

The Economic Outlook

Focus on San Jose

June 2017

Christopher Thornberg

Founding Partner, Beacon Economics

*Director, UC Riverside Center for Forecasting and
Development*



San José State
UNIVERSITY



BridgeBank

Forecasting 101

Donald Trump Is Elected President in Stunning Repudiation of the Establishment

By MATT FLEGENHEIMER and MICHAEL BARBARO NOV. 9, 2016



The Victory of Miserabilism

If it ain't broke... don't fix it

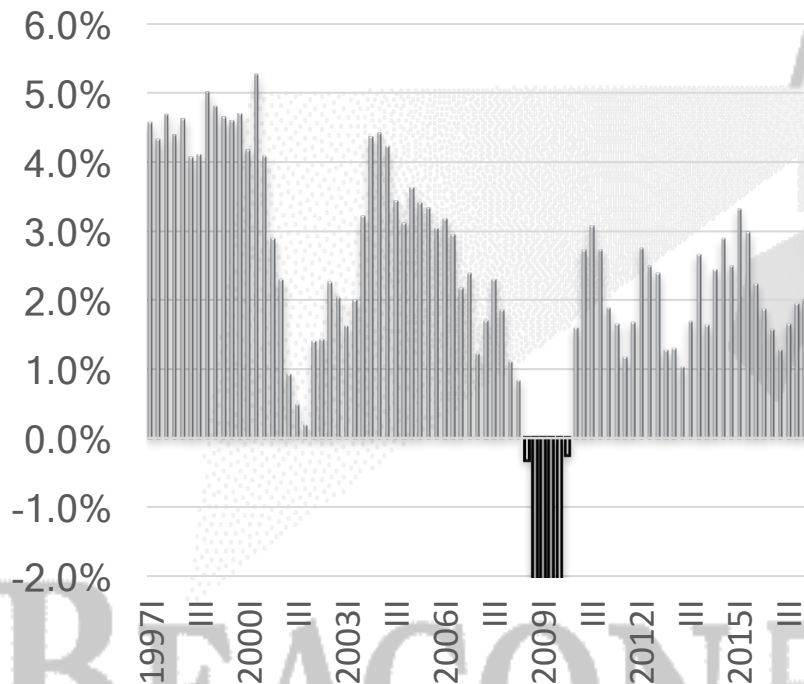
- US GDP is growing slow, but it is growing
- Fundamentals are fine, no chance of recession (for now)
- U.S.: 5% world's population, 20% of the world's consumption
- Real incomes have been rising, true well-being even more so
- Labor markets are tight
- Inflation slow, interest rates low
- Business investment solid, profits are high
- US energy: too successful for its own good
- Manufacturing: doing fine
- Housing market—signs of progress
- California still way out in front

The true challenges

- Slow growth due to self-inflicted wounds / political gridlock
- The global commodity glut
- State and Local budgets still stressed, decaying Infrastructure
- Health cost inflation
- Underfunded pensions and entitlements
- An under-performing housing market / bad financial regulations (Dodd-Frank)
- Growing wealth inequality
- The shift to the information economy
- The growing disconnect between political debate and reality

GDP: Accelerating Despite Weak Start

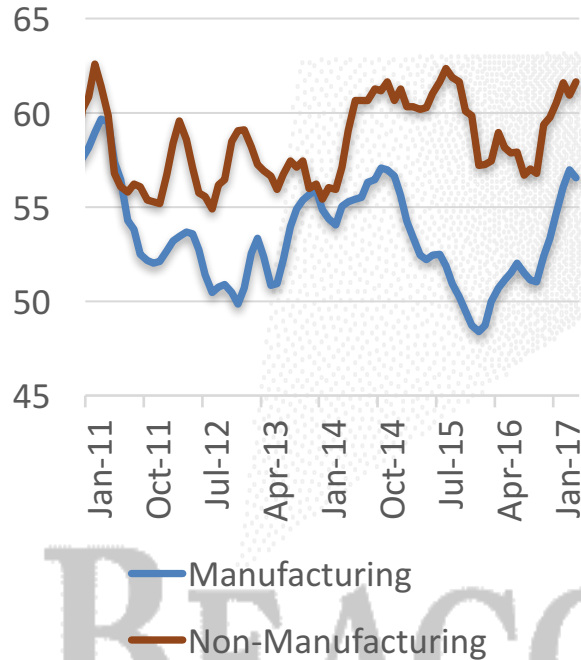
Real GDP Growth (Y-o-Y)



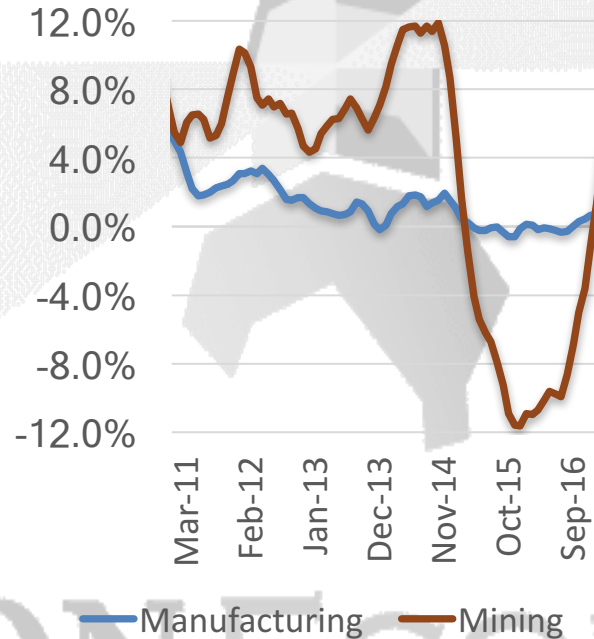
	2016			2017
	II	III	IV	I
GDP	1.40	3.50	2.10	0.70
Final Demand	2.38	2.16	2.91	1.56
Consumption	2.88	2.03	2.40	0.23
Goods	1.51	0.77	1.29	0.02
Services	1.37	1.26	1.11	0.21
Investment	-1.34	0.50	1.47	0.69
Structures	-0.06	0.30	-0.05	0.55
Equipment	-0.17	-0.26	0.11	0.49
Intellectual property	0.35	0.13	0.05	0.08
Residential	-0.31	-0.16	0.35	0.50
Change inventories	-1.16	0.49	1.01	-0.93
Net Exports	0.18	0.85	-1.82	0.07
Exports	0.21	1.16	-0.55	0.68
Imports	-0.03	-0.31	-1.27	-0.61
Government	-0.30	0.14	0.03	-0.30
Federal	-0.02	0.16	-0.08	-0.13
State and local	-0.28	-0.02	0.11	-0.17

Production Activities

ISM Indices Smoothed to April



Industrial Production Growth

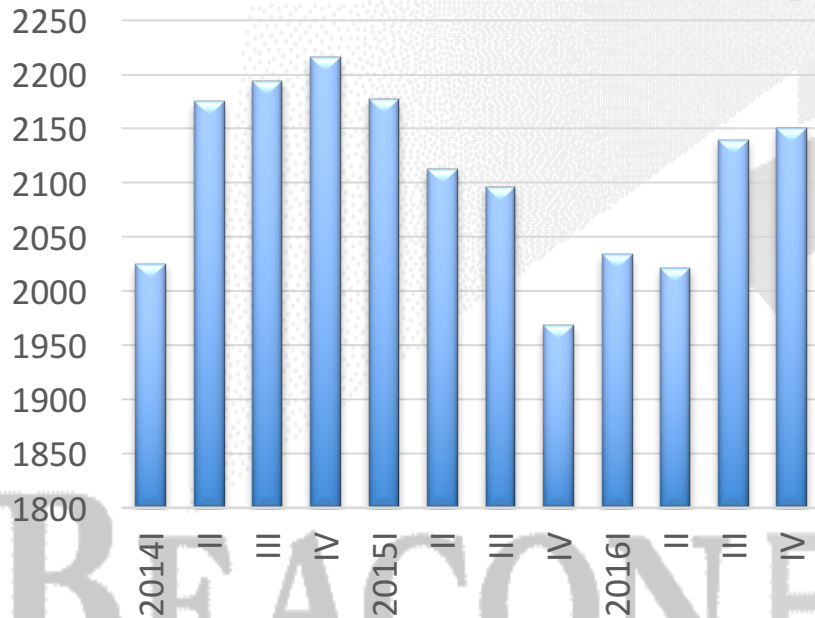


Industrial Production Growth Rates (yoy)

Sector	Share		
	17	15-16	16-17
Total IP	100.0	-2.7	2.2
Information processing	2.2	0.2	5.4
Industrial and other	5.3	-6.8	1.4
Equipment parts	5.1	-5.1	1.6
Energy	17.2	-7.1	4.2

Profits and Investments

**Corporate profits with
inventory valuation and capital
consumption adjustments**

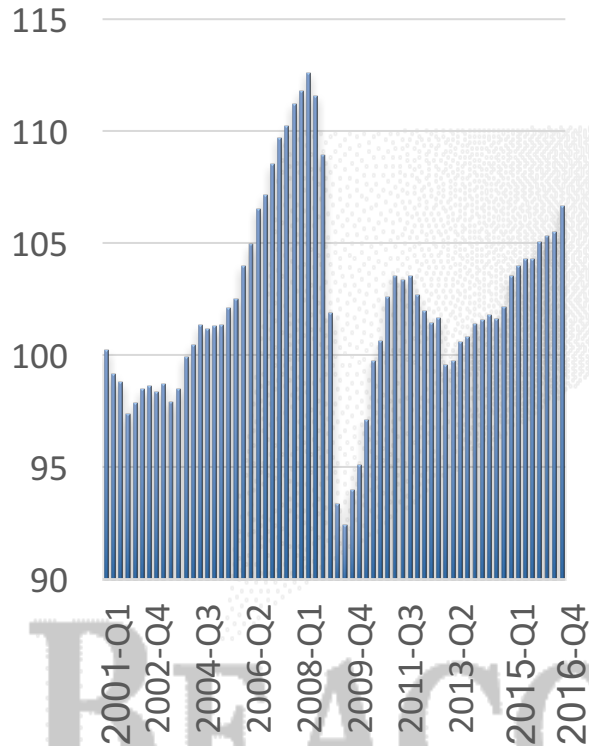


Investment

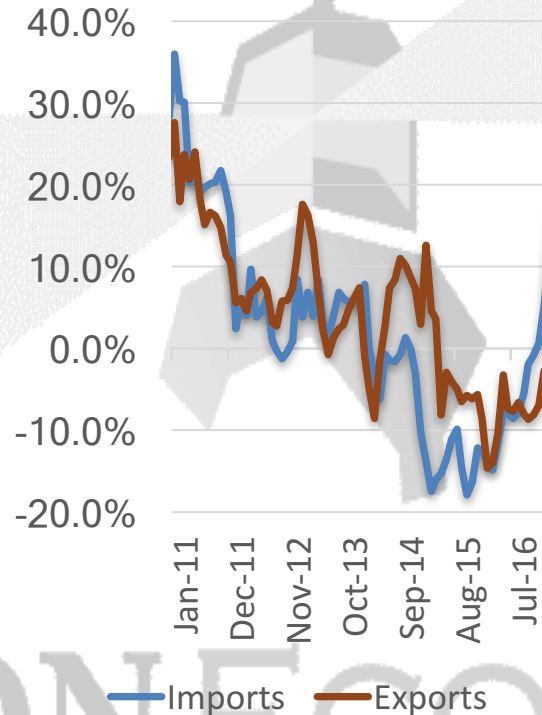
	2017	Gr 15	Gr 16
Total	2,869.1	0.7%	3.0%
Structures	465.9	-2.9%	6.1%
Commercial	164.1	16.3%	6.7%
Mining	71.7	-45.4%	43.5%
Equipment	1,060.0	-2.9%	1.8%
Information	364.1	2.4%	5.0%
Industrial	222.0	2.7%	4.3%

Global Economy: Stronger

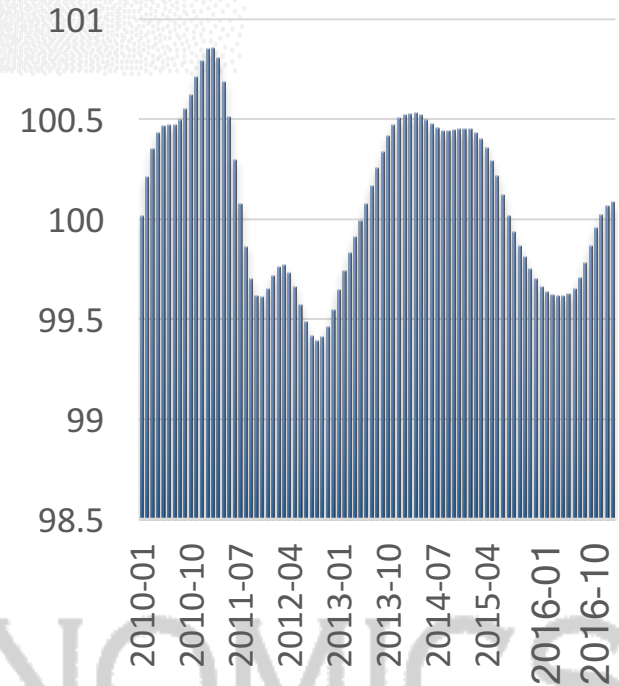
EU IP Index



China Growth Real Trade

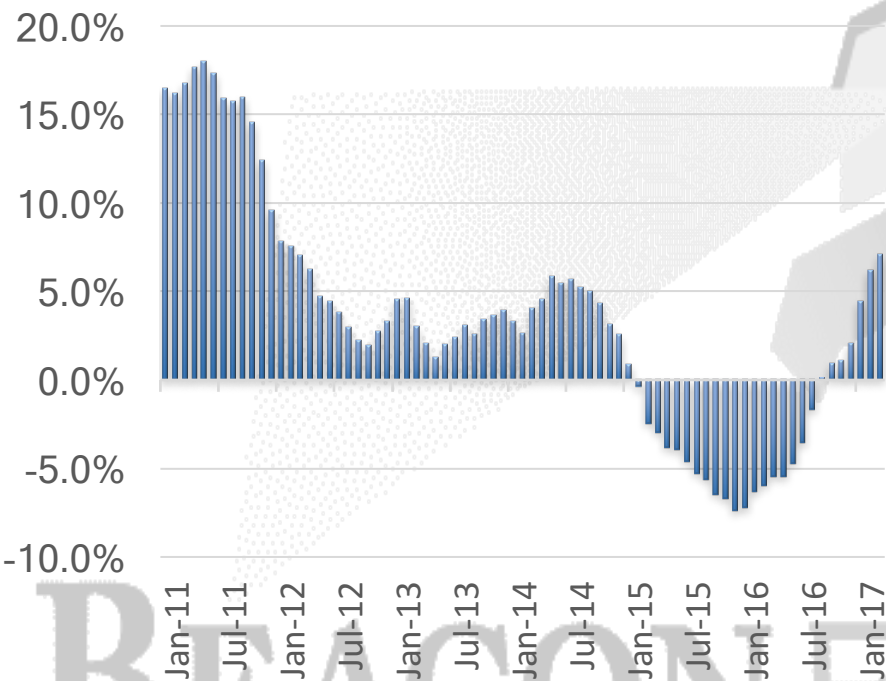


OECD Leading Indicator Index



External Accounts

Nominal Export Growth Y-o-Y

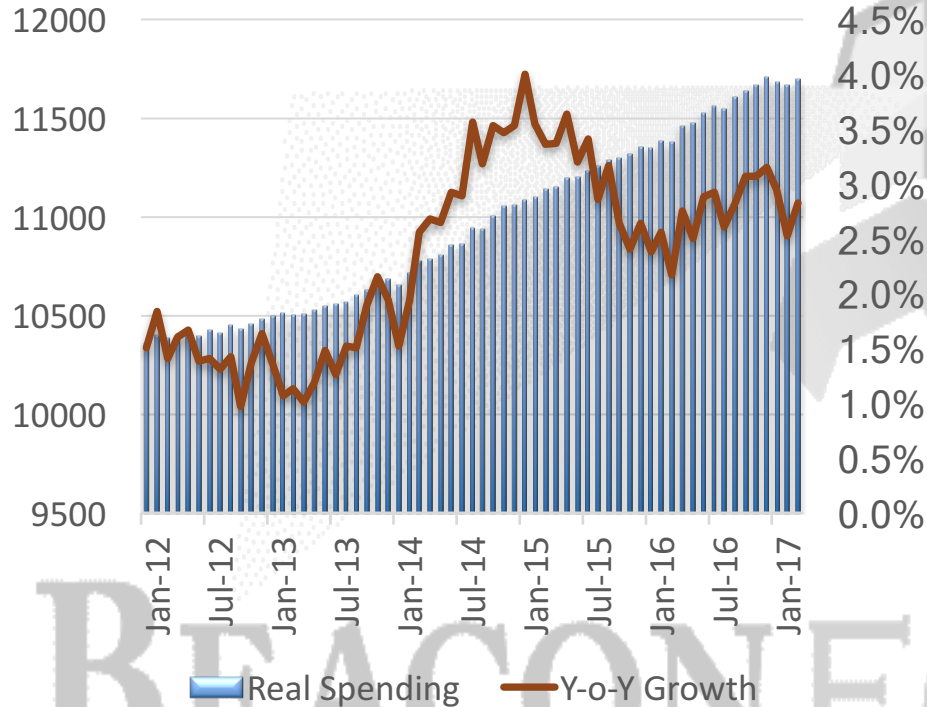


\$US: Real Broad Index



Consumer Spending

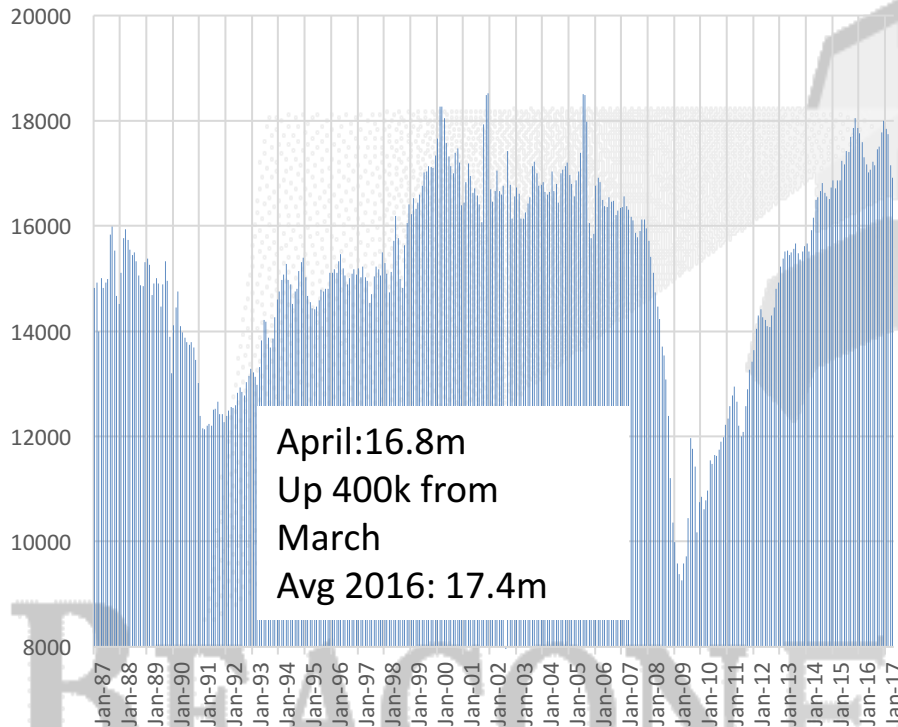
Real Consumer Spending



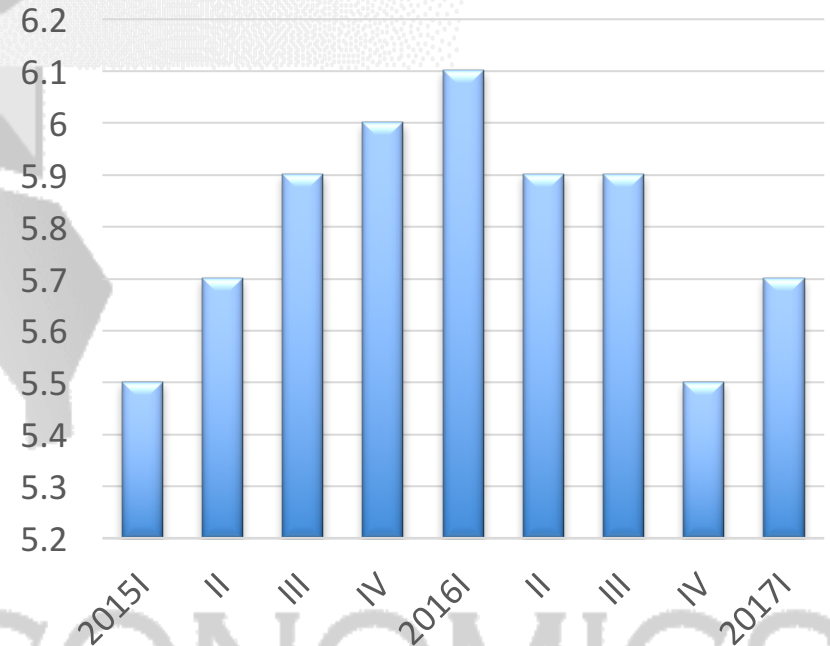
	Q3-Q4	Q4-Q1	Diff
PCE Total (Real)	\$100.8	\$9.7	-\$91.1
Motor vehicles and parts	\$16.8	-\$19.6	-\$36.4
Health care	\$27.0	\$15.8	-\$11.2
Other durable goods	\$3.3	-\$3.6	-\$6.9
Other services	\$11.5	\$5.2	-\$6.3
Food and beverages	\$13.6	\$8.7	-\$4.9
Clothing and footwear	\$0.0	-\$4.8	-\$4.8
Gasoline and other energy	-\$1.2	-\$5.9	-\$4.7
Housing and utilities	-\$7.1	-\$11.6	-\$4.5
Transportation services	\$4.7	\$1.1	-\$3.6
Recreation services	\$6.0	\$4.2	-\$1.8
Furnishings	\$4.0	\$2.5	-\$1.5
Financial services	\$3.9	\$3.4	-\$0.5

Autos and Savings

Smoothed Auto Sales (3 Month)

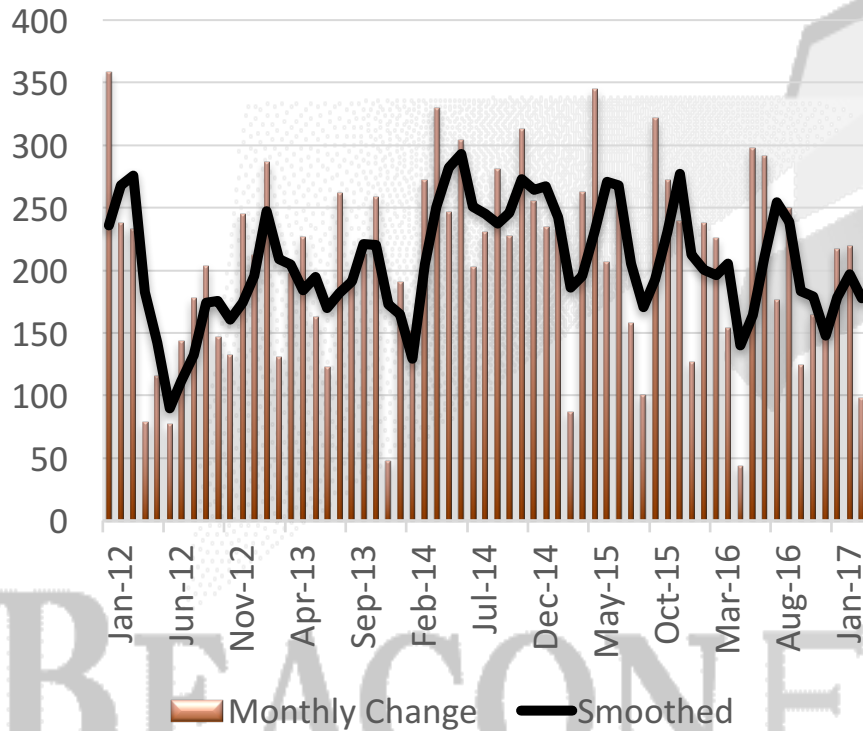


Personal saving as a percentage of disposable personal income

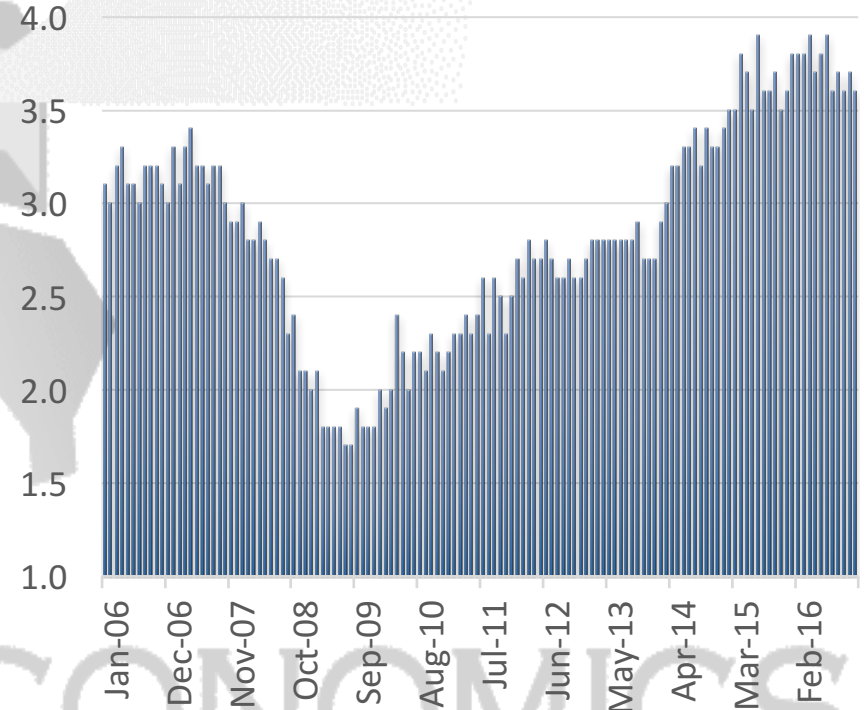


Labor Markets

Change Payroll Jobs

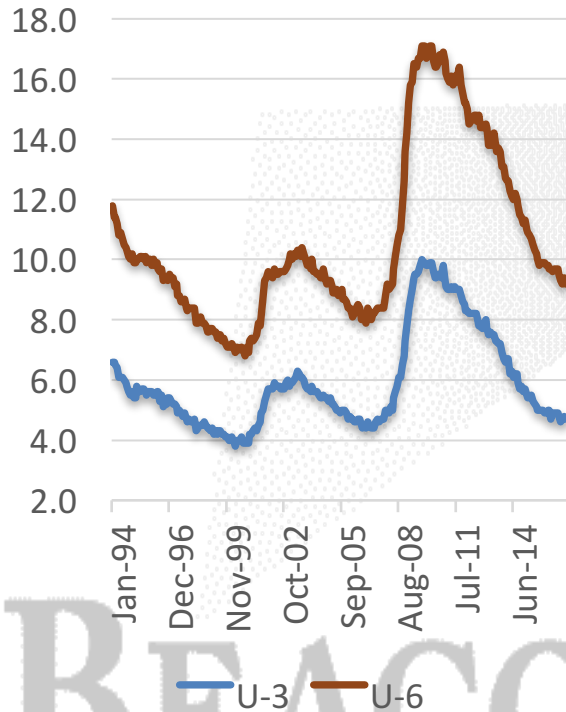


Job Openings Rate

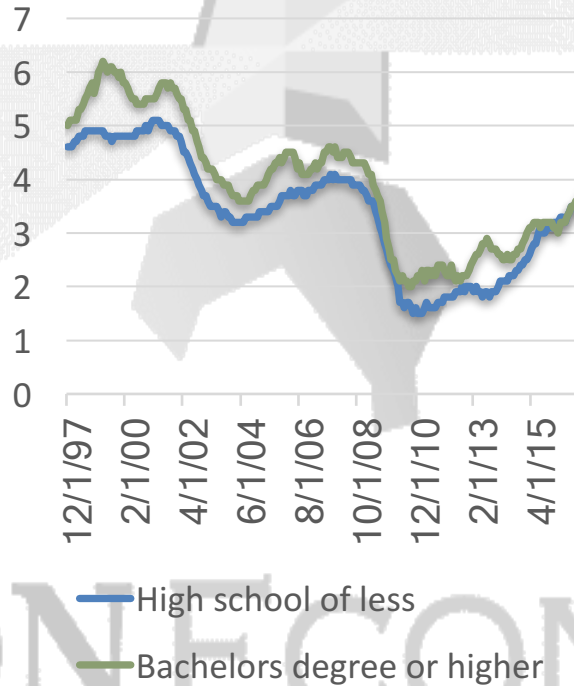


Unemployment

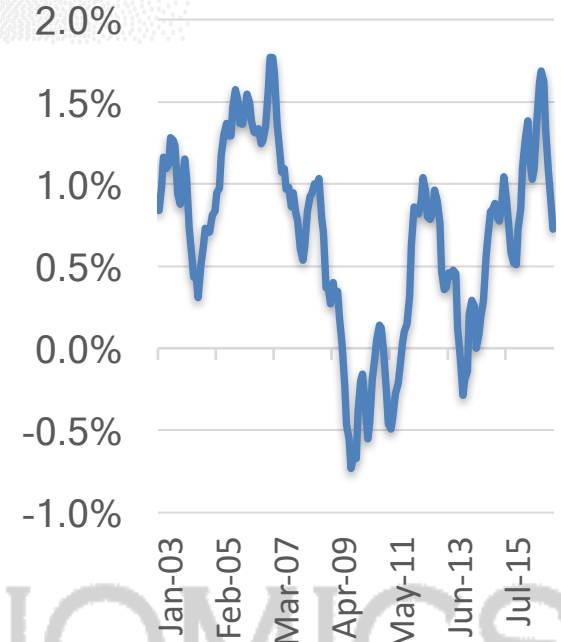
US Unemployment Rates



Y-o-Y % Growth Median Wages



Y-o-Y Growth Labor Force



Local Economic Performance

State Unemployment Rate Nov 2016

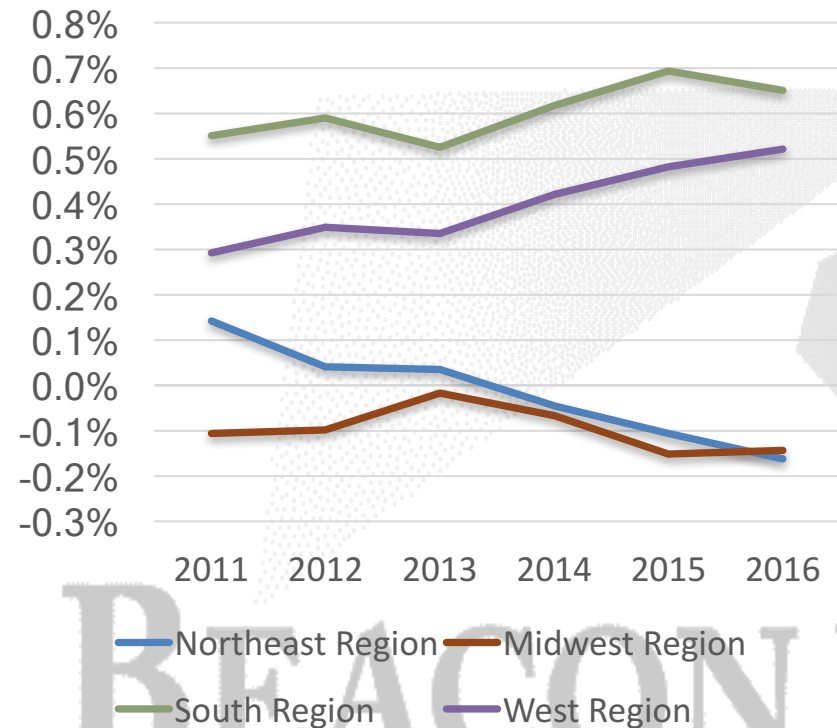
Alaska	6.9	Wyoming	5.3	Iowa	4.2
New Mexico	6.7	Missouri	5.2	Maryland	4.2
Louisiana	6.4	Oklahoma	5.2	Maine	4.1
DC	6.1	Georgia	5.1	Wisconsin	4.1
Mississippi	6	Kentucky	5	Arkansas	4
Nevada	5.8	New York	5	Minnesota	4
West Virginia	5.8	South Carolina	4.9	Virginia	4
Pennsylvania	5.7	Ohio	4.8	Idaho	3.8
Rhode Island	5.6	Texas	4.8	Colorado	3.6
Washington	5.6	Florida	4.7	Massachusetts	3.6
Arizona	5.5	North Carolina	4.7	Utah	3.4
California	5.5	Michigan	4.6	Hawaii	3.3
Illinois	5.5	Tennessee	4.6	Vermont	3.3
Oregon	5.5	Indiana	4.5	Nebraska	3.2
Alabama	5.4	Kansas	4.4	North Dakota	3
Connecticut	5.4	Delaware	4.3	New Hampshire	2.9
New Jersey	5.3	Montana	4.3	South Dakota	2.9

State Participation 2015

Minnesota	70.2	Pennsylvania	62.8
Wisconsin	68.0	Ohio	62.5
Maryland	66.8	California	62.2
Colorado	66.7	Georgia	61.3
Missouri	65.6	N Carolina	61.2
Virginia	65.2	New York	61.1
Mass.	64.9	Louisiana	60.5
Illinois	64.7	Michigan	60.3
New Jersey	64.1	Arizona	59.8
Indiana	63.7	Tennessee	59.3
Texas	63.7	Florida	59.3
Washington	63.0	S Carolina	59.0

Population Shifts

Net Migration (% of Pop) by region



Net Migration by State 14-16

Florida	1.51%	Ohio	-0.05%
Nevada	1.27%	Penn	-0.06%
Colorado	1.10%	Wisconsin	-0.08%
Oregon	1.08%	Michigan	-0.08%
South Carolina	1.04%	New Jersey	-0.14%
Washington	0.99%	Vermont	-0.19%
Arizona	0.96%	W Virginia	-0.26%
Texas	0.90%	New York	-0.27%
North Dakota	0.79%	Mississippi	-0.28%
Idaho	0.77%	Kansas	-0.30%
Delaware	0.66%	Connecticut	-0.32%
North Carolina	0.66%	Wyoming	-0.35%
Montana	0.60%	New Mexico	-0.47%
Georgia	0.54%	Illinois	-0.58%
Tennessee	0.53%	Alaska	-0.73%
Utah	0.49%		

Income Stagnation?

\$100,00
\$90,00
\$80,00
\$70,00
\$60,00
\$50,00



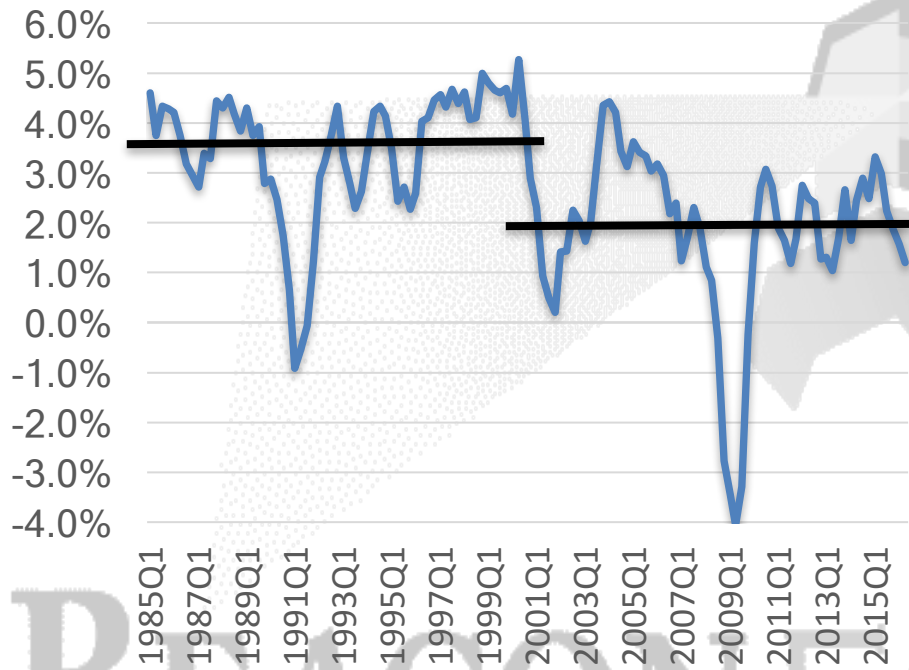
y?

tions

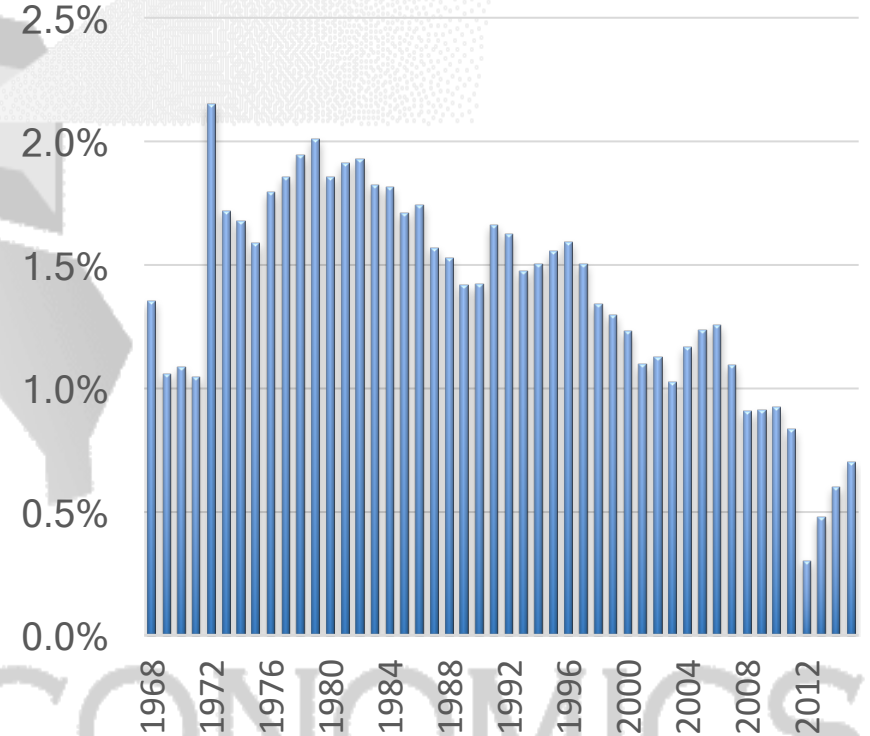
t quality
iety
tion
nditions

Secular Stagnation?

Real GDP Growth Y-o-Y

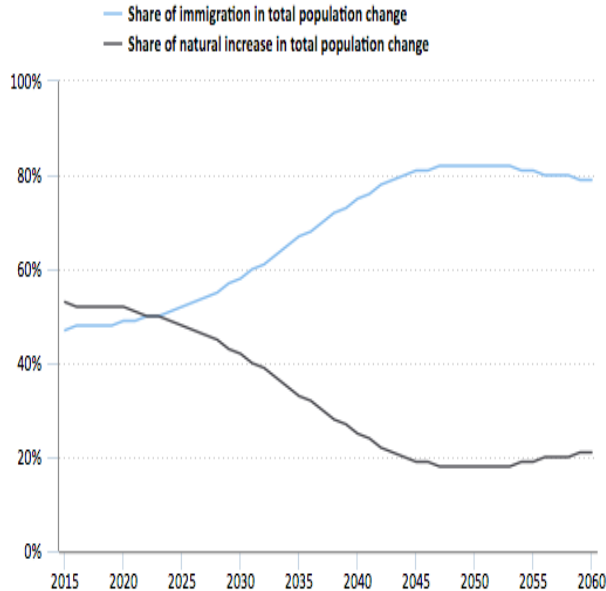


US Growth Adults 25-64 Years Old

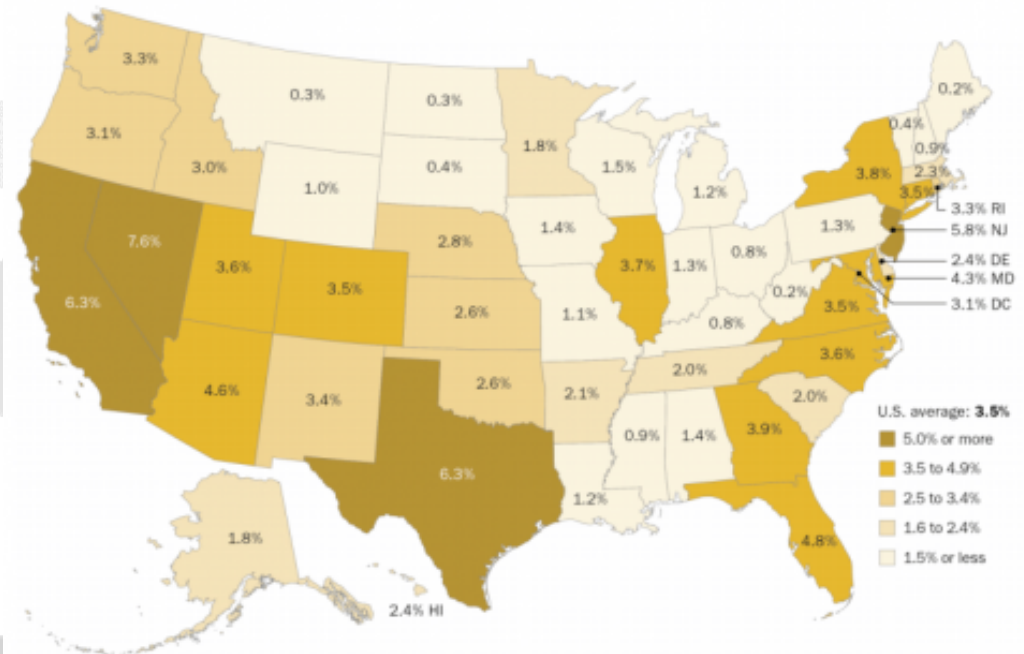


Immigration

Projected share of natural increase of population and immigration in total population change



Unauthorized Immigrant Share of Population, by State, 2012



Note: Percentages calculated from unrounded numbers.

Source: Pew Research Center estimates for 2012 based on augmented American Community Survey data from Integrated Public Use Microdata Series (IPUMS)

California fact versus fiction

Chief
Executive
NETWORK

CONTINUOUS IMPROVEMENT FOR YOU - THE CEO

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](#)

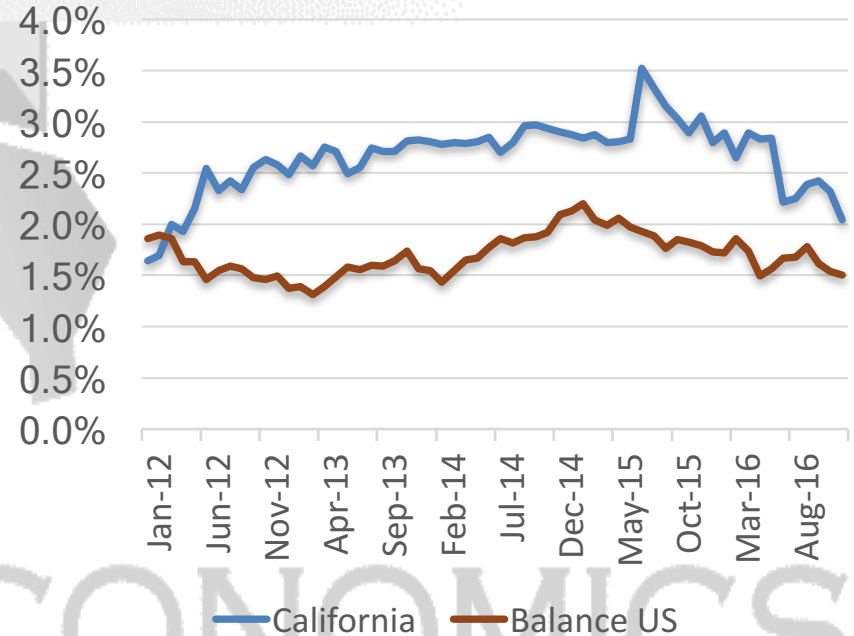


As for California

5 Year Change in Payroll Jobs by State

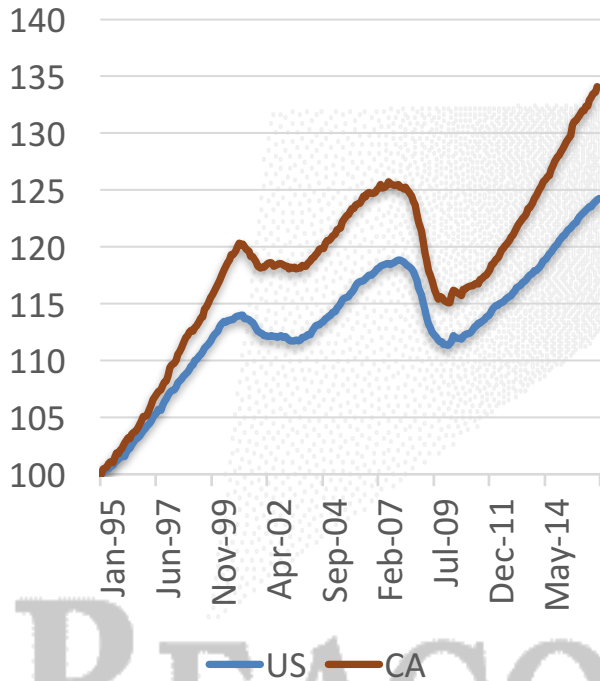
	New Jobs	Ann Gr	US Share
Utah	226	3.5%	1.8%
Nevada	188	3.1%	1.5%
Florida	1,207	3.1%	9.5%
Idaho	96	3.0%	0.8%
Colorado	344	2.9%	2.7%
Oregon	228	2.7%	1.8%
Washington	401	2.7%	3.2%
California	2,038	2.7%	16.1%
Georgia	521	2.5%	4.1%
Texas	1,425	2.5%	11.2%
Arizona	298	2.3%	2.3%
South Carolina	220	2.3%	1.7%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

State and National Employment Growth

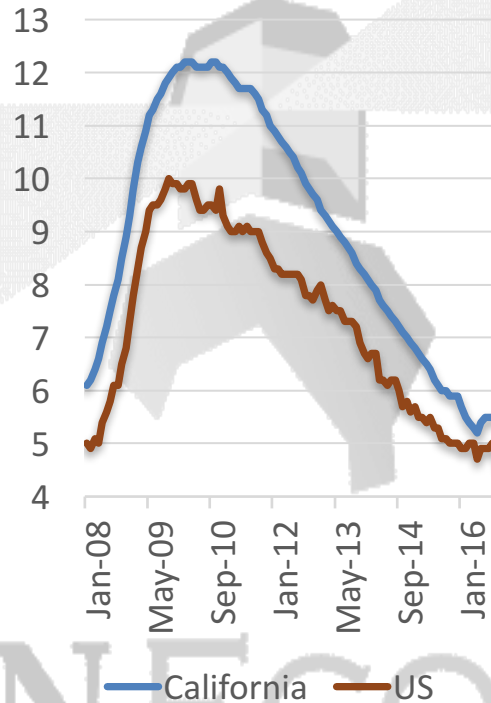


State Employment / Income

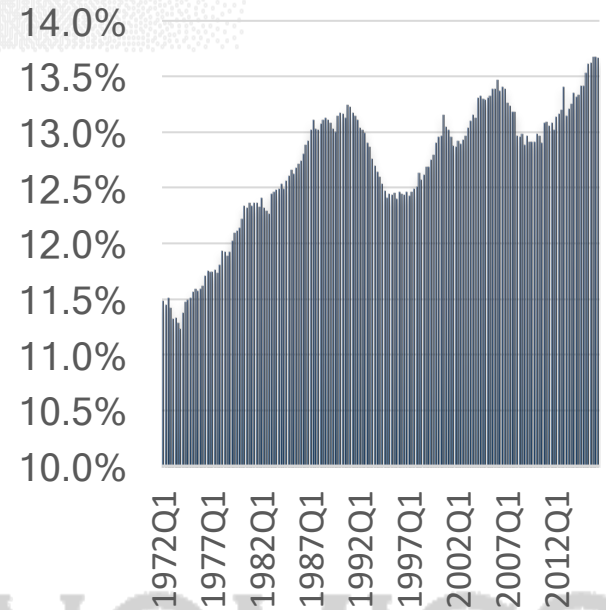
Employment (Index)



Unemployment Rates



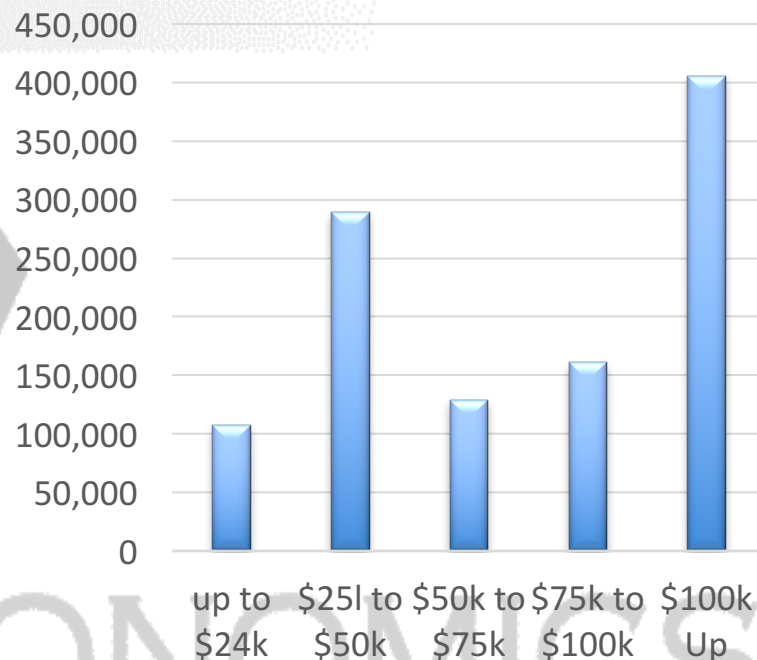
CA Share National Personal Income



California Employment

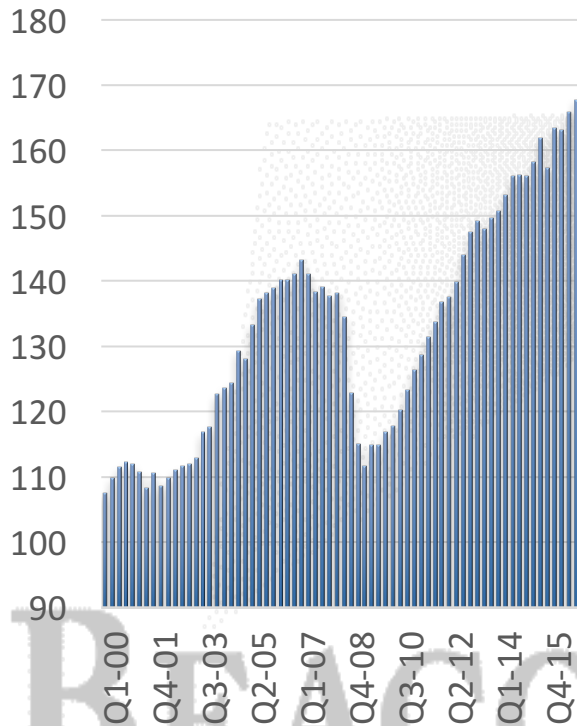
	Feb-17	1 Yr	Ch
Total Nonfarm	16676.1	1.9%	315.8
Education	370.2	5.7%	19.8
Government	2538.2	1.9%	46.4
Wholesale Trade	738.1	2.5%	18.3
Financial Activities	830.6	1.7%	14.1
Health Care	2222.8	3.2%	69.3
Prof Sci Tech	1241.8	2.7%	32.9
Other Services	565.3	2.3%	12.9
Retail Trade	1688.9	0.7%	11.3
Management	227.9	1.2%	2.8
Logistics	593.9	3.3%	18.9
Manufacturing	1299.7	-0.7%	-9.6
Information	532.2	3.1%	15.8
Hospitality	1928.6	2.6%	48.9
Admin Support	1091.6	0.0%	0.5
NR/Construction	806.2	1.7%	13.6

**Change in Employment by
Income Level 11-15**

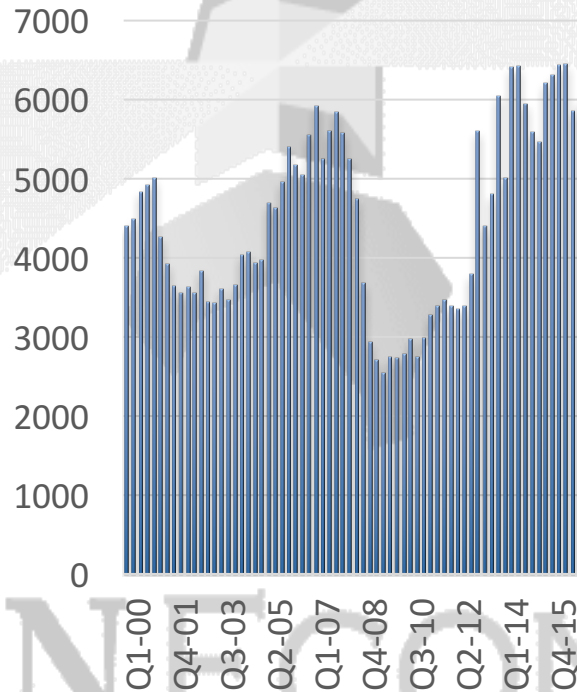


Business Activity

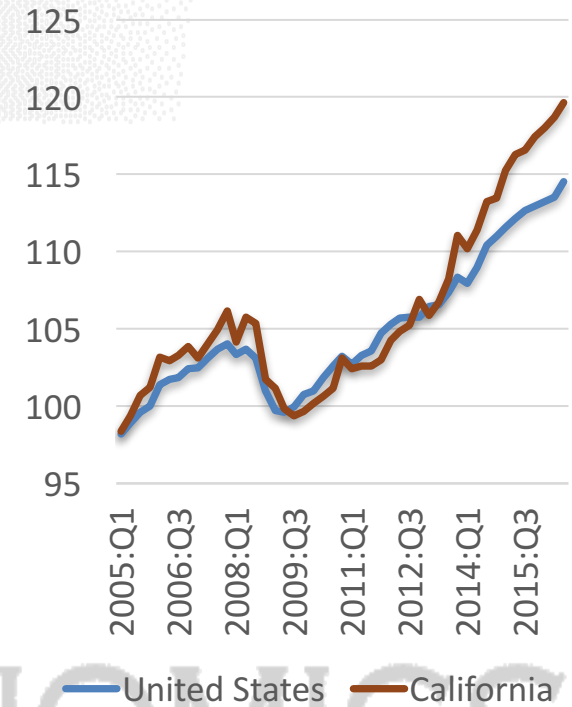
State Taxable Sales



Non-Residential Permit Values



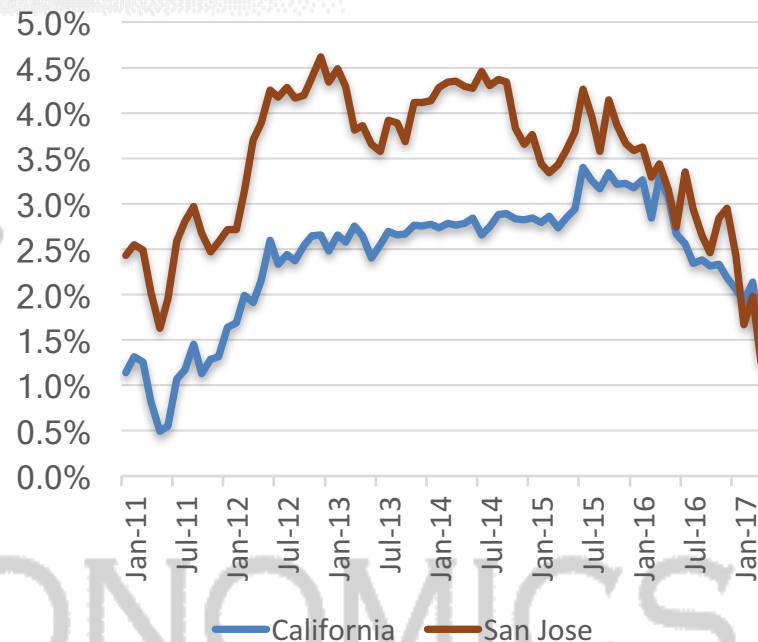
State GDP (Index)



Where is Growth?

<u>Payrolls</u>	<u>Mar-17</u>	<u>15-16</u>	<u>16-17</u>
California	16,694.0	2.8%	2.1%
Inland Empire	1,433.7	4.0%	3.5%
Oakland (MD)	1,156.2	3.3%	2.8%
Ventura	306.9	1.2%	2.8%
Fresno	340.5	3.5%	2.7%
San Francisco (MD)	1,110.4	4.5%	2.5%
Sacramento	957.9	3.5%	2.0%
Stockton	228.3	3.9%	2.0%
San Diego	1,436.8	2.7%	2.0%
San Jose	1,081.0	3.3%	2.0%
Santa Barbara	183.1	0.7%	1.8%
Los Angeles (MD)	4,429.6	2.6%	1.7%
Orange County (MD)	1,591.5	2.7%	1.3%
Santa Rosa	201.7	2.5%	0.6%
Bakersfield	257.8	-0.8%	0.6%

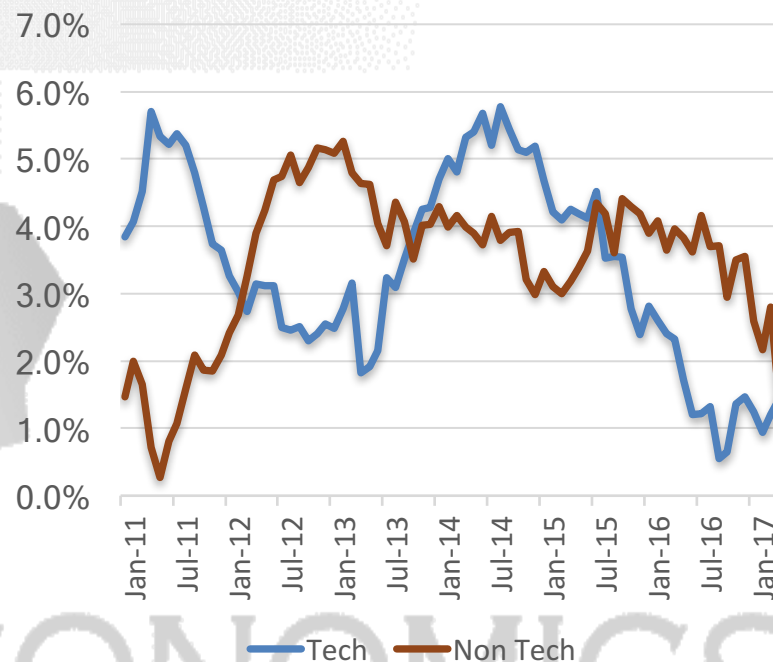
Payroll Employment Growth



Proximate v Ultimate Causes

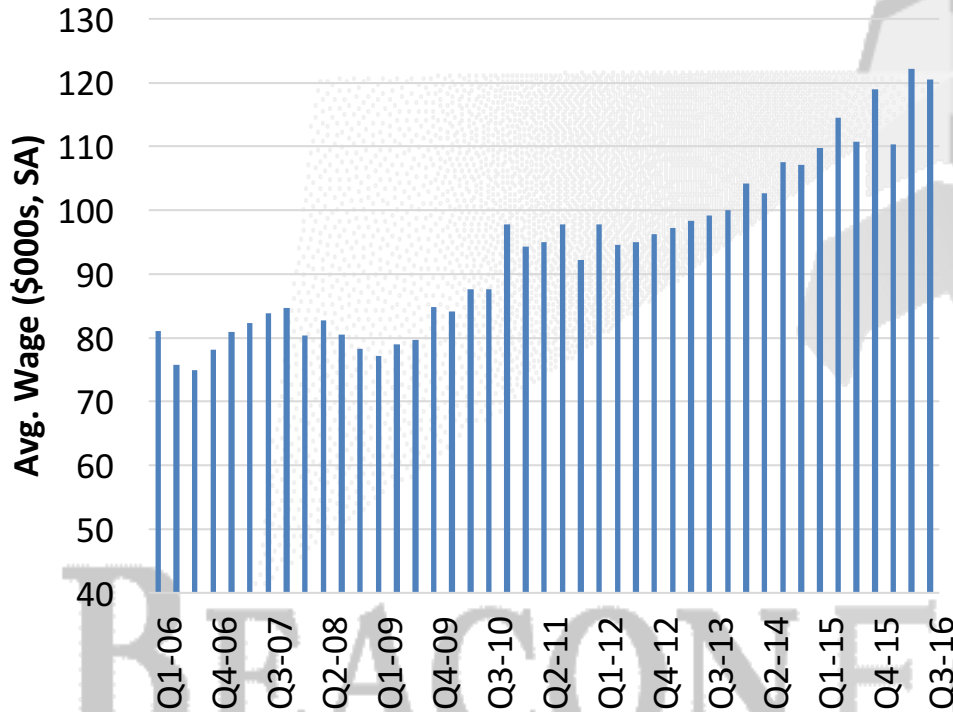
Total, All Industries	1,085,100	36,100	14,500	-21,600
Computer Mfg	52,200	6,800	500	-6,300
Construction	47,200	4,600	-200	-4,800
Administrative	61,300	2,700	-2,000	-4,700
Educational Services	44,900	1,500	-1,700	-3,200
Computer Systems	75,800	5,300	2,200	-3,100
Wholesale Trade	36,600	700	-1,400	-2,100
Finance & Insurance	20,800	1,000	-800	-1,800
Health Care	120,900	5,600	4,400	-1,200
Retail Trade	84,900	0	-1,000	-1,000
Real Estate	14,100	500	100	-400
Government	96,700	800	1,100	300
Information	76,200	3,500	3,900	400
Semiconductor Mfg	38,400	-2,700	-1,000	1,700
Leisure & Hospitality	102,800	2,000	5,700	3,700

Tech and Non Tech Growth



Wages

**Average Wage
Santa Clara County, Q1-06 to Q3-16**

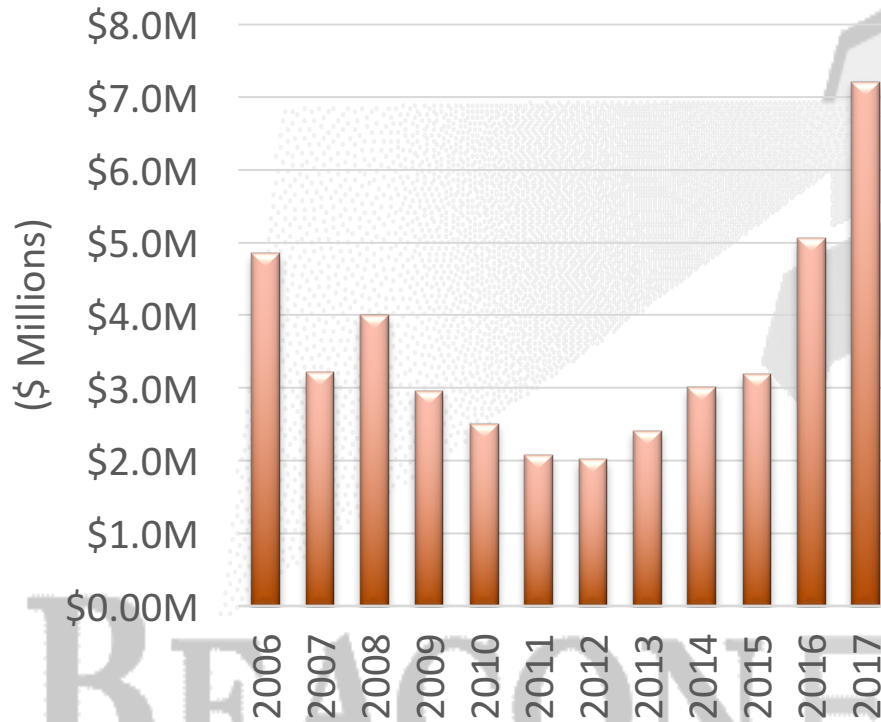


Average Wage by industry, Santa Clara County

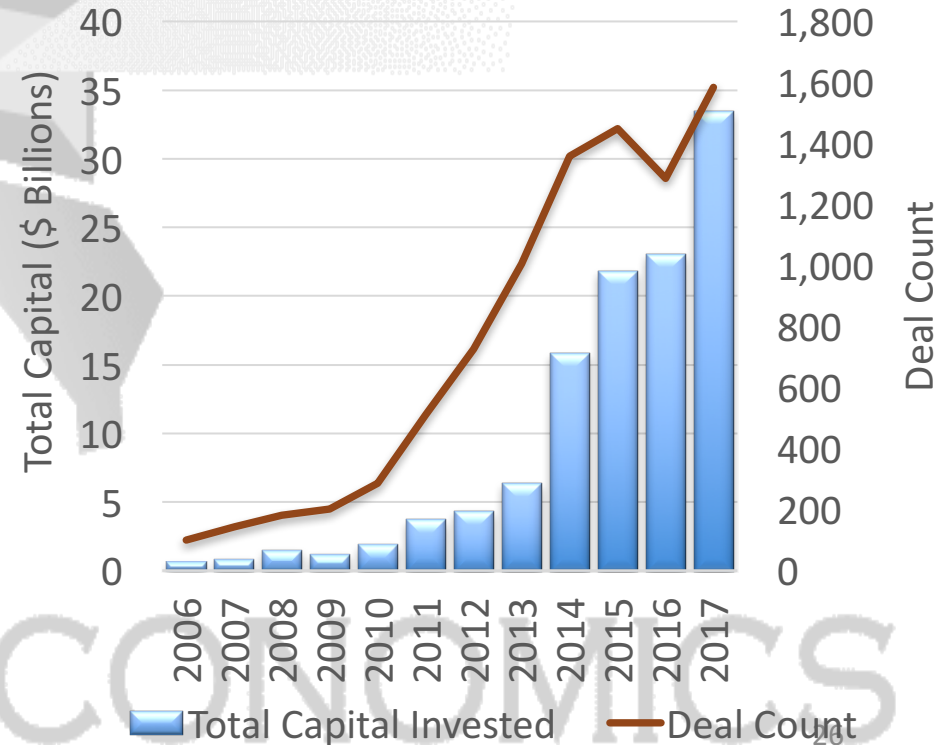
Industry	Q3-16	YOY Growth (%)
Manufacturing	190,396	15.1
Information	313,138	14.1
Other Svcs.	42,622	10.7
Health Care	68,785	8.6
NR/Construction	79,002	8.3
Prof, Sci, Tech, and Mgmt	175,322	7.8
Admin Support	69,317	7.6
Leisure and Hospitality	29,103	7.3
Education	80,625	3.8
Transport/Warehouse/Util	61,256	3.3
Wholesale Trade	126,836	0.0
Fin. Svcs. and Real Estate	126,789	-0.3
Retail Trade	50,021	-3.7
Total Private	124,353	8.7
Government	79,538	10.9
Total	120,535	8.8

West Bay Venture Capital

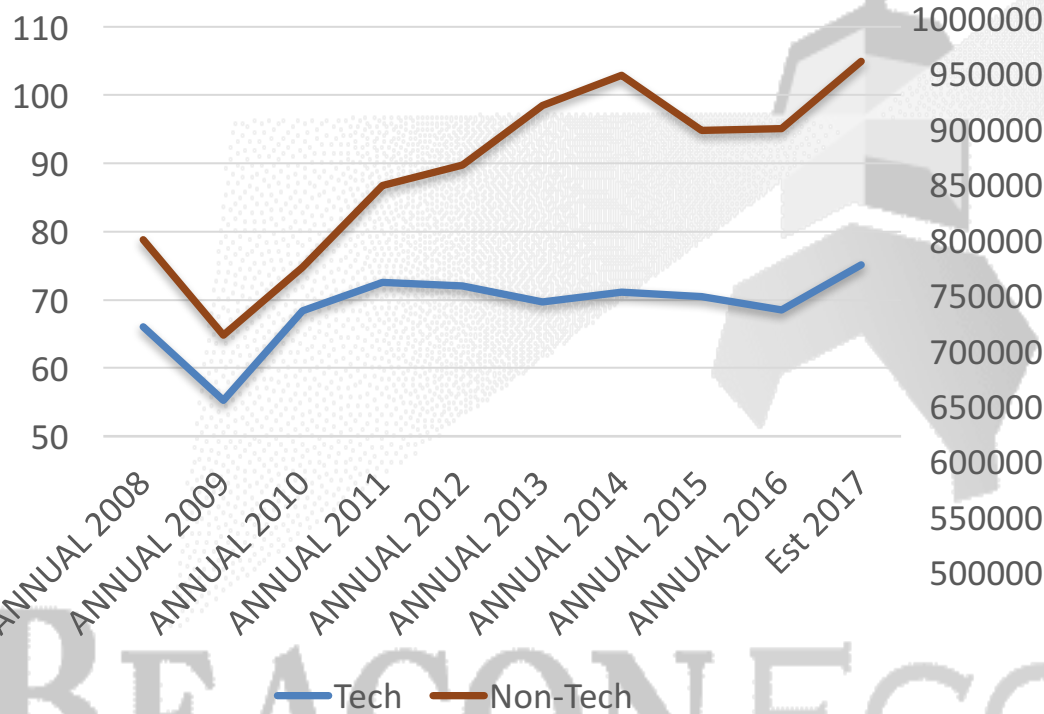
Median VC Deal Size



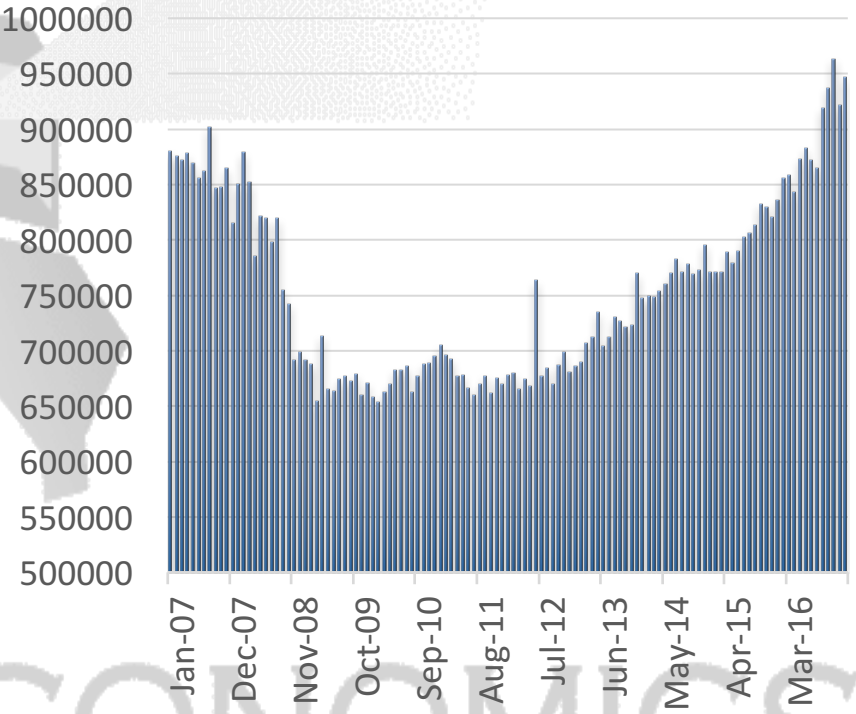
Total VC and Deals Made *2017 Projected



Nominal State Exports

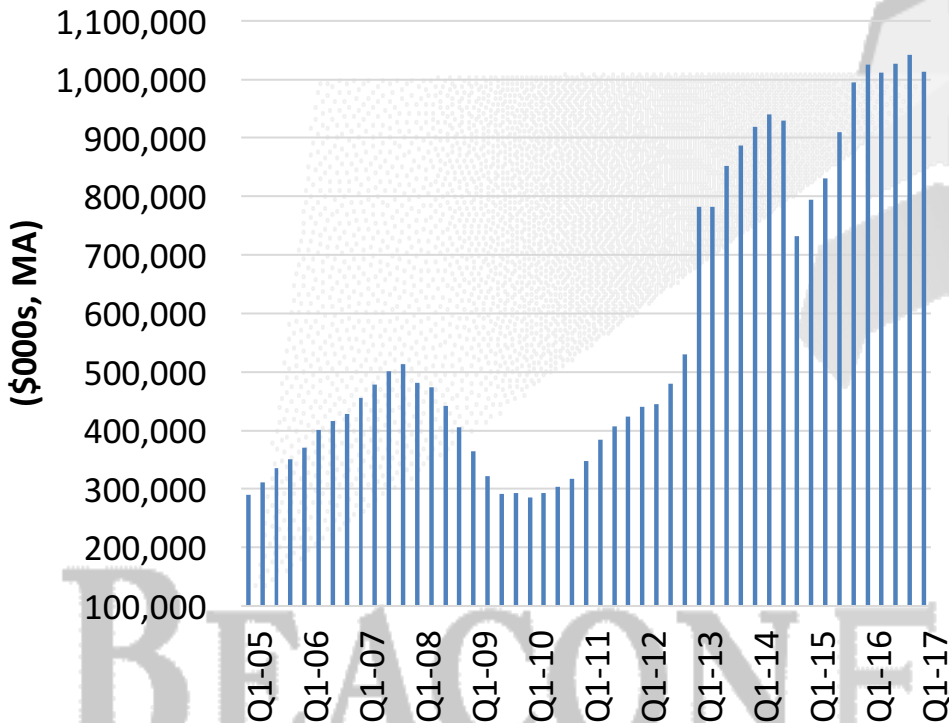


San Jose – SJC Passengers



Nonresidential Construction

**Nonresidential Building Permit Values
San Jose (MSA), Q1-05 to Q1-17**

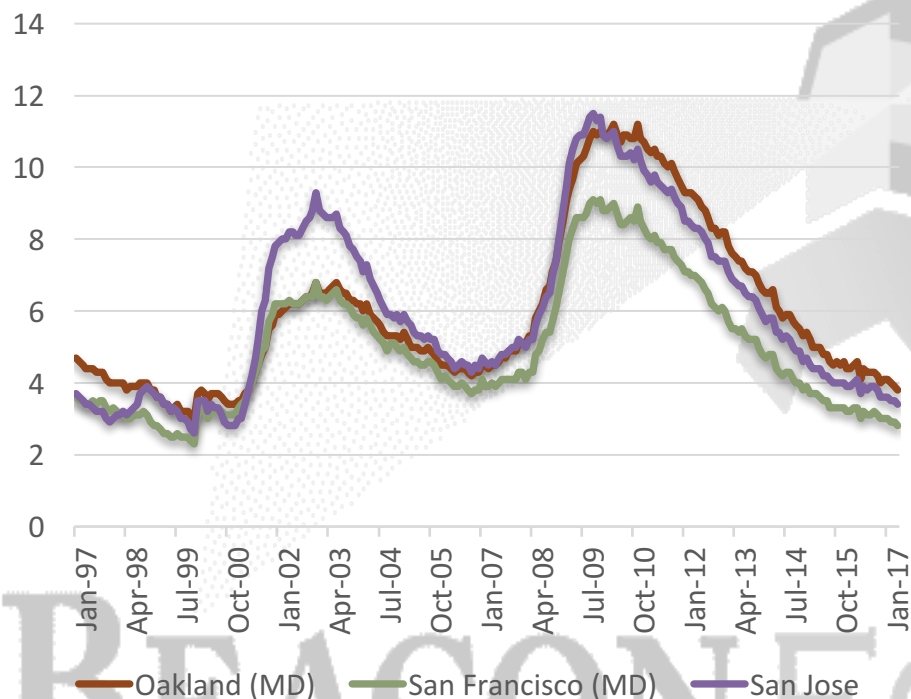


San Jose (MSA) Nonres. Building Permit Values

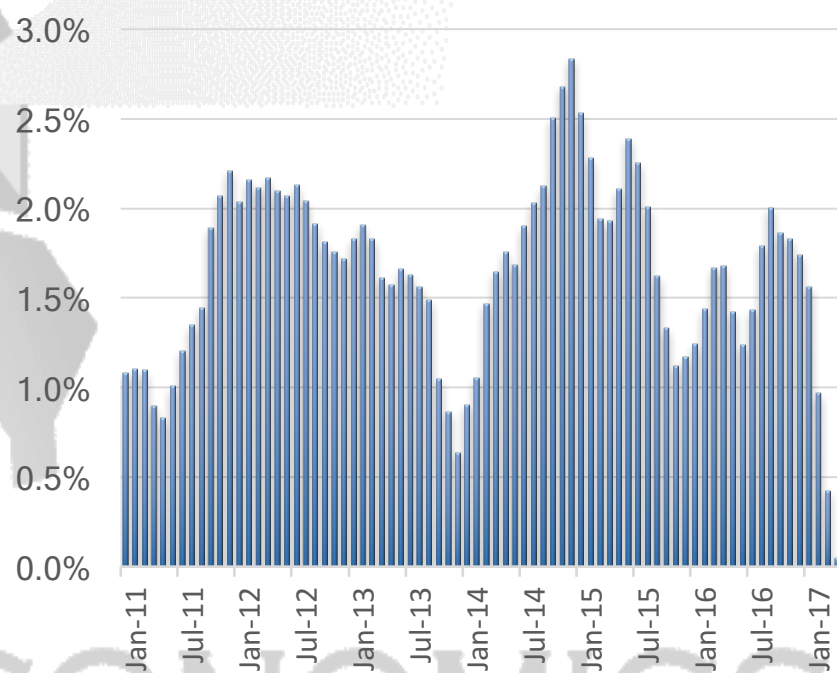
Permit Type	2016 (\$000s)	YOY Change (\$000s)	YOY Growth (%)
New Commercial	2,064,456	725,636	54.2
Office	1,296,213	610,961	89.2
Retail	232,308	26,582	12.9
Hotel	113,985	89,423	364.1
Industrial	49,257	-57,844	-54.0
Other	438,969	97,599	28.6
Total Nonresidential	4,564,376	1,204,479	35.8

The Ultimate Cause

Unemployment Rate



San Jose Labor Force Growth



If there were a bread shortage ...

Bread Control

Government
Must Own The
Bread!

**Bakers Are
Greedy!**

**The Bakeries
Have Failed!**

**Bread Loaf
Baking
Targets**

Non-Profit
Baking

**Bread
Certainty**

Points-System Loaf
Valuation

Minimum Loaf Size
Regulation

**Link Loaf Prices
to CPI**

**Stronger Baking
Regulation**

**Baking Impact
Fee**

**Government
Bakery**

I Support
Baking But
Not Near My
House

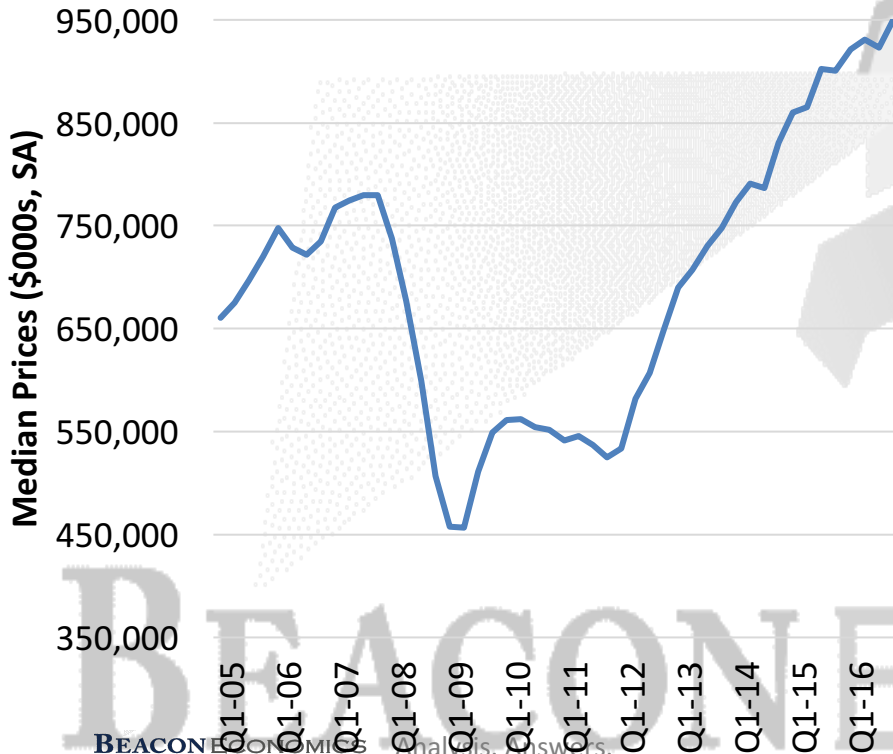
Inclusionary Baking

**Tax New
Loaves!**

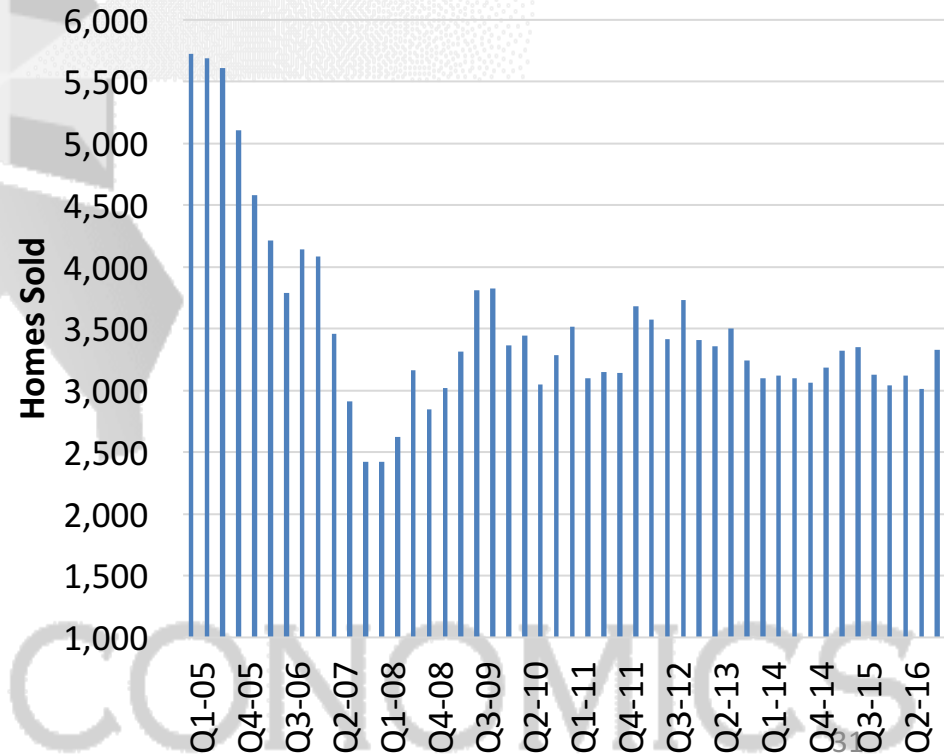
Baking bonus –
more loaves
allowed if some
discounted

Residential Real Estate

Existing Single-Family Home Prices
Santa Clara County, Q1-05 to Q4-16

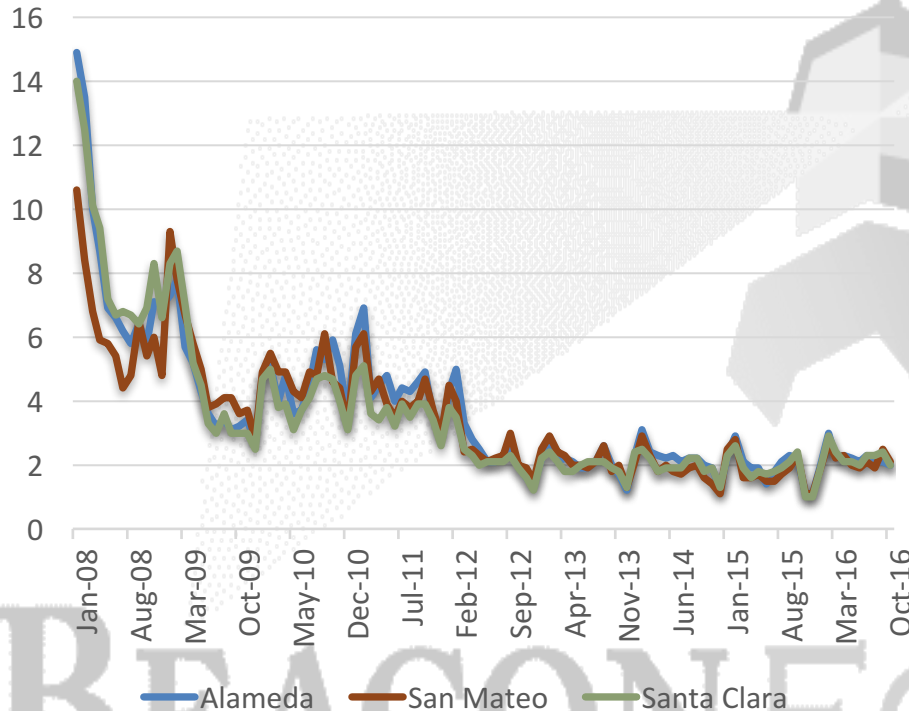


Existing Single-Family Home Sales
Santa Clara County, Q1-05 to Q4-16



Single Family Markets

Months Supply

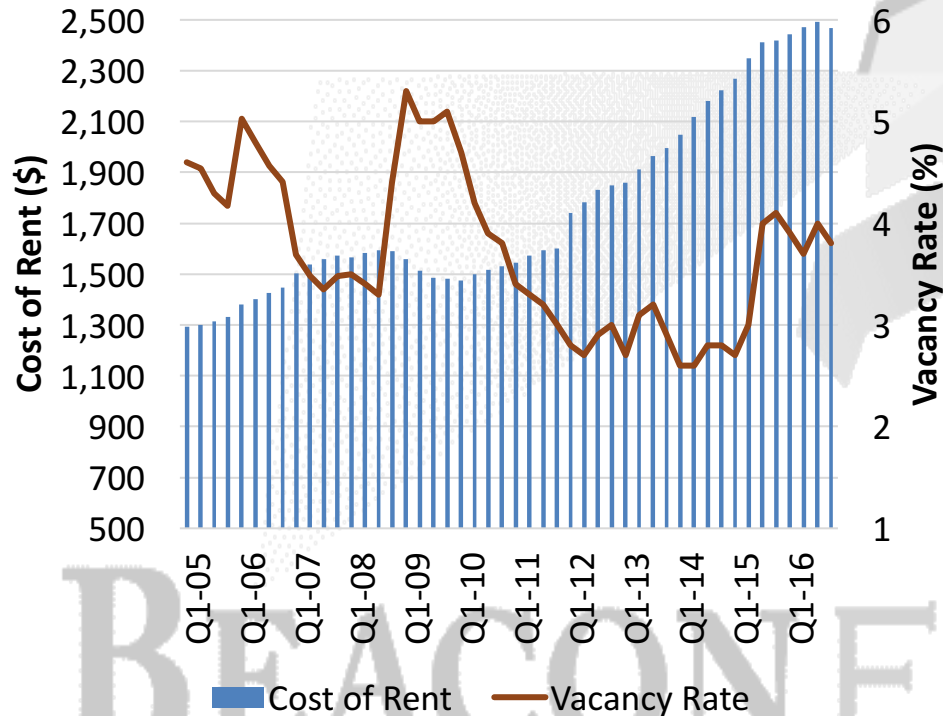


Housing Vacancy 2015

	On Market	Total
US	3.1%	7.2%
California	2.1%	4.3%
Santa Clara	1.2%	2.6%
San Mateo	1.4%	2.6%

Apartment Rental Market

**Apartment Rents and Vacancy Rates
Santa Clara County, Q1-05 to Q4-16**

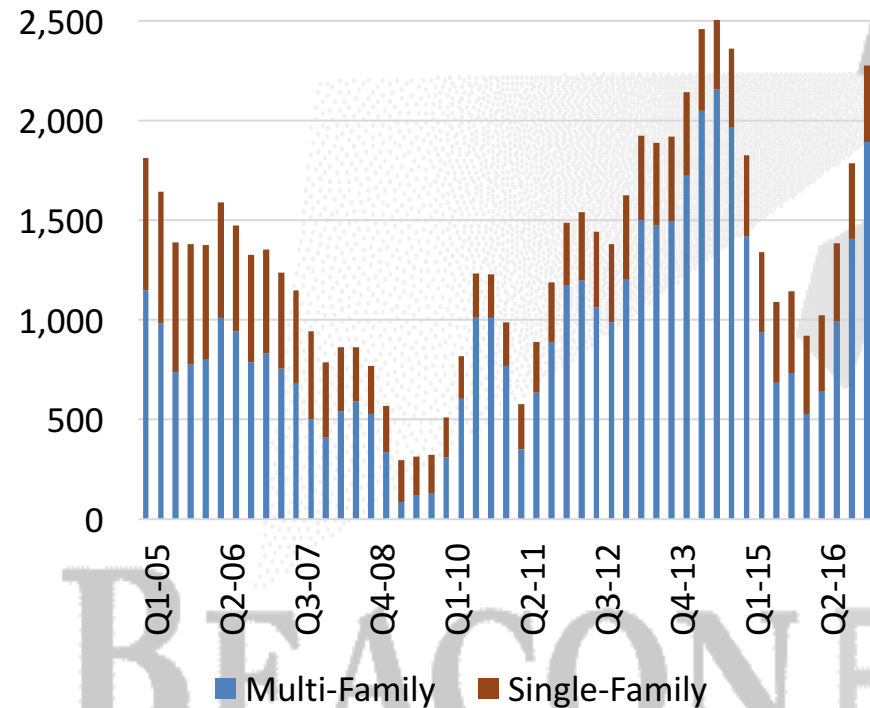


Apartment Rental Market by Submarkets, Q2-16

Submarket	Cost of Rent		Vacancy Rate	
	Q2-16 (\$)	YOY Growth (%)	Q2-16 (%)	YOY Change (p.p.)
Northeast San Jose	2,468	7.1	6.8	2.5
Campbell/Los Gatos	1,731	3.8	2.2	-0.6
South San Jose	1,482	3.7	3.5	1.0
Central San Jose	1,803	2.7	4.1	0.1
East San Jose	1,889	2.6	1.1	0.2
Santa Clara	2,088	1.9	1.7	0.8
Cupertino/Saratoga	2,684	1.7	4.3	1.1
Mtn. View/Los Altos	2,306	1.5	4.4	1.0
Sunnyvale	2,049	1.4	2.3	0.1

Residential Construction

**Residential Construction Permits
Santa Clara County, Q1-05 to Q1-17**



Single-Family Units, 2016

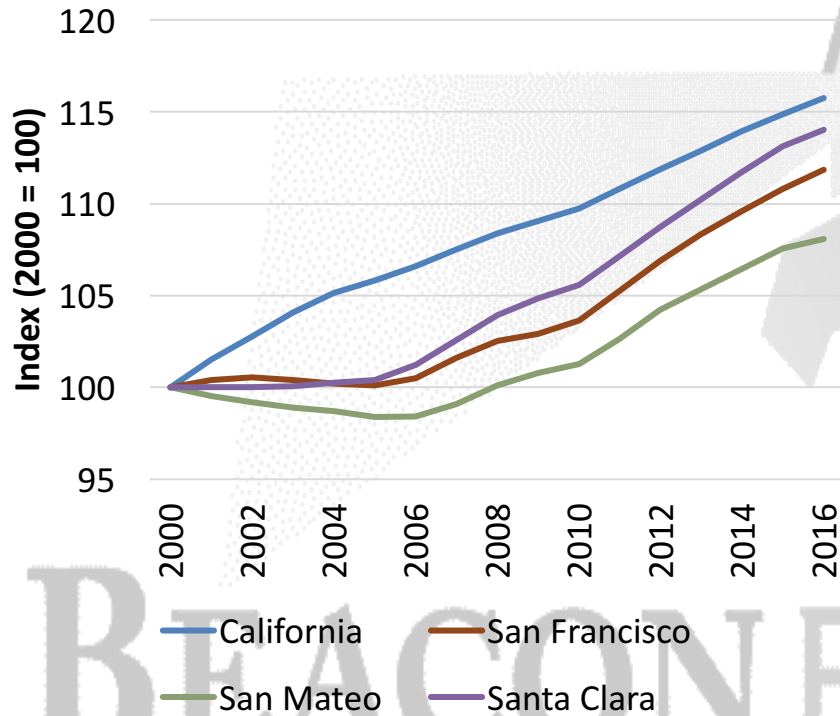
Place	Permits 2016	YOY Level Change	YOY Growth (%)
Sunnyvale	230	79	52.3
San Jose	219	67	44.1
Milpitas	134	61	83.6
Santa Clara	67	14	26.4
Mountain View	26	-31	-54.4

Multi-Family Units, 2016

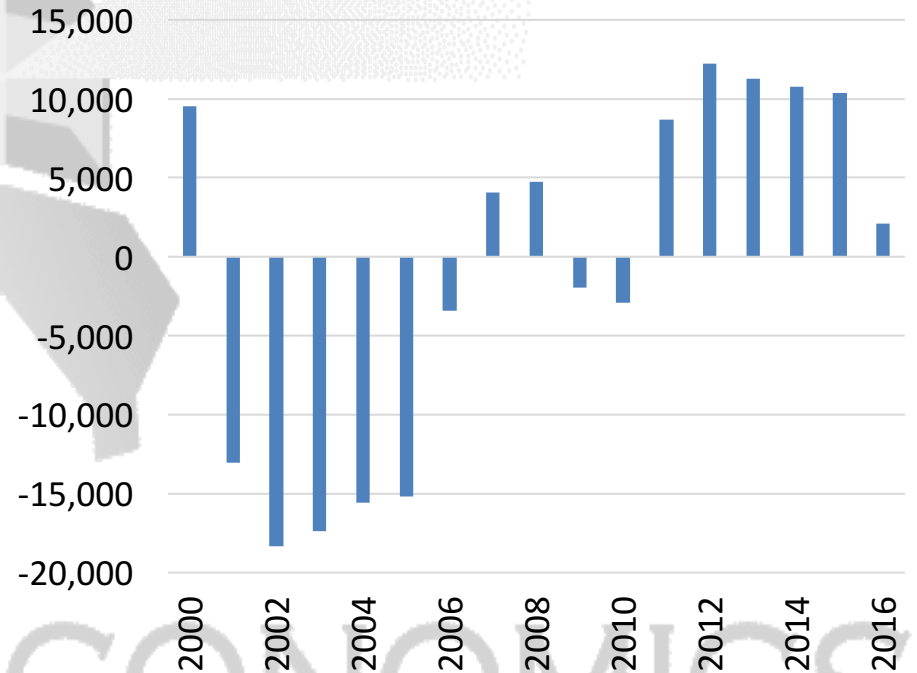
Place	Permits 2016	YOY Level Change	YOY Growth (%)
Milpitas	384	209	119.4
Santa Clara	351	182	107.7
San Jose	1,957	93	5.0
Mountain View	8	8	N/A
Sunnyvale	2	-239	-99.2

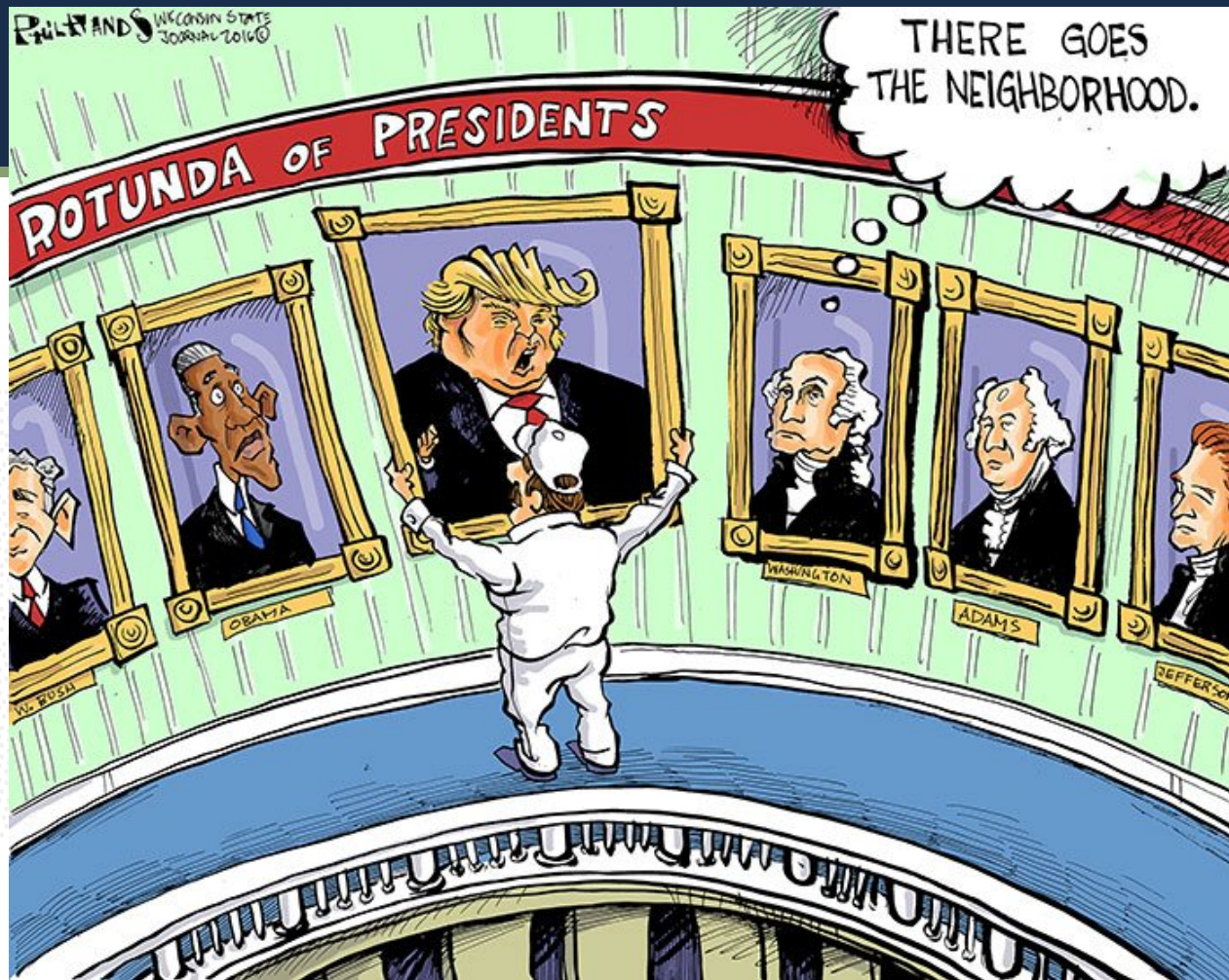
Population

Total Population Growth 2000 to 2016



Net Migration Santa Clara County, 2000 to 2016



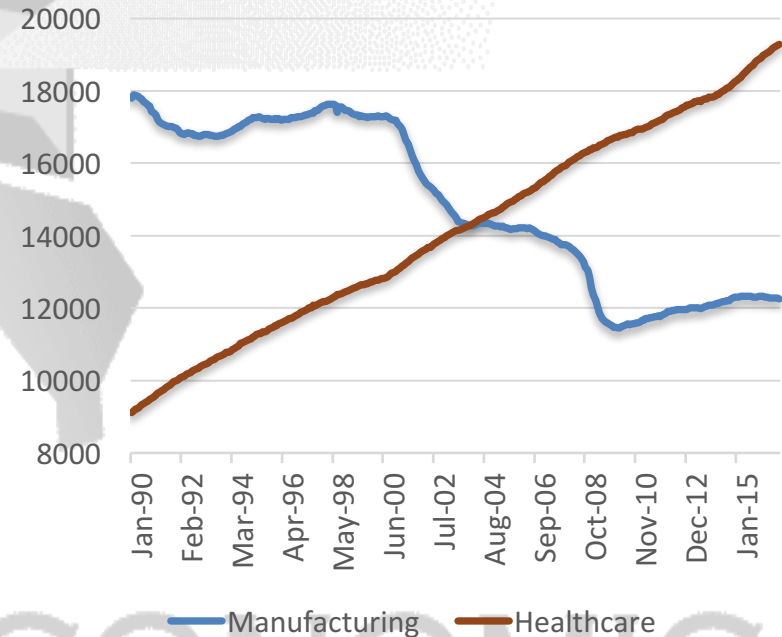


The Future of Obama-care?

US Population Insurance Status

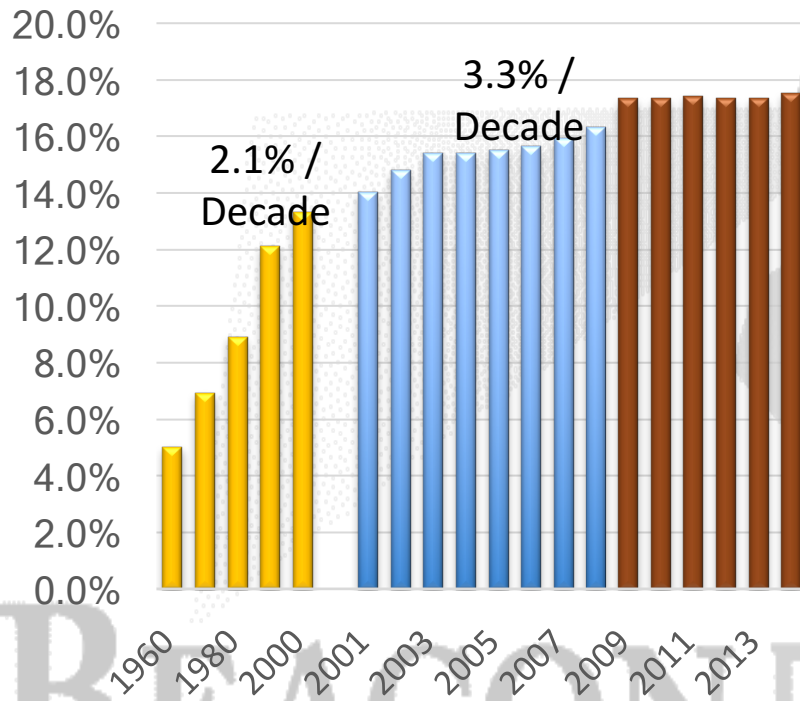
		2015	09-15 Change
65+	Public	44,731	7,913
	Private	1,314	558
	Uninsured	392	34
Total	Public	117,107	21,831
	Private	169,586	9,055
	Uninsured	29,758	-15,907

Employment by Sector



The Healthcare Crisis

National Health Spending % GDP



**Per Capita Healthcare Spending
2015, PPP Adjusted**

USA	\$9,402	France	\$5,428
Norway	\$7,832	Canada	\$5,421
Switzerland	\$7,300	Belgium	\$5,340
Sweden	\$6,285	Australia	\$4,873
Netherlands	\$6,209	Finland	\$4,467
Germany	\$6,204	Japan	\$4,255
Austria	\$6,143	UK	\$3,717

Social Insurance

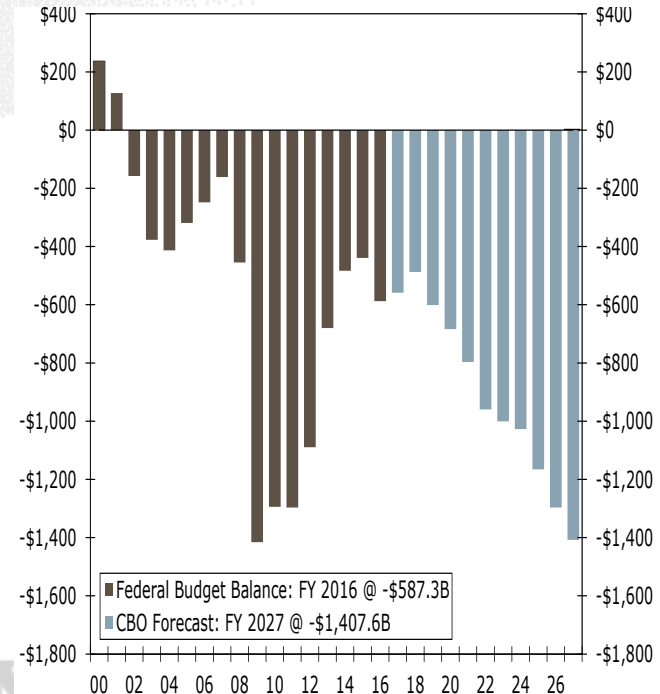
Population Growth Projections

	2015	2015-2025		2025-2035	
Total	321,369	25,966	8.1%	23,003	6.6%
<18 years	73,635	1,380	1.9%	2,431	3.2%
18 to 24	31,214	(478)	-1.5%	154	0.5%
25 to 44	84,657	8,772	10.4%	3,552	3.8%
45 to 64	84,032	(1,797)	-2.1%	3,553	4.3%
65 years+	47,830	18,090	37.8%	13,313	20.2%
85 years+	6,304	1,178	18.7%	4,427	59.2%

Medicare Spending Projections

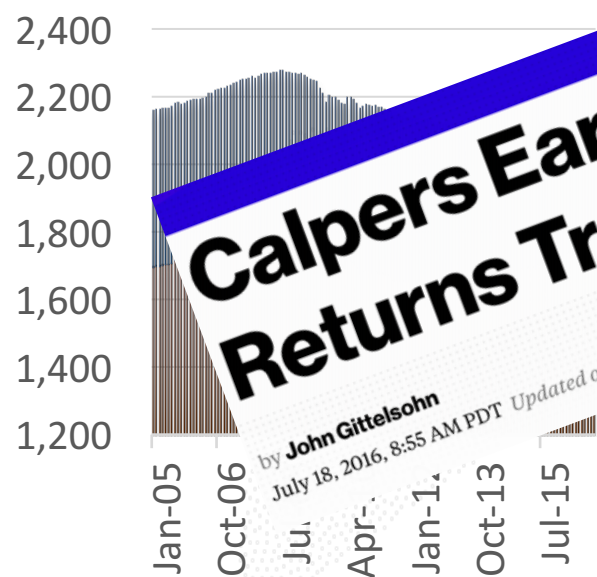
	Fed M. Spending / Senior
1995	\$5,461
2015	\$13,531
2035*	\$43,395
	Spending Share Federal Rev
1995	13.0%
2015	18.7%
2035*	41.0%

CBO Deficit Projections



Public Sector

Public Employment



Calpers Earns 0.6% as Long-Term Returns Trail Fund's Target

by John Gittelsohn
 July 18, 2016, 8:55 AM PDT Updated on July 18, 2016, 2:28 PM PDT

CALPERS's sees 5.8 percent return with new allocation; below 7 percent goal

Wednesday, 8 Feb 2017 | 6:16 AM ET



Average Total Compensation: California

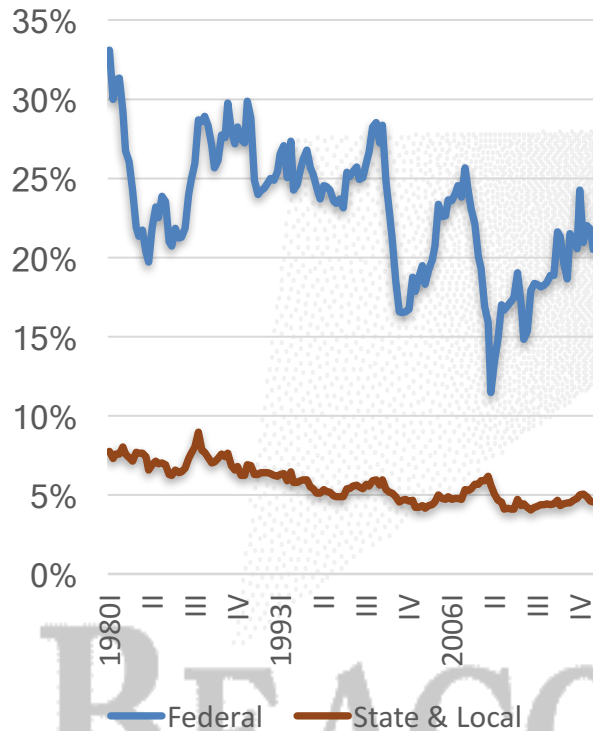


- State Government
- Local Government

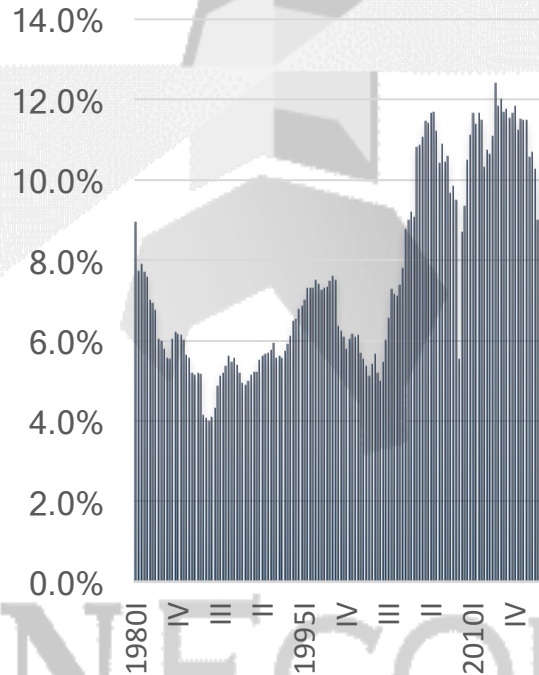
- Private
- State & Local

Tax Reform not Tax Cuts

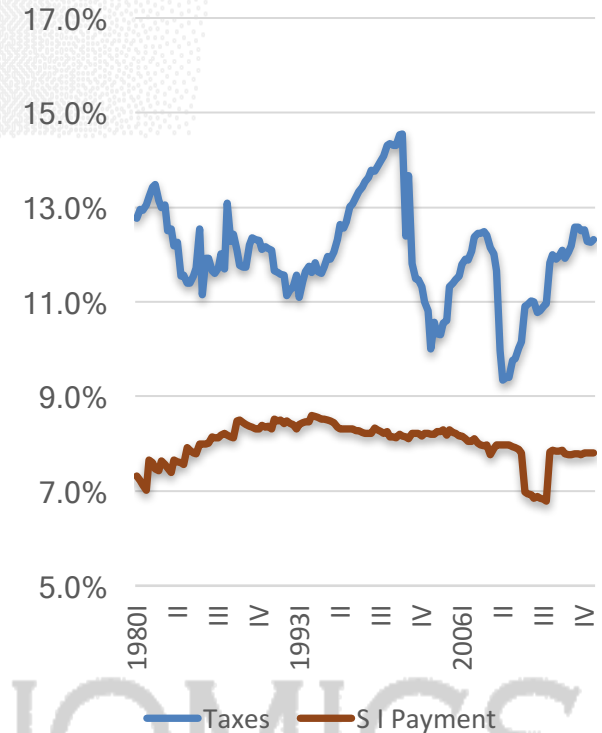
US Corporate Taxes as % Profit



Corporate Net Income as % National Income

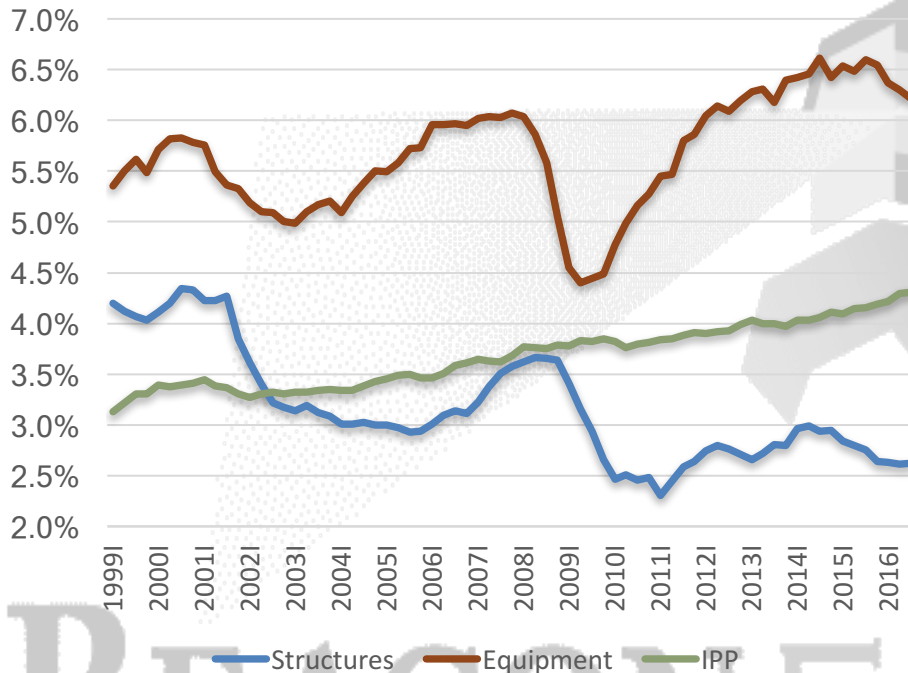


Income Taxes Share of Income



Implications

Investment (Real) Share of GDP



Real Net Worth

	1989	2001	2013
Mean Net Worth by Percentile of Net Worth			
Less than 25	-\$1.0	\$0.1	-\$13.0
25–49.9	\$41.8	\$58.4	\$35.9
50–74.9	\$162.2	\$219.9	\$177.7
75–89.9	\$411.6	\$594.0	\$546.3
90–100	\$2,294	\$3,631	\$3,962

The Big Picture

The Economic Outlook

- Economic Growth Outlook for 2017: 2-2.5% even with the weak first quarter
- Labor markets to remain tight, wages to put pressure on profits
- Financial markets a bit frothy, but interest rates to remain low
- Exports, business investment to pick up
- California to slow ut mainly due to housing shortage
- San Jose: Still hot- but growth is constrained by housing, infrastructure

The Trump Factor

- **The Good:** Infrastructure, Mortgage Reform, Government Efficiency, Trade negotiations
- **The Bad:** Interest Rates, Federal Deficit, Personal Liabilities, Deregulation of Wall Street, Foreign policy, Healthcare
- **The Ugly:** The potential for a trade war, Immigration and the Environment, Entitlements, Revenge of the Left



BEACON ECONOMICS

Our Services

- Economic Forecasting
- Regional Intelligence Reports
- Business & Market Analysis
- Real Estate Market Analysis
- Ports & Infrastructure Analysis
- Economic Impact Analysis
- Public Policy Analysis

To view or download this presentation please visit:

www.BeaconEcon.com

Chris@BeaconEcon.com

310-571-3399

For additional information visit www.beaconecon.com