

The Inland Empire Economy Past, Present, Future of So-Cal's Growth Engine

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Christopher Thornberg, Ph.D.

Director, UCR School of Business Center for Economic Forecasting and Development
Founding Partner, Beacon Economics LLC

UCR Center for Economic Forecasting and Development

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Miserabilism!

Why many Americans aren't benefiting from robust U.S. economy

Market plunge reveals growing investor pessimism in US economy

The US economy is strong. Three signs it won't last

U.S. Economy Will Slow in 2019, May Enter Recession in 2020, Economists Forecast. Trump Administration Disagrees

For the U.S. Economy, Storm Clouds on the Horizon

Millennials poorer than previous generations, data show

We're Measuring the Economy All Wrong



The official statistics say that the financial crisis is behind us. It's not.

SEP. 22, 2014, AT 6:01 AM

The American Middle Class Hasn't Gotten A Raise In 15 Years

Treasury Market Flashing A Warning For U.S. Economy

A look back

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?

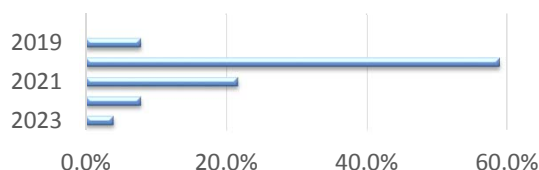
- A fall to remember
 - Heard on the street “There are only two positions out there: cash, and fetal”
- Its not ‘what Wall Street troubles mean to California’, its ‘what California troubles mean for Wall Street’
 - Recession was already fully underway even if many economists and politicians remained 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?

• 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, inflation still constrained
- 2019: back to a solid pace of 2.5% growth
- Still a low chance of recession in next 24 months
- Southern California: Still out in front

WSJ Next Recession Poll



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

Will the Real Economy Please Stand Up?

- **Brakes and Imbalances**

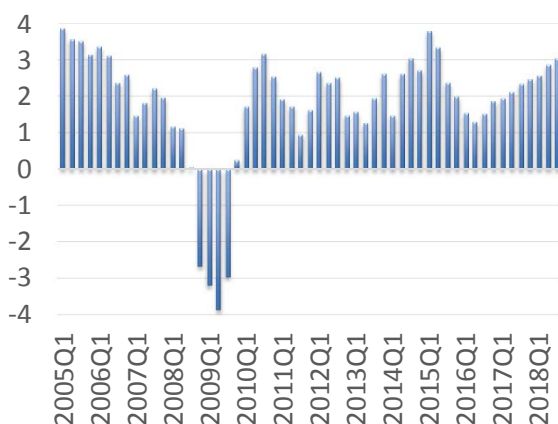
- Labor shortages impacting employers
- Local Housing Shortages
- Recent market volatility / rising long term rates
- Aggressive Fed, flattening yield curves
- Sharp growth in government deficits
- The Federal government shutdown
- Global trade / security worries

- **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: Q3 3.5%, Q4 tracking 2.5%

Real GDP Growth (yoy)



	2016	2017	Q2	Q3
GDP	1.88	2.48	4.20	3.50
Final Demand				
Consumption	1.87	1.83	2.57	2.69
Goods	0.75	0.96	1.16	1.20
Services	1.11	0.87	1.42	1.49
Fixed investment	0.39	0.95	1.10	-0.04
Structures	0.07	0.08	0.43	-0.26
Equipment	-0.08	0.54	0.27	0.03
Intellectual prop	0.24	0.18	0.45	0.35
Residential	0.16	0.15	-0.05	-0.16
Change inventories	-0.20	-0.11	-1.17	2.07
Net exports	-0.34	-0.23	1.22	-1.78
Exports	0.09	0.56	1.12	-0.45
Imports	-0.43	-0.79	0.10	-1.34
Government	0.16	0.03	0.43	0.56
Federal	0.02	0.09	0.24	0.21
State and local	0.15	-0.06	0.20	0.35

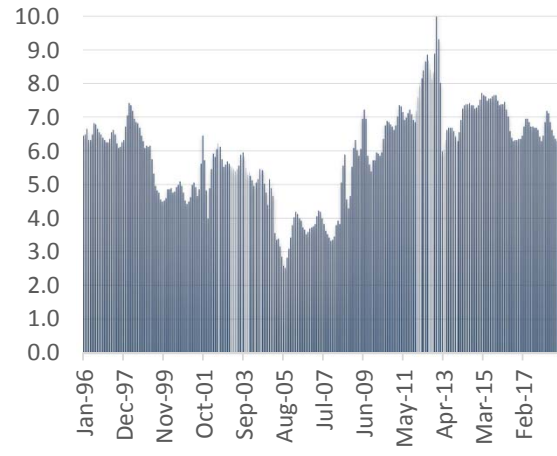
Consumer Spending

Real Consumer Spending (Y-o-Y)



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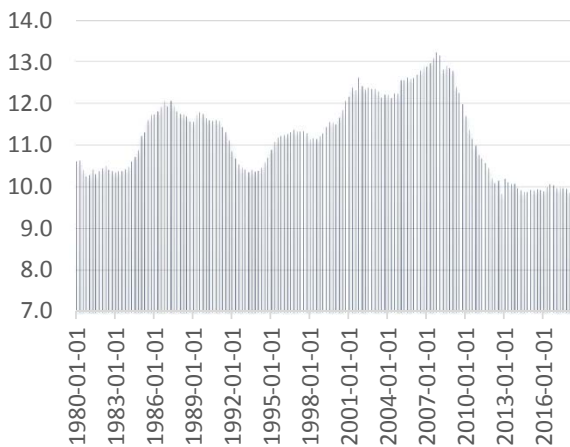
Personal Savings Rate



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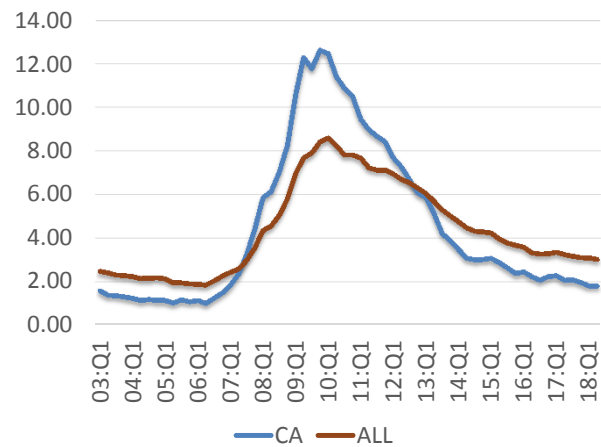
Consumer Debt Loads

Financial Obligations Ratio



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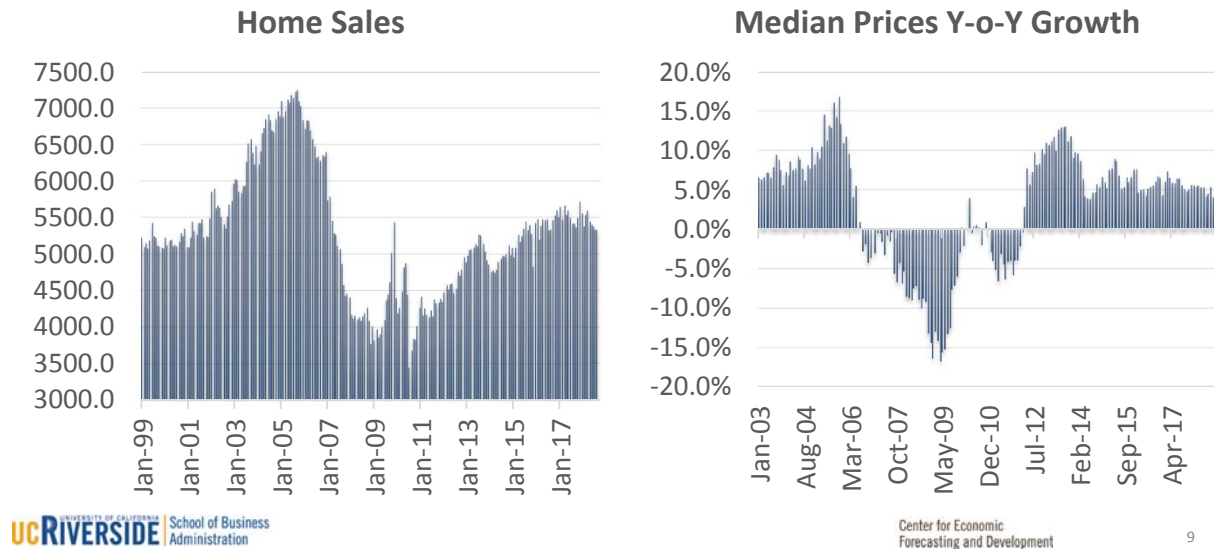
Share Debt 90+ Delinquent



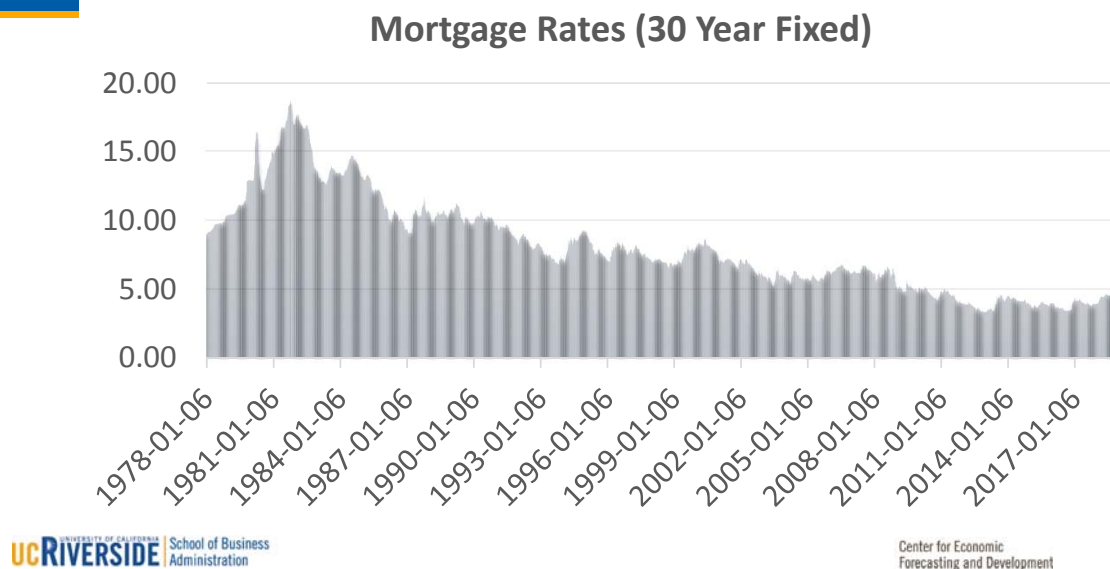
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Housing Markets: Slight Slowing



Rising Rates?

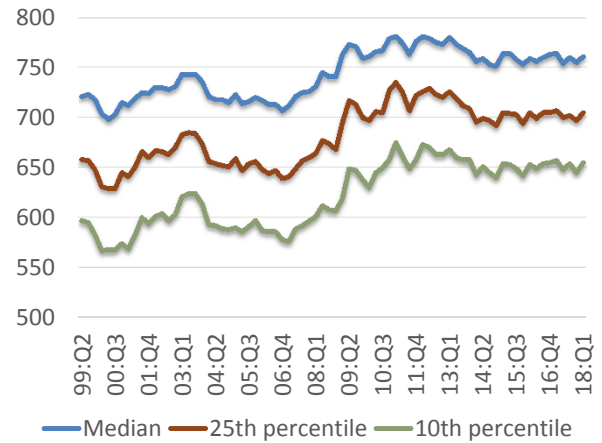


Ownership and Credit Availability

Ownership Rates

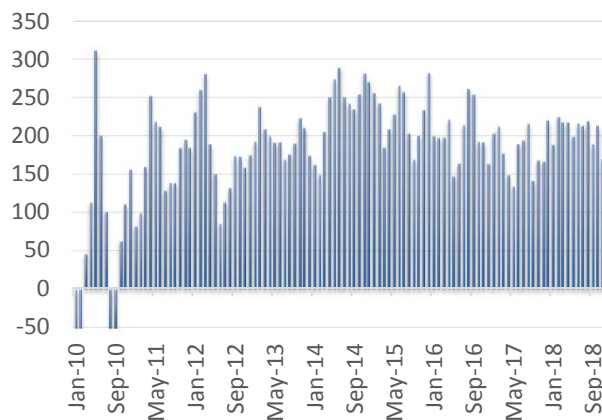


Mortgage Origination by Credit Score

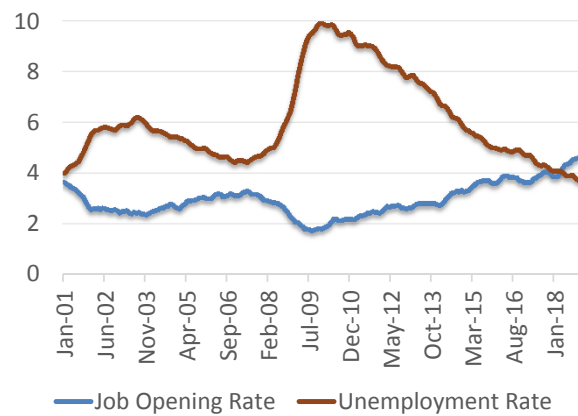


Labor Markets

Change Non Farm Payrolls (Smoothed)

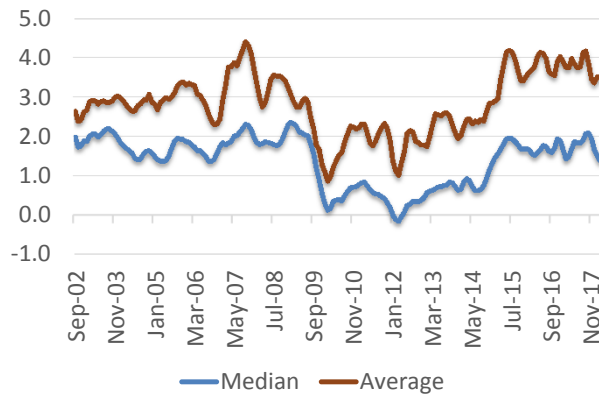


Unemployment and Job Openings



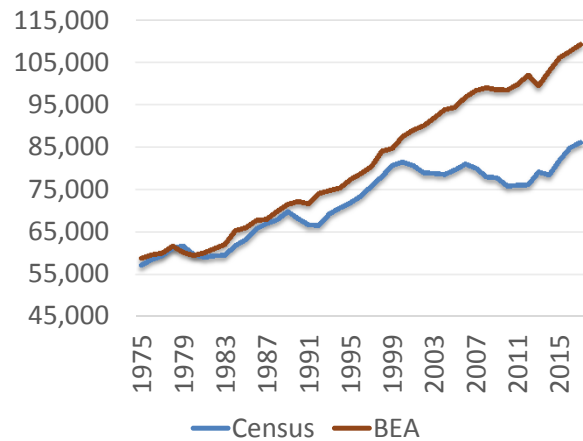
Consequences

Real Wage Gains for Continuously Employed FT Workers



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Real Average Household Income

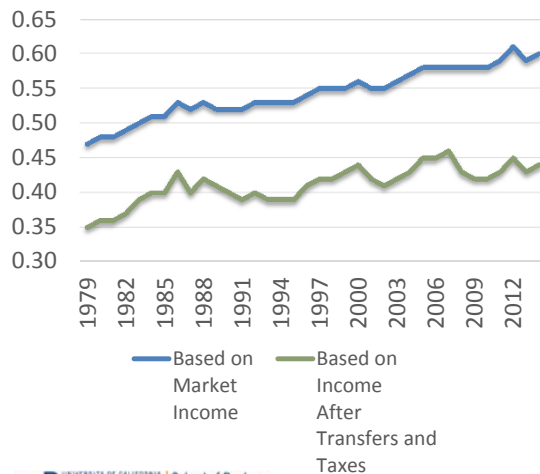


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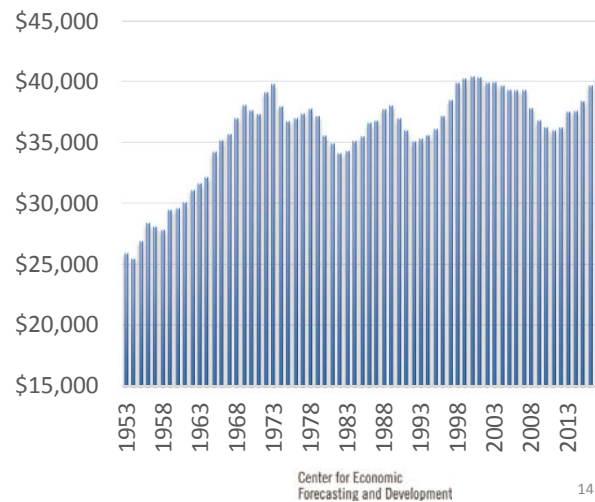
Wage Gains

Gini Coefficients



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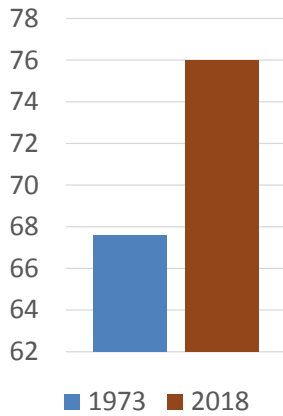
Real Median Income- Males



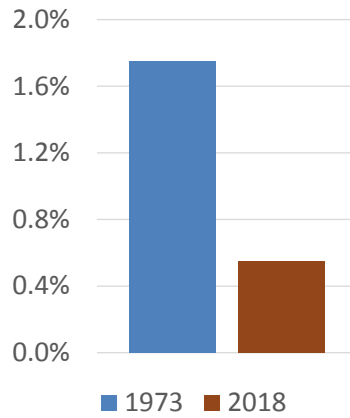
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Quality of Life

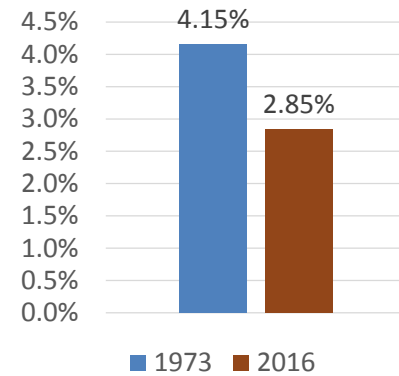
Life Expectancy



Infant Mortality

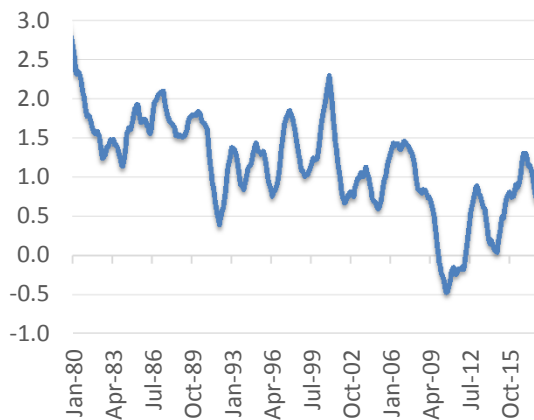


Total Crime Rate in the U. S.

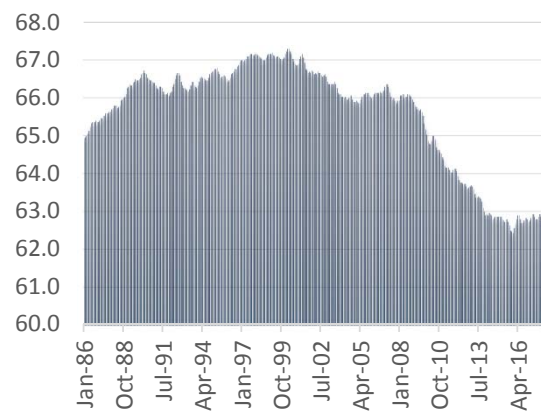


Workforce Growth

US Labor Force Growth (Smoothed)

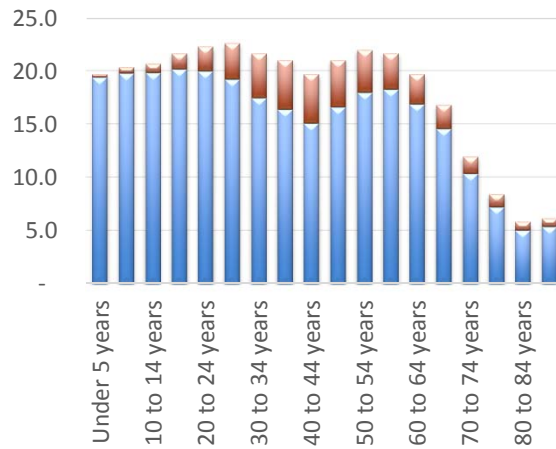


US Participation Rate



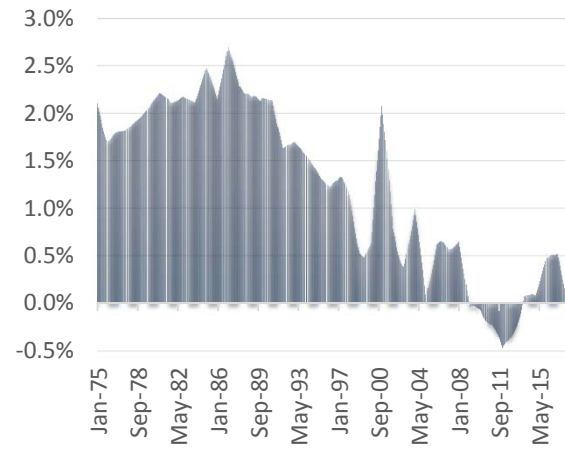
The Boomer Bust

2016 Population by Age (Millions)



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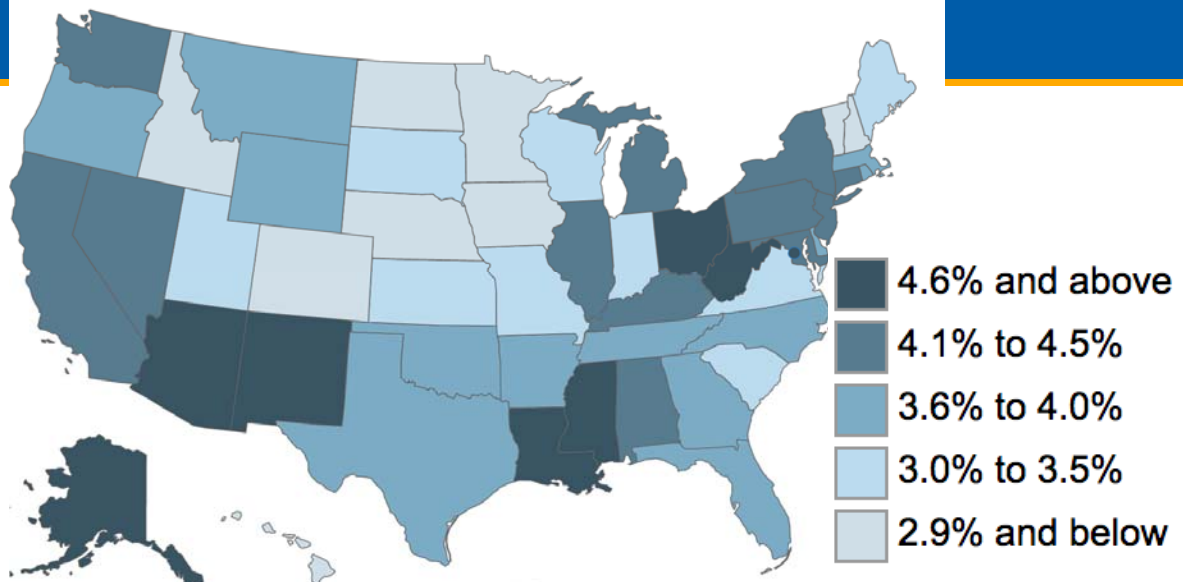
US Population 25-54 Y-o-Y Gr



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State unemployment rates, August 2018, seasonally adjusted

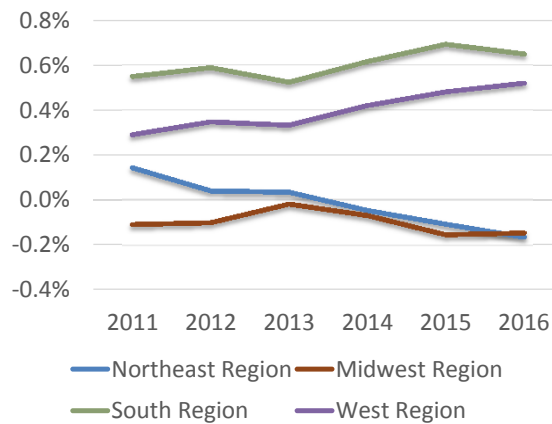


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Population Shifts

Net Migration (% of Pop) by region



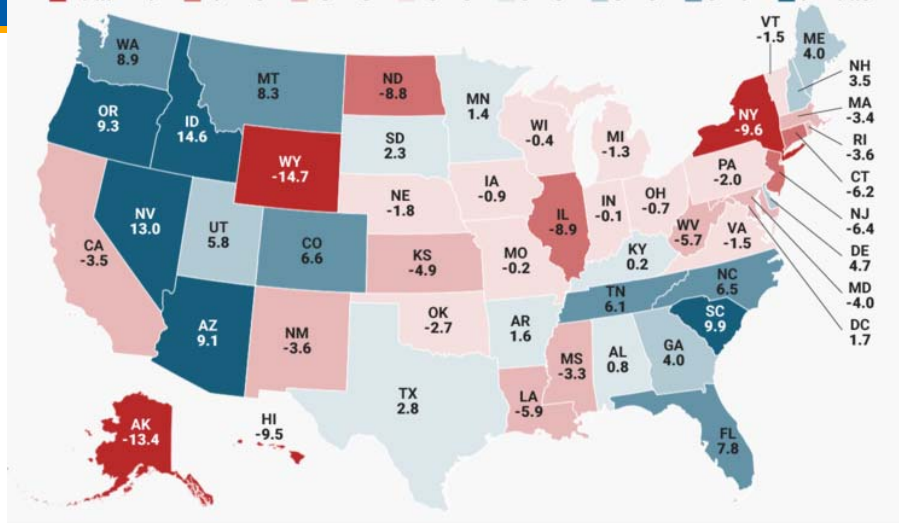
Net Migration by State 14-16

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%

NET DOMESTIC MIGRATION

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

Legend: -14.7 to -9 (dark red), -9 to -6 (red), -6 to -3 (light red), -3 to 0 (pink), 0 to 3 (light blue), 3 to 6 (medium blue), 6 to 9 (dark blue), 9 to 14.6 (darkest blue)



California fact versus fiction



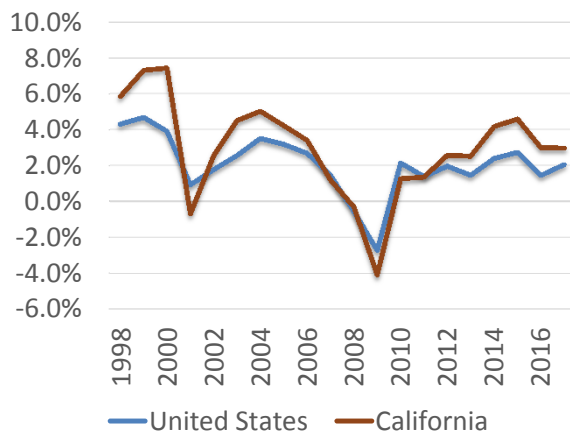
2016 Best & Worst States For Business

- 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](#)

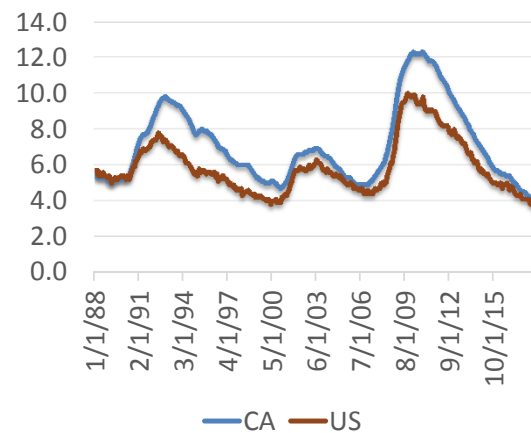


Booms and Busts

Growth in Real Output



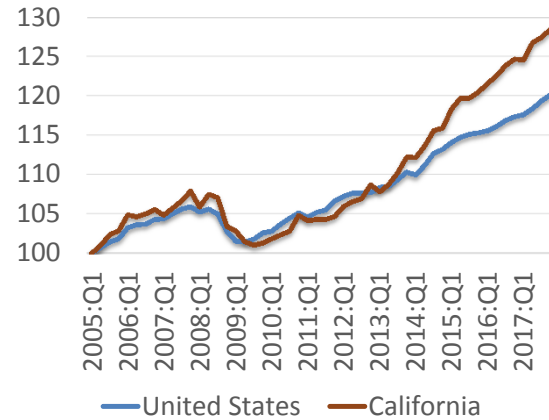
US Unemployment



California Economic Engine

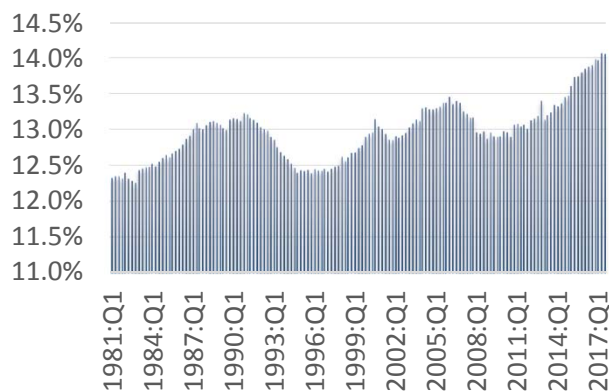
Q1 2018	1 Year	5 Year
Washington	4.3%	3.7%
California	3.5%	3.7%
Utah	3.7%	3.4%
Colorado	4.5%	3.4%
Oregon	3.4%	2.9%
Florida	2.3%	2.8%
Texas	4.2%	2.8%
Idaho	3.2%	2.8%
Georgia	2.5%	2.8%
Nevada	4.0%	2.7%

Real State Output Index



California Economic Engine

California Share National Personal Income



Employment

Rk	State	#	Ann Gr	Share US
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	Oregon	252.1	2.9%	2.0%
5	Idaho	92.1	2.8%	0.7%
6	Colorado	328.7	2.7%	2.6%
7	Washington	413.1	2.7%	3.3%
8	California	2051	2.6%	16.3%
9	Georgia	537.9	2.6%	4.3%
10	South Carolina	237.6	2.4%	1.9%

Myth Busting

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

Share New FT Employees 2014-2017

	25-50K	50-75K	75K-100K	100K+
State	318,146	179,115	177,425	484,322
Bay	4.4%	9.1%	24.1%	39.4%
So Cal	43.1%	27.7%	29.5%	39.4%
S Cen Val	19.6%	19.9%	8.8%	7.1%
N Cen Val	16.1%	11.8%	12.1%	10.1%
Cen Cst	5.3%	6.0%	5.1%	2.2%
Other	11.4%	25.5%	20.3%	1.8%

Quiz Time

Match the payroll employment growth rate (letters)
(1995-2015) to the California region (numbers)

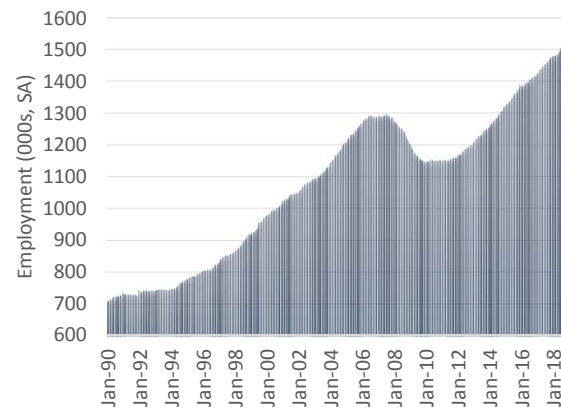
A	23.6%	1	Bay Area
B	25.8%	2	Central Coast
C	27.0%	3	Greater Los Angeles
D	33.8%	4	Greater Sacramento
E	39.8%	5	So Central Valley

State Job Growth

	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 (MD)	1,560.5	225.4	16.9%	6.7%
Sacramento	1,033.3	225.0	27.8%	6.7%
Oakland (MD)	1,362.9	179.2	15.1%	5.3%
San Francisco (MD)	994.3	141.2	16.6%	4.2%
San Jose	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%

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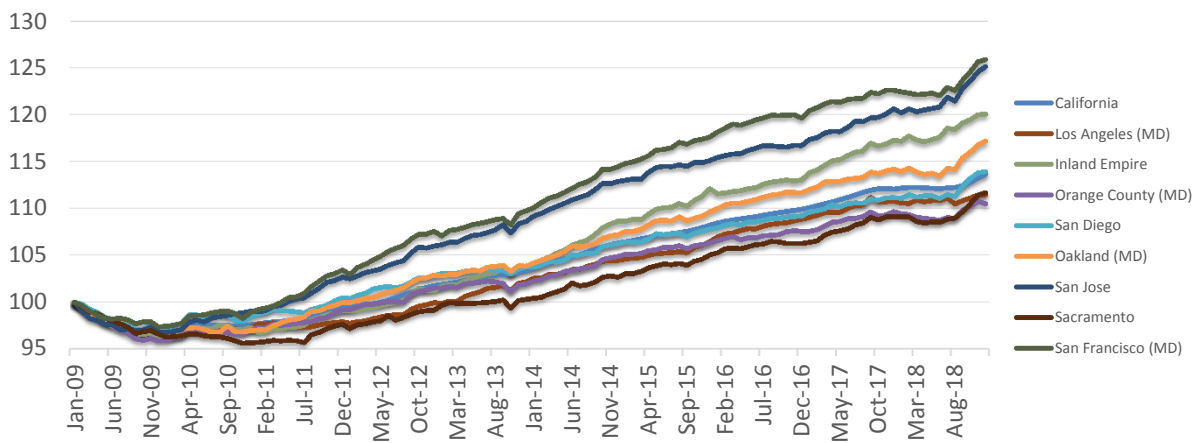
Total Nonfarm Employment
Inland Empire



Center for Economic
Forecasting and Development

Local Payroll Employment

Indexed Payroll Job Growth 09-19



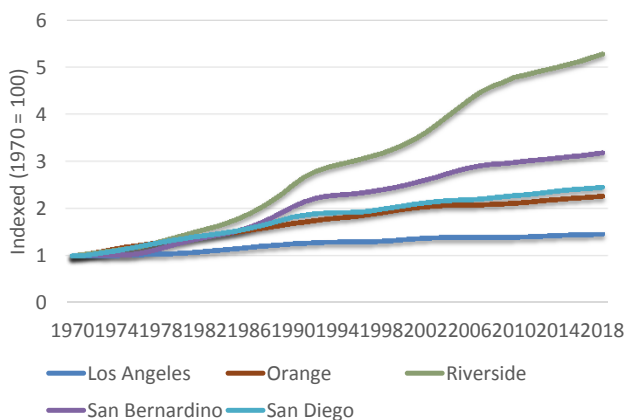
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Population

Population Growth

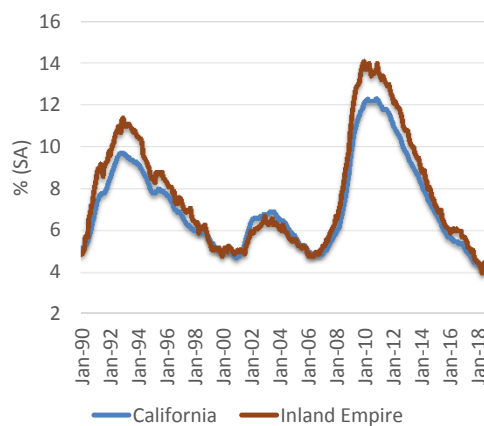


	2018	Ch 70-18	Gr 70-18
Riverside	2,416	1,959	428.8%
San Bernardino	2,175	1,493	218.8%
Imperial	191	116	155.9%
San Diego	3,337	1,980	145.8%
Ventura	859	481	127.0%
Orange	3,221	1,800	126.6%
Los Angeles	10,284	3,242	46.0%
So-Cal	22,483	11,070	

Resident Labor Force

MSA / State	Labor Force	MSA Rank
Oregon	2,128,399	
Seattle-Tacoma-Bellevue	2,115,242	13
Louisiana	2,107,987	
Riverside-San Bernardino-Ontario	2,073,421	14
Kentucky	2,063,185	
Minneapolis-St. Paul-Bloomington	2,007,145	15
Connecticut	1,914,839	
Oklahoma	1,861,101	
Iowa	1,697,159	
Denver-Aurora-Lakewood	1,653,341	16
San Diego-Carlsbad	1,611,458	17
Utah	1,571,635	
Tampa-St. Petersburg-Clearwater	1,542,313	18
Nevada	1,526,445	

Unemployment Rates



The IE in Context

Gross Metropolitan Product (Real)

San Diego-Carlsbad, CA	215343	17
Denver-Aurora-Lakewood, CO	197969	18
Baltimore-Columbia-Towson, MD	187395	19
Portland-Vancouver-Hillsboro, OR-WA	164466	20
Charlotte-Concord-Gastonia, NC-SC	163637	21
St. Louis, MO-IL	159888	22
Riverside-San Bernardino-Ontario, CA	149059	23
Tampa-St. Petersburg-Clearwater, FL	142633	24
Pittsburgh, PA	138187	25
Indianapolis-Carmel-Anderson, IN	135444	26
Austin-Round Rock, TX	135010	27
Cincinnati, OH-KY-IN	132010	28

Nominal GMP Growth 01-16 (Top 50)

Houston-The Woodlands-Sugar Land, TX	113.9%	5
Portland-Vancouver-Hillsboro, OR-WA	108.2%	6
Salt Lake City, UT	104.8%	7
Urban Honolulu, HI	103.8%	8
Charlotte-Concord-Gastonia, NC-SC	101.6%	9
Riverside-San Bernardino-Ontario, CA	100.2%	10
Las Vegas-Henderson-Paradise, NV	100.0%	11
Seattle-Tacoma-Bellevue, WA	98.2%	12
San Jose-Sunnyvale-Santa Clara, CA	96.8%	13
Dallas-Fort Worth-Arlington, TX	95.7%	14
Orlando-Kissimmee-Sanford, FL	92.3%	15
San Francisco-Oakland-Hayward, CA	90.5%	16

The Rhetoric

Low wages cast shadow on Inland Empire's rapid growth, UCR report says

UCR's 'State of Work' report outlines economic advantages and disadvantages

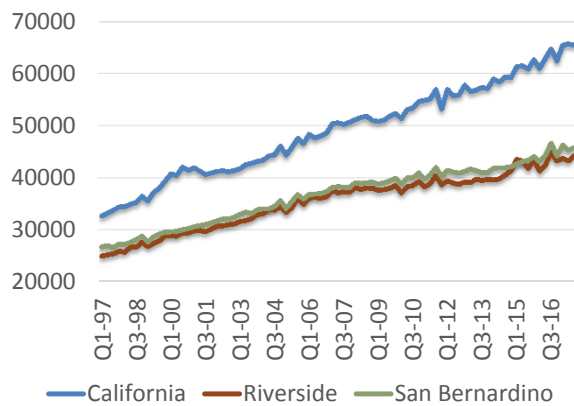
Inland Empire job growth outpaces nation but wages remain low

Local Borrowing Trends Released – Can Inland Empire Households Survive Rising Interest Rates?

In California's Inland Empire, fewer than half of jobs pay a living wage

Local Incomes

Average Payroll Wages



Private Sector Employment Wages

Rank	Region	2015 Avg Pay
15	San Diego CA MSA	\$53,746
16	St. Louis MO-IL MSA	\$49,263
17	Denver CO MSA	\$56,454
18	Baltimore MD	\$54,089
19	Riverside-San Bernardino CA MSA	\$39,424
20	San Francisco CA MSA	\$99,209
21	Tampa-St. Petersburg FL MSA	\$44,265
22	Pittsburgh PA MSA	\$48,146
23	San Jose CA MD	\$109,862
24	Orlando FL MSA	\$41,699
25	Portland-Vancouver OR-WA MSA	\$53,844

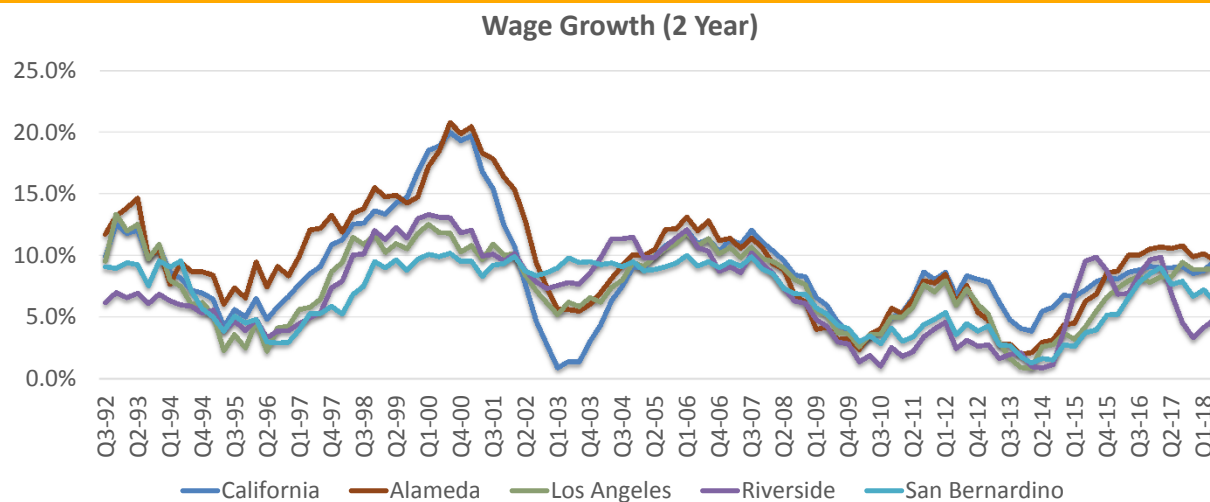
Who is ahead? Behind?

Define Success

Tech Jobs
Venture Capital
Relative Average Wages

Growing Wages
Falling Poverty
Low Unemployment
Solid Pace Growth

Growth in Wages



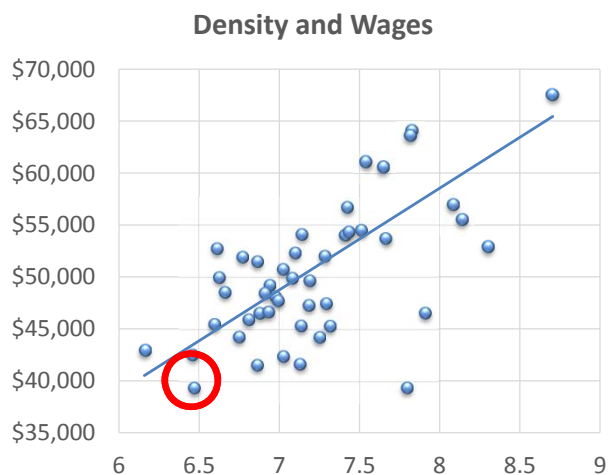
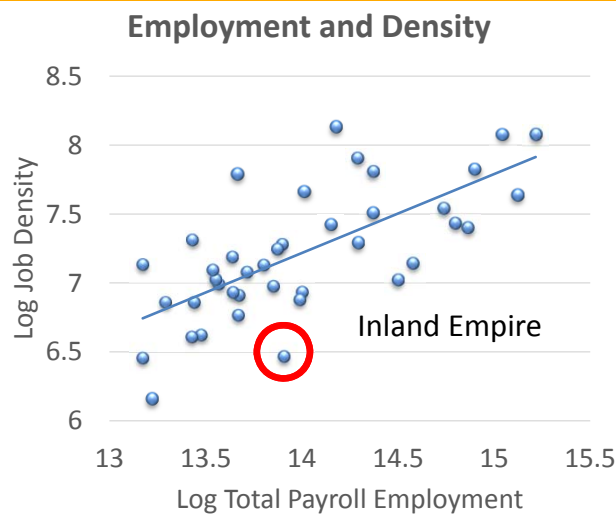
A Different Economy

	Dec-18	Gr 13-18	LQ 2018	R Gr 13-15
Total Nonfarm	1505.9	20.0%		
NR/Construction	101.2	33.9%	1.32	5.2%
Manufacturing	100.2	13.3%	0.87	9.7%
Wholesale Trade	66.9	15.7%	1.06	12.5%
Retail Trade	183.4	9.1%	1.25	4.6%
Logistics	129.8	59.9%	2.25	29.4%
Information	11.1	-2.6%	0.23	-21.3%
Financial Activities	44.7	6.4%	0.61	-1.2%
Prof Sci Tech	40.3	3.3%	0.36	-9.2%
Management	8	-5.9%	0.39	-9.4%
Admin Support	102.7	21.8%	1.03	6.4%
Education	20	12.4%	0.61	-2.4%
Health Care	214.9	24.1%	1.04	6.0%
Leisure and Hospitality	174.2	24.3%	0.98	5.8%
Other Services	45.3	8.1%	0.92	1.0%
Government	263.3	16.9%	1.16	7.4%

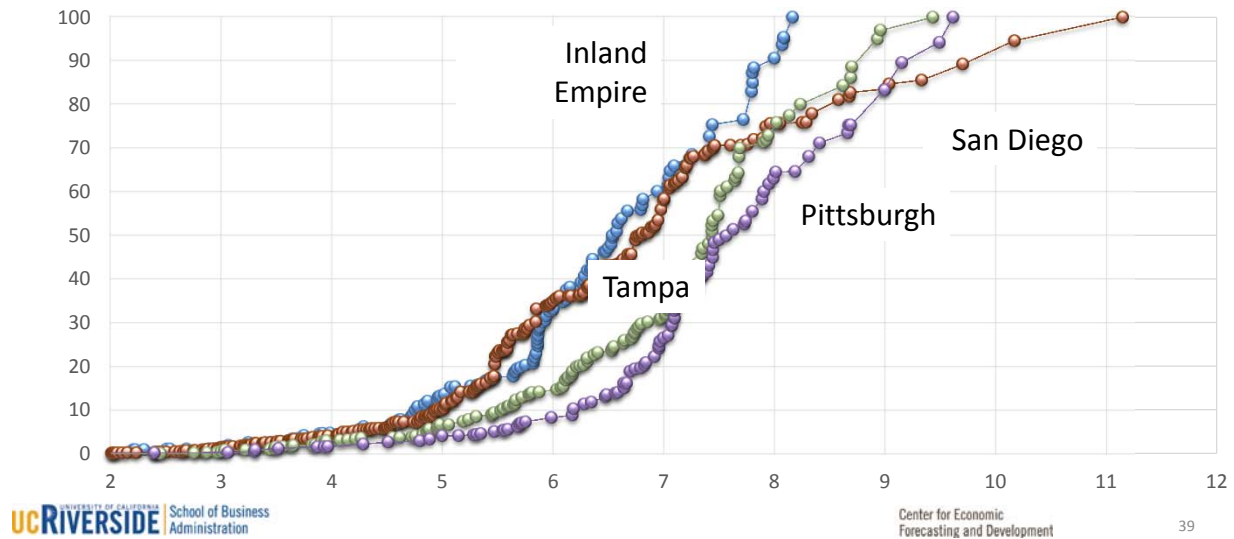
Industry Wages

Industry	Los Angeles	Orange County	Riverside	San Bernardino
Total	61,200	60,200	44,300	45,900
Construction	62,400	81,700	56,500	56,600
Food Manufacturing	48,000	47,200	53,400	49,000
Truck Transportation	50,900	47,400	52,100	55,700
Warehouse & Storage	48,100	56,000	37,700	38,300
Prof, Sci, & Tech Services	102,000	92,800	62,400	66,600
Employment Services	35,900	35,300	26,500	27,000
Health Care	43,600	50,000	41,200	45,800
Government	71,100	67,700	61,300	58,700

Job Density

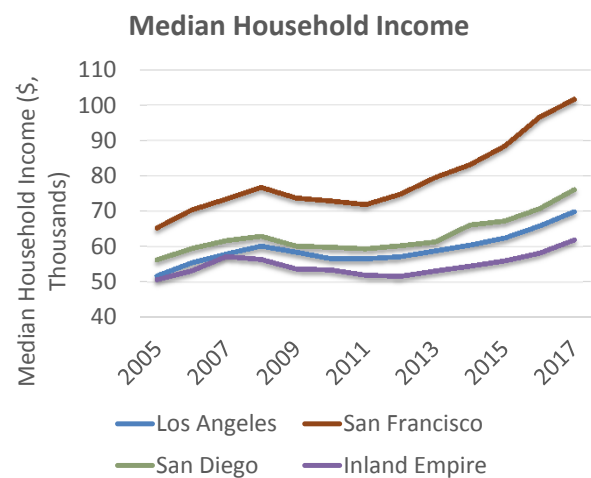


Density Distributions



Median Household Income

Region	2017 Median Household Income	% Change 2014-17
San Jose	\$117,474	21.8%
San Francisco	\$101,714	22.2%
San Diego	\$76,207	15.1%
San Luis Obispo	\$71,880	13.2%
Los Angeles	\$69,992	15.7%
Sacramento	\$67,902	13.1%
Inland Empire	\$61,994	13.6%
Fresno	\$51,800	19.3%
Merced	\$47,735	8.3%



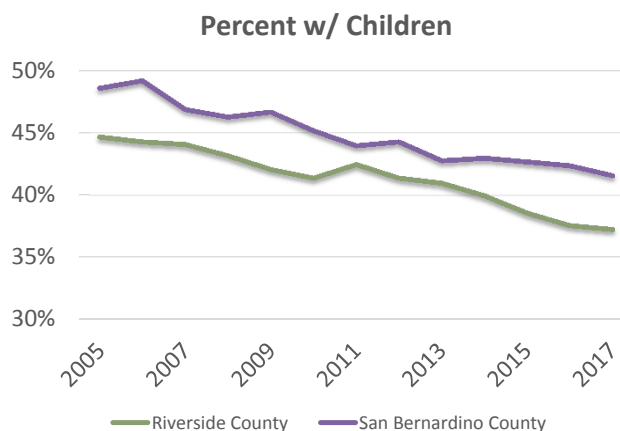
Local Pay by Education

	Los Angeles	Orange	Riverside	San Bernardino
Population 25 years and over with earnings	\$36,954	\$42,884	\$36,321	\$36,684
Less than high school graduate	\$21,901	\$23,328	\$25,340	\$23,642
High school graduate (includes equivalency)	\$28,882	\$31,311	\$30,829	\$30,663
Some college or associate's degree	\$36,535	\$40,499	\$36,943	\$36,977
Bachelor's degree	\$54,442	\$61,202	\$55,461	\$53,264
Graduate or professional degree	\$77,200	\$87,277	\$80,064	\$75,241

Standard of Living?

“In an Inland Empire family of four with two working adults, each parent must earn about \$18 an hour, or \$36,000 each year, to make ends meet. Only 38% of jobs in the Inland Empire meet this standard.”

“only about 4 in 10 jobs pay enough for working families to make ends meet”



Living Wage Standards?

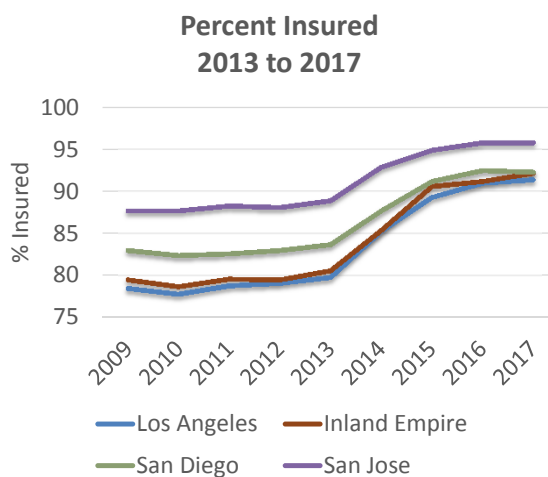
Self-Sufficiency Standard — 2 Adults, 2 Children					
Monthly Costs	Riverside	San Bernardino	San Diego	Orange County	Los Angeles
Housing	\$1,178	\$1,133	\$1,816	\$1,876	\$1,663
Child Care	\$1,289	\$1,283	\$1,367	\$1,401	\$1,362
Food	\$853	\$830	\$943	\$940	\$923
Transportation	\$539	\$544	\$533	\$537	\$570
Health Care	\$444	\$444	\$470	\$478	\$424
Miscellaneous	\$430	\$423	\$513	\$523	\$494
Taxes	\$758	\$739	\$1,011	\$1,052	\$940

Part Time Employment - 2018

	IE	Chg since 2013	LA	Chg since 2013	OC	Chg since 2013
Full Time	72.5	8.7	72.3	7.3	73.0	5.4
Not at Work	2.1	-0.1	2.7	0.9	2.3	0.1
Part-Time - Economic Reasons	5.2	-2.6	4.6	-4.0	2.5	-5.3
Part-Time - Non-Economic Reasons	15.5	1.8	16.2	1.6	18.3	2.4
Unemployed	4.7	-7.8	4.2	-5.7	4.0	-2.6

Total Insured

Region	Percent Insured 2017	Percent Insured 2013	Percent Insured 2009
Fresno	92.3%	81.7	80.1%
Los Angeles	91.4%	79.8	78.5%
Merced	92.5%	80.8	81.2%
Inland Empire	92.2%	80.6	79.5%
Sacramento	95.0%	85.9	87.4%
San Diego	92.3%	83.7	83.0%
San Francisco	95.5%	89	88.1%
San Jose	95.8%	88.9	87.7%
San Luis Obispo	94.0%	88.8	86.3%



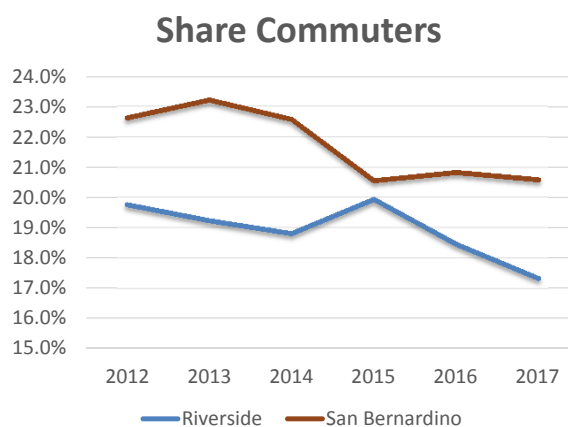
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Source: ACS

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Commute Times - 2017

Region	Less than 20 min.	20-59 min.	60+ min.
Los Angeles	30.1%	55.0%	14.9%
Orange County	35.3	54.9	9.8
Riverside	35.6	45.9	18.5
San Bernardino	35.4	49.2	15.5

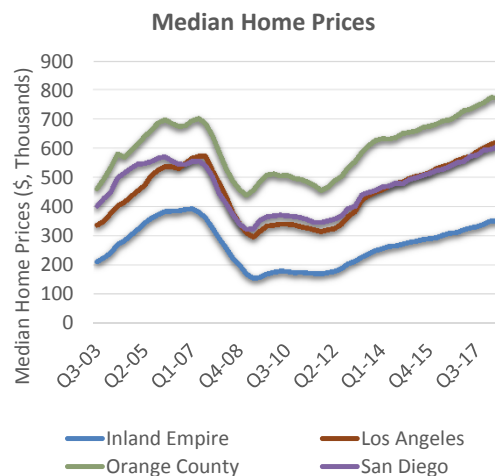
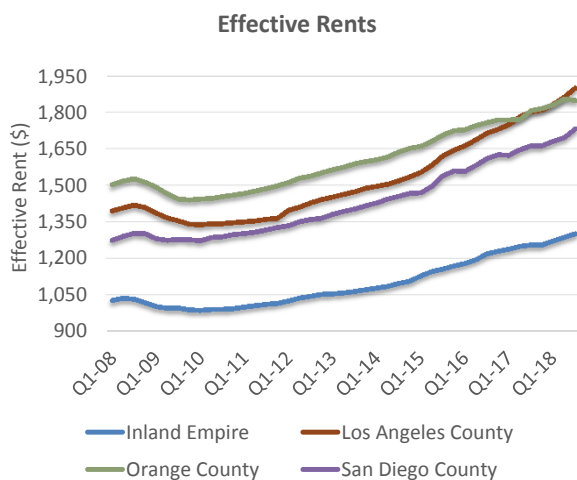


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Housing



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Source: Inland Empire DataQuick

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Housing Costs

by Educational Attainment

	LA	OC	Rv	SB
Less Than High School	39.0	41.4	34.9	33.6
High School Graduate	36.2	36.9	31.6	31.5
Some College	32.0	31.8	28.4	29.2
Bachelors Degree	27.6	26.8	25.8	26.3
Grad./Prof. Degree	24.7	25.7	23.4	24.3

Share Households > 30% Income

	Renter		
	2013	2016	Ch
Fresno	54.8%	57.5%	2.7%
Los Angeles	57.0%	55.4%	-1.6%
San Bernardino	54.7%	55.4%	0.7%
Riverside	58.8%	54.8%	-4.0%
San Diego	53.7%	54.7%	1.0%
Orange	55.5%	54.1%	-1.4%
Sacramento	52.9%	52.1%	-0.9%
Alameda	50.8%	47.2%	-3.6%
Santa Clara	47.2%	46.2%	-1.1%
San Francisco	42.8%	36.8%	-6.0%

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The Big Picture

- **Positives: It will be a good year**
 - GDP Growth Outlook for 2019: 2%+
 - State revenues will look positive
 - 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
 - Debt Levels still safe
 - California: Still a top performer
 - IE: Doing just great
- **Negatives: Problems Growing**
 - Labor shortages will be an issue
 - Local housing supply tightening
 - Fed will continue to tighten, yield curve flattening
 - Markets behaving oddly
 - Federal deficit widening sharply
 - Current shutdown—how long?
 - Political uncertainty to dominate headlines
 - Critical Policy Issues Remain Undiscussed
 - Miserabilism warping our sense or reality

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900 University Ave.
Riverside, CA 92521

communication@economicforecasting.org
<http://soba.ucr.edu>
951-827-6329

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