Angeles	Orange	San Diego	San Francisco	Santa Clara
Renters							
2016	6,000,750	273,116	1,832,068	447,586	532,265	222,703	276,842
Change 11-16	375,376	16,779	112,284	36,722	36,656	3,678	14,125
Growth 11-16	6.7%	6.5%	6.5%	8.9%	7.4%	1.7%	5.4%
Overcrowded							
	818,737	39,668	303,691	72,153	60,812	16,739	43,186
Share	13.6%	14.5%	16.6%	16.1%	11.4%	7.5%	15.6%
Change 11-16	75,986	15,758	12,676	2,078	16,673	-2,091	7,089

# Filtering Blockage

Renters by Income: Struture Built Before 1970			
Metro	Household Income Less than \$35,000	Household Income \$35,000 to \$74,999	Household Income \$75,000 or More
San Francisco	26.5%	22.2%	51.2%
East Bay	31.4%	32.6%	36.0%
San Diego	35.0%	33.5%	31.5%
Orange	32.4%	36.3%	31.3%
Los Angeles	40.2%	31.7%	28.0%
Houston	45.4%	31.4%	23.2%
Inland Empire	47.5%	30.7%	21.8%
Phoenix	50.3%	28.2%	21.5%
Dallas	46.6%	33.0%	20.4%

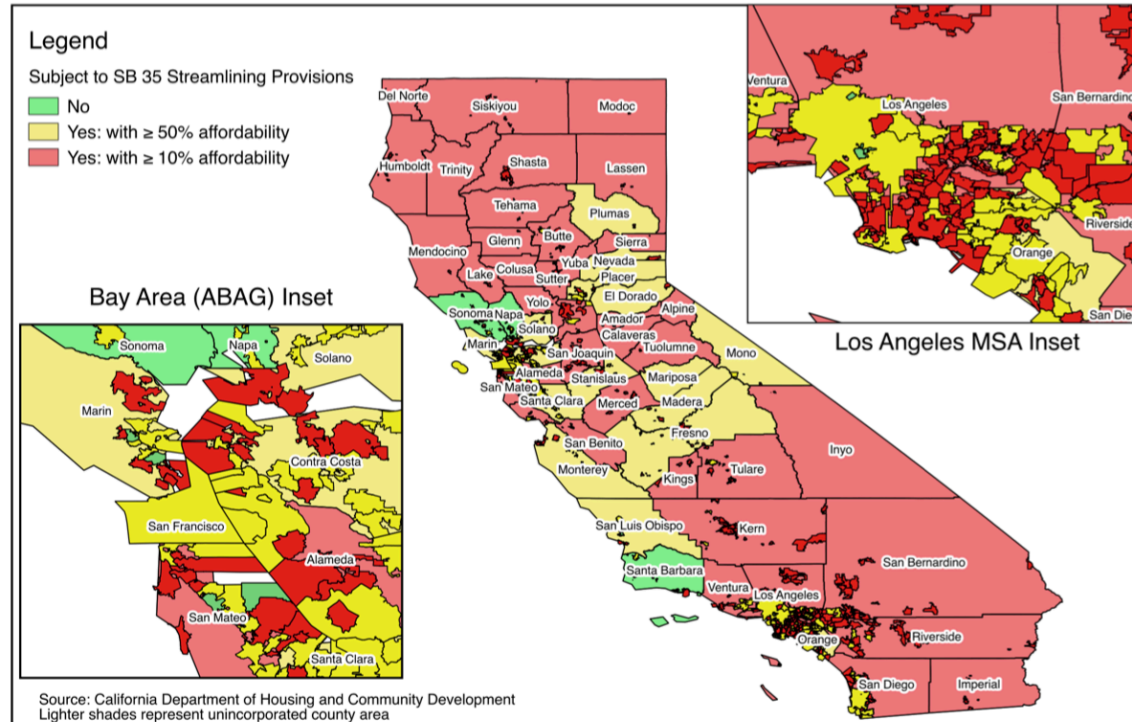
# The 2017 Legislative Housing Package

## SB35

On Feb 1, 2018 the state released the list of cities that are behind on their housing goals are thus required to streamline housing approvals under housing bill, SB 35.

As it turns out, 97% of CA cities have not met their housing goals.

SB 35 Statewide Determination Summary by City  
As of January 31, 2018





## SB 828: RHNA Reform

# SB 827: Mandating Denser & Taller Zoning Near Transit

- The Regional Housing Needs Assessment (RHNA), which is how California determines how much housing each local community should build, is based on a flawed methodology that significantly underestimates population growth and how much housing will be needed. In addition, the current RHNA allocation process is non-standardized, insufficiently connected to actual data, and highly politicized, thus giving some communities advantages when assigning state housing goals.
- SB 828 creates a clearer, fairer, more data-driven, and more equitable process for how the state and regional bodies assign RHNA numbers to local communities. It does this by requiring a more data-focused, objective process and by creating stronger guardrails, thus reducing the wiggle room jurisdictions use to lower their RHNA allocations. SB 828 also requires communities to begin making up for past RHNA deficits.
- The state of California and Los Angeles County continue to invest in public transportation, but too often the areas around transit lines and transit stops are zoned at very low densities, even limiting housing to single family homes around major transit hubs like BART, Caltrain, Muni, and LA Metro stations.
- Requiring low-density housing around transit makes no sense. Transit-rich areas are where the state we should be putting dense housing. Building dense and tall housing around transit is not only sound environmental, economic, and equity policy – it is also one of California's most promising sources of new housing.

# The Big Picture

- **Positives: It will be a good year**
  - GDP Growth Outlook for 2018: 3%
  - State revenues will look positive
  - Labor markets to remain tight, constraining growth
  - Rising wages to put pressure on profits
  - Exports, business investment continue to pick up
  - California housing shortages will constrain growth locally
  - Multifamily will be doing just fine
- **Negatives**
  - Fed will continue to tighten, yield curve flattening
  - Markets looking frothy—watch debt levels
  - Consumer savings: entering dangerous waters
  - Federal deficit will widen sharply
  - Political uncertainty to dominate headlines

# 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 CA 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  
Slowing Lending  
The Supply of CA Housing



## Our Services



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Regional Intelligence Reports



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Real Estate Market Analysis



Ports & Infrastructure Analysis



Economic Impact Analysis

Public Policy Analysis

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- ❖ Contact Christopher Thornberg

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310-571-3399

# Beacon's work in Revenue Forecasting

## **Beacon Economics**

Founded in 2007, Beacon Economics LLC is an independent research and consulting firm dedicated to delivering accurate, insightful, and objectively-based economic analysis. Leveraging unique proprietary models, vast databases, and sophisticated data processing, the company specializes in services like industry analysis, economic policy analysis, economic impact analysis, real estate market analysis, and economic and revenue forecasting. Beacon Economics equips its clients with both the data and insights required to understand the significance of on-the-ground realities and make informed business and policy decisions based on them.

### **Sample Clients for whom Beacon has provided Forecasting Services:**

- County of Los Angeles
- County of Riverside
- City of Oakland
- City of Anaheim
- City of San Luis Obispo
- Riverside County Transportation Commission
- City of Newport Beach

# Beacon's Approach to Forecasting

Beacon Economics creates and maintains forecasting models that predict the path of revenue flows for a five-year period from the point at which data is fully available. In creating these models, Beacon takes two distinct steps: 1) create a revenue forecasting model, and 2) build a fully integrated econometric model in order to forecast both economic drivers and revenue streams.

## **Based on historical data provided, Beacon's revenue forecasts assess:**

- Assessed Valuation Forecast
- Taxable Sales Forecast
- Sales Tax Forecast
- Business Tax Forecast
- Transient Occupancy Tax Forecast
- Real Property Transfer Tax Forecast
- Building Permit Forecast
- Demographic Forecast

Each forecast is based on Beacon Economics' proprietary, econometric forecast models. A model is customized specifically for each project and the most updated, location-specific data available is used. As part of each project, Beacon Economics schedules detailed discussions with Client staff to review and explore tax and other Client data that may be used in the model.