

The Economic Outlook

Focus on Contra Costa County

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Trumped!

What does it mean for the National and California economy?

The shocker!

The Perils of Political Forecasting

♥ FiveThirtyEight

Nate Silver 8 am, Tuesday November 8



The Victory of Miserabilism

Things aren't that bad

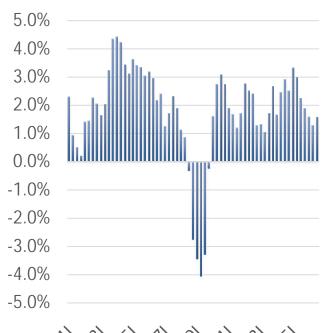
- US GDP is growing slow, but it is growing
- Fundamentals are fine, no chance of recession
- U.S.: 5% world's population, 20% of the world's consumption
- Real incomes have been rising, true wellbeing even more so
- Labor markets are tight
- Inflation slow, interest rates low
- US energy sector: too successful for its own good
- Manufacturing: doing fine, trade (on net) good for US
- California still leading the nation in growth

The true challenges

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

GDP Growth

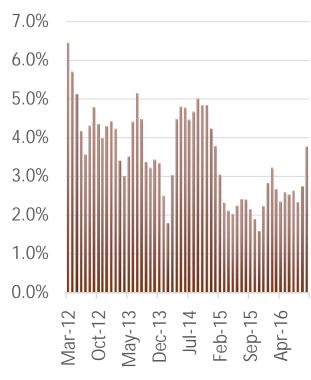




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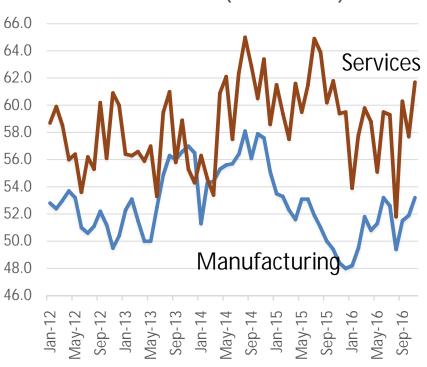
2016 Avg IV-II Ш GDP 1.03 3.20 Cons. 1.84 1.89 Goods 0.74 0.74 Services 1.10 1.15 -0.760.34 Invest -0.17 Struct 0.26 -0.31 -0.28Equip **IPP** 0.23 0.04 0.13 Res -0.17-0.64 0.49 Inv **Net Trade** -0.090.87 -0.07 **Exports** 1.18 **Imports** -0.02 -0.31 Gov 0.05 0.05

Retail Sales Growth (Y-o-Y)



Broad Indicators

ISM Indexes (Diffusion)

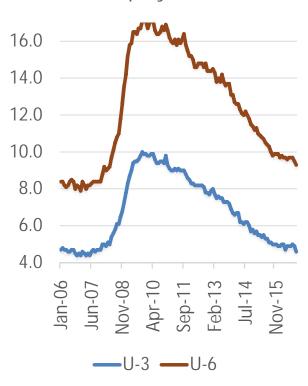


Y-o-Y Growth Employment

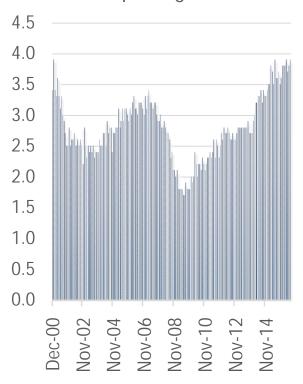


Labor Markets

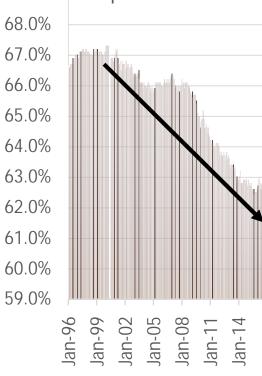




Job Opening Rate



Participation Rate



Local Economic Performance

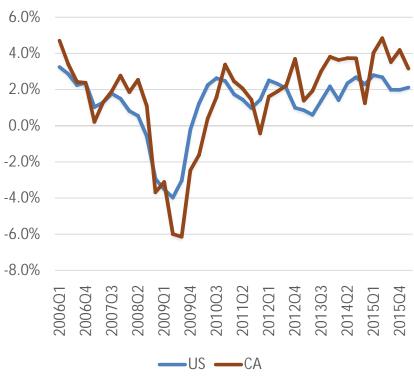
	15	160	Ch		15	16	Ch		15	160	Ch
Alaska	6.5	6.9	0.4	Wyoming	4.3	5.3	1	lowa	3.6	4.2	0.6
New Mexico	6.5	6.7	0.2	Missouri	4.6	5.2	0.6	Maryland	5.1	4.2	-0.9
Louisiana	6	6.4	0.4	Oklahoma	4.2	5.2	1	Maine	4.2	4.1	-0.1
DC	6.7	6.1	-0.6	Georgia	5.6	5.1	-0.5	Wisconsin	4.6	4.1	-0.5
Mississippi	6.4	6	-0.4	Kentucky	5.4	5	-0.4	Arkansas	5	4	-1
Nevada	6.6	5.8	-0.8	New York	5	5	0	Minnesota	3.6	4	0.4
West Virginia	6.6	5.8	-0.8	South Carolina	5.5	4.9	-0.6	Virginia	4.2	4	-0.2
Pennsylvania	4.9	5.7	0.8	Ohio	4.6	4.8	0.2	Idaho	4.1	3.8	-0.3
Rhode Island	5.6	5.6	0	Texas	4.5	4.8	0.3	Colorado	3.6	3.6	0
Washington	5.7	5.6	-0.1	Florida	5.1	4.7	-0.4	Massachusetts	4.8	3.6	-1.2
Arizona	5.9	5.5	-0.4	North Carolina	5.7	4.7	-1	Utah	3.5	3.4	-0.1
California	6	5.5	-0.5	Michigan	5.1	4.6	-0.5	Hawaii	3.4	3.3	-0.1
Illinois	5.9	5.5	-0.4	Tennessee	5.6	4.6	-1	Vermont	3.7	3.3	-0.4
Oregon	5.7	5.5	-0.2	Indiana	4.5	4.5	0	Nebraska	3	3.2	0.2
Alabama	6.1	5.4	-0.7	Kansas	4	4.4	0.4	North Dakota	2.7	3	0.3
Connecticut	5.3	5.4	0.1	Delaware	4.9	4.3	-0.6	New Hampshire	3.3	2.9	-0.4
New Jersey	5.2	5.3	0.1	Montana	4.1	4.3	0.2	South Dakota	3.1	2.9	-0.2

As for California

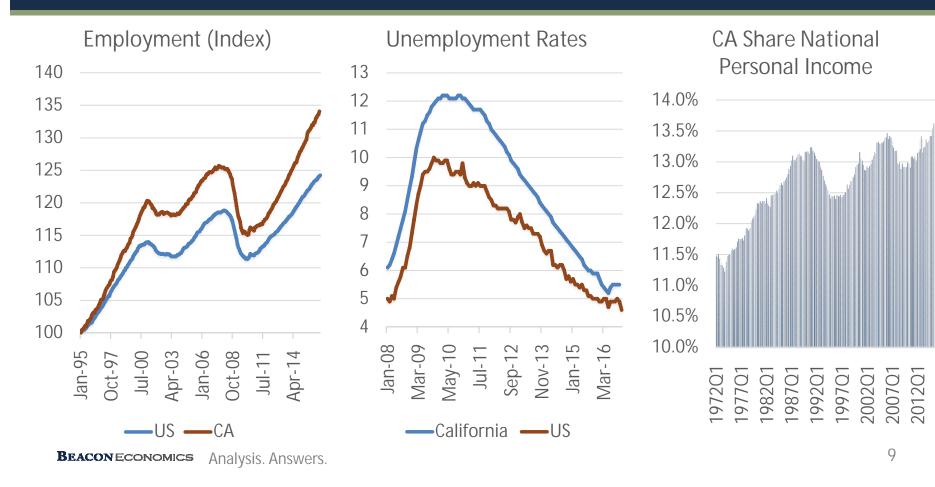
3 Year Change in Payroll Jobs by State

	J	•	3	
		Abs	Growth	Share
Florida		792.8	3.3%	10.0%
Utah		131.6	3.2%	1.7%
Nevada		117	3.2%	1.5%
Oregon		167.6	3.2%	2.1%
Colorado		219	2.9%	2.8%
Washington		273.7	2.9%	3.5%
Georgia		349.6	2.8%	4.4%
California		1309.1	2.8%	16.5%
Idaho		52.6	2.6%	0.7%
South Carolina		150.7	2.6%	1.9%
Tennessee		211.9	2.5%	2.7%
Texas		828.3	2.4%	10.4%
Arizona		179.4	2.3%	2.3%
North Carolina		264.9	2.1%	3.3%
Delaware		27.9	2.1%	0.4%
Massachusetts	5	198.6	1.9%	2.5%
Michigan		220.8	1.7%	2.8%



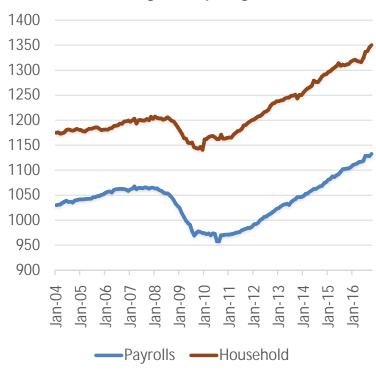


State Employment / Income



Industry Employment & 2015 Wages

East Bay Employment



BEACONECONOMICS Analysis. Answers.

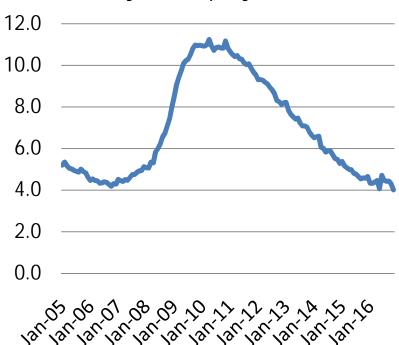
Industry Employment in East Bay, November 2016

landi interio	Nov-16	1-Yr Chg.	1-Yr %	<u>Alameda</u>	Contra Costa
Industry	<u>(000s)</u>	<u>(000s)</u>	<u>Chg.</u>	<u>County</u>	<u>County</u>
Hospitality	114.8	7.4	6.9%	\$28,567	\$21,139
Construction	68.5	4,4	6.8%	\$75,149	\$73,095
Education/Health	188.1	7.9	4.4%	\$56,170	\$60,036
Information	23.1	0,5	2.3%	\$132,625	\$103,695
Financial Activities	49.9	1.1	2.2%	\$72,643	\$95,792
Other Services	38.9	0.6	1.6%	\$40,516	\$35,895
Trade,Transport,Util.	204.8	2.9	1.4%	\$53,773	\$52,059
Government	170.0	1.3	0.8%	\$72,410	\$62,508
Professional	184.5	1.2	0.6%	\$98,798	\$86,415
Manufacturing	85.9	1.6	-1.9%	\$86,815	\$95,482
Total Nonfarm	1129.4	25,4	2.3%	\$68,791	\$63,792

Source: CA Employment Development Department and U.S. Bureau of Labor Statistics

EB / CC Employment

East Bay Unemployment Rate



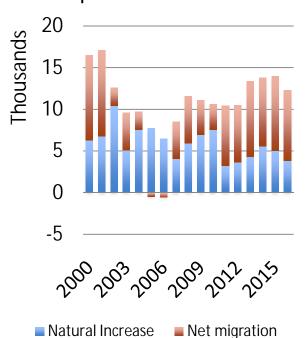
		Nov-14	Į.	Nov	/-15	1	Nov-16
Civilian Labor Force		547,600		551,000		561,500	
Civilian Employment		516,60			5,000		538,300
. ,					-		
Civilian Unemployment		30,9		Z	5,900		23,200
Civilian Unemployment Ra	te	5.7	1 %		4.7%		4.1%
		Payroll	1	4-15	15-	16	Ch
Total, all industries		361,187		1.9%	3.6	%	12,456
Construction		24,705		2.9%	13.0	%	2,845
Manufacturing		14,788	-	1.9%	-2.5	%	-374
Trade, transportation		63,706		2.9%	4.3	%	2,606
Information		8,049	-	0.9%	-3.3	%	-274
Financial activities		26,889		5.5%	2.2	%	586
Professional		51,585	-	6.7%	2.6	%	1,316
Education health		65,758		4.7%	5.4	%	3,379
Leisure hospitality		41,231		4.2%	4.6	%	1,803
Federal Government		4,721		6.2%	0.1	%	3
Local Government		43,522		1.9%	0.6	%	256

Population





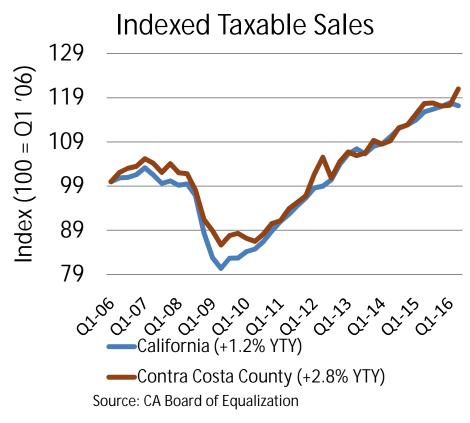
Components of County Population Growth



2015 Income Data

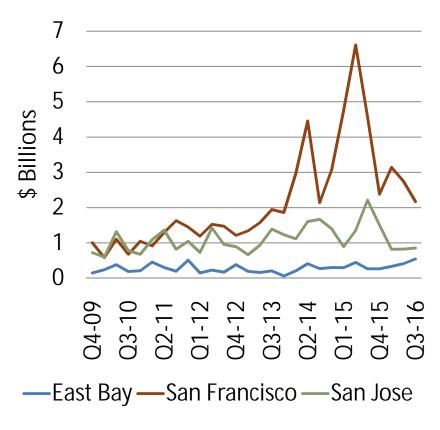
	Alameda	Contra Costa
HH	571,828	391,996
	1.5%	1.0%
Median	81,717	83,104
	5.8%	3.4%
Mean	109,109	115,085
	6.8%	2.2%

Spending Trends



East Bay Taxable Receipts, Q2 '16			
<u>Category</u>	<u>Q2 '16</u>	1-Yr % Chg.	
Autos and Transportation	20,085,21	6 5.8%	
Building and Construction	9,737,14	9 3.1%	
Business and Industry	19,236,93	5 1.9%	
Food and Drugs	6,450,91	0 4.1%	
Fuel and Service Stations	7,656,04	0 -15.9%	
General Consumer Goods	23,694,22	6 2.4%	
Restaurants and Hotels	13,028,13	5 5.8%	
Total	117,012,06	9 2.6%	
Source: HdL Companies			

Bay Area Venture Capital



Venture Capital Investment Since 2010 (\$ millions)				
		Contra		
Industry	Bay Area	Costa	Sh	are
Biotechnology	11048	.2	36.6	0.3%
Electronics Instr.	1051	,2	7.7	0.7%
IT Services	8036	.2	5.0	0.1%
Industrial Energy	7241	.0	76.4	1.1%
Media and Entertain.	9824	.1	3.1	0.0%
Medical D. & E.	5749	.0	64.6	1,1%
Semiconductors	3728	.9	0.3	0.0%
Software	53336	2	96.2	0.2%
Source: Price Waterhouse Coopers' Moneytree Reports				

East Bay Tech Sector

Technology Industry Employment and Annual Average Wage, 2015

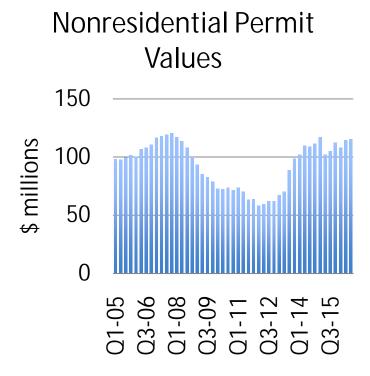
Industry	Contra Costa			
	Employment	A.A.W. (\$)		
Semiconductors and related device mfg.	192	89714		
Computer and software merchant				
wholesalers	2159	174583		
Other electronic parts merchant wholesalers	222	63642		
Software publishers	2974	158584		
Data processing, hosting and related services	1313	103931		
Internet publishing and web search portals	420	91008		
Engineering services	16097	105223		
Custom computer programming services	7272	120509		
Computer systems design services	9032	121163		
Computer facilities management services	14	52398		
Other computer related services	1076	92564		
Research and development in biotechnology	5360	125884		
Other physical and biological research	825	97573		
Source: U.S. Bureau of Labor Statistics QCEW Data				

Major Deals in Contra Costa Since 2010 Name \$ mill Industry HealthTell Inc 26.1 Biotechnology Trov Inc 25.5 Software 25.1 Industrial Energy Alion Inc. 23.0 Medical D. & E.* Breathe Technologies Inc. Five9s Communications Inc 22.0 Software MBA Polymers Inc. 18.4 Industrial Energy MBA Polymers Inc. 14.6 Industrial Energy Steadymed Ltd 12.2 Medical D. & E Providence Medical Technology 12.0 Medical D. & E. 12.0 Software Five9 Inc. Whamcloud, Inc. 10.0 Software Mayvenn Inc 10.0 Retail Dist.

Source: Price Waterhouse Coopers' Moneytree Reports

Commercial Real Estate

Nonresidential Permitt	2016		YTD %
T		YTD Chg.	
Type	(\$ 000s)	(\$000s)	Chg.
Total Nonres.	360614.9	36934.0	11%
Nonres: Alts/Adds	228011.2	88293.9	63%
Retail	42717.0	6893.9	19%
	12717.0	0070.7	1 7 70
1 1 2 1 2 1 2 1 2 1 4 1 1 1 1 1 1 1 1 1	2002	2222	* 1 7 A
Hotel	9900.0	9900.0	N/A
Industrial	5541.5	-5176.7	-48%
Office	0.0	-14853.3	-100%
Source: Construction In	dustry Resea	rch Board	



East Bay Office Market

East Bay Office Market, Q3 '16						
	Costs	of Rent	<u>Vacan</u>	Vacancy Rate		
Submarket	<u>(\$/</u>	sq.ft.)	<u>(</u> 9	<u>%)</u>		
odbillarkot				1-Yr.		
	Q3 '16	1-Yr.% Chg.	Q3 '16	Chg.		
Airport/San						
Leandro/Hayward	23.05	4.4%	19.8	-1.4		
Central Business District	36.05	12.9%	9.2	-0.9		
Fremont/Newark	22.15	1.5%	21.6	-1,5		
North Alameda	32.68					
Troi (III) Illianio da						
North Contra Costa	30.44					
North I-680	28.94					
South I-680	27.42	5.1%	25.5	-1.6		
West Contra Costa	25.57	2.8%	5 14.6	-0.1		
Total Metro Area	29.84	7.4%	5 14.1	-1.6		
Source: Reis, Inc.						



East Bay Retail Market

East Bay Retail Rental Market, Q3 '16				
	<u>Cost o</u>	of Rent		
Submarket	<u>(\$/s</u>	<u>sq.ft.)</u>	<u>Vacan</u>	<u>cy Rate (%)</u>
odomano.		1-Yr. %		
1 <u></u>	Q3 '16	Chg.	Q3 '16	1- Yr. Chg.
Central Contra				
Costa	32.3	90.99	6 5	.3 0.8
Central/North			_	_
Alameda	30.8	3 1.69	% 7	.9 2.9
East Alameda	28.3	9 1.49	% 7	.5 -0.2
East Midilieud	ZQ.J	7	∕ 0	.0.2
East Contra Costa	24.1	3 2.19	% 9	.4 -1.2
South Alameda	25.9	9 2.89	% 6	.5 -1.5
Mari Oralas Orala	24.4	- 0.00	·	2 0 4
West Contra Costa	34.4	5 2.09	% 5	.3 0.4
Total Metro Area	29.6	3 1.69	% 6	.8 0.4
instantivisti o mica	4.7. ₁ 9.	O:	·V	.у

Vallejo Pabl Concord Pleasant Hill Brentwood Walnut Creek Danville n Francisco Daly City Dublin Livermore acifica 101 Fremont Scarper Peak San Carlos Newark 680 Redwood City Milpitas Sunnyvale San Jose 20 km

Quiz Time

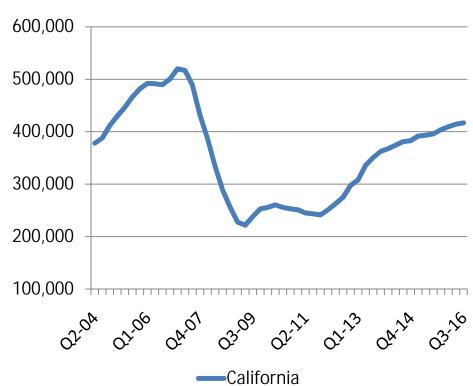
Match the payroll employment growth rate (letters) (1995-2015) to the California region (numbers)

Α	23.6%
В	25.8%
С	27.0%
D	33.8%
Е	39.8%

1	Bay Area
2	Central Coast
3	Greater Los Angeles
4	Greater Sacramento
5	So Central Valley

Homes

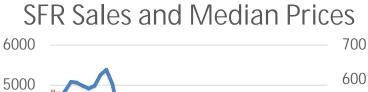




California Home Prices, Q3-16

County	Median Price	YoY Growth (%)
Monterey	517,400	13.7
San Luis Obispo	537,200	8.1
Inland Empire	306,400	8.0
San Diego	536,400	6.0
San Francisco	1,221,500	5.8
Orange County	696,200	3.7
South Bay	919,000	2.3
Santa Barbara	461,600	-4.1
Los Angeles	542,600	6.9

Single Family Real Estate





BEACONECONOMICS Analysis. Answers.

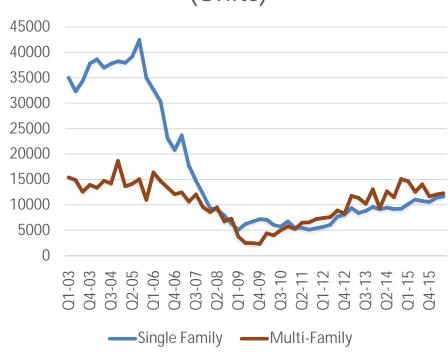
SFR Sales and	Median	Prices	Ω 3	'16
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Location	<u>Media</u>	n Prices		<u>Sales</u>	
	Q3 '16	1-Yr. % Chg.	Q3 '16	1-Yr % Cł	າg.
Antioch	346593	5.0%	6 4	52 ().5%
Brentwood Concord	502122 514994				3.4% 1.1%
Richmond Total County	356606 493108				4.5% 5.8%

Source: Reis, Inc.

State Housing

State Residential Permits (Units)

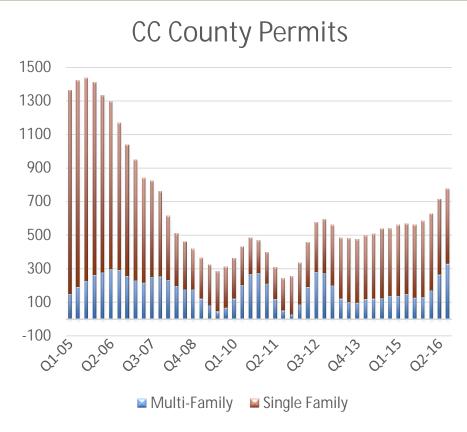


New Pop / Permits

California	4.1	Tulare	4.0
Ventura	6.8	Los Angeles	4.0
Contra Costa	6.6	Fresno	4.0
Sonoma	6.1	San Mateo	3.4
Alameda	5.9	Kern	3.0
Santa Barbara	5.3	Santa Clara	3.0
San Bernardino	5.0	Orange	2.8
Solano	4.6	Placer	2.1
Riverside	4.5	San Francisco	2.1
San Diego	4.2	Sacramento	0.7

Bay Area Housing Affordability

0 - 1	Affor	dabilit	У	Estimate	d Costs
County			Medi	an Home	Monthly
	Q3 '16 Q2	<u>'16</u>	<u>Q3 '15 Price</u>		<u>Payment</u>
Solano	45	45	45 \$393	3,000	\$1,910
Contra-Costa	35	32	34 \$601	,510	\$2,920
Sonoma	27	26	26 \$580),500	\$2,820
Napa	25	25	23 \$639	,000	\$3,110
Alameda	22	20	20 \$795	5,400	\$3,870
Santa Clara	22	19	19 \$1,00	00,000	\$4,860
Marin	19	18	19 \$1,18	85,000	\$5,760
San Mateo	15	14	13 \$1,30	00,000	\$6,320
San					
Francisco	14	13	11 \$ 1,2	98,000	\$6,310
Source: Califo	rnia Associa	ition o	f Realtors		

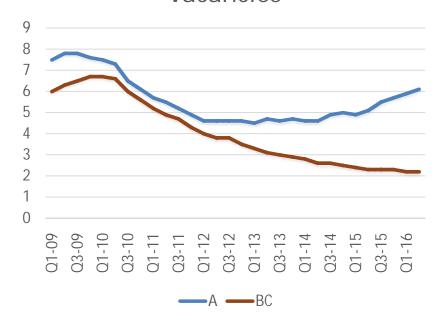


Apartments

Share Renters with >	30% of	Income	on Rent
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	2010	2014
Los Angeles	59.2%	60.1%
Riverside	62.7%	59.8%
Santa Barbara	56.7%	58.4%
Fresno	57.0%	58.3%
Orange	58.3%	58.0%
San Diego	58.8%	56.7%
Sacramento	58.7%	54.5%
Alameda	53.7%	51.4%
Santa Clara	47.7%	49.2%
San Francisco	46.2%	42.5%

California Apartment Vacancies



East Bay Apartment Market



East Bay Apartment Market, Q3 '16					
	Cost of Rent Vacancy Rates (%)				
		1-Yr. %			
Submarket	Q3 '16	Chg.	Q3 '16	1 Yr. Chg.	
Concord/Martinez	1530	1.7%	2.1	0.0	
East Alameda	1890	1.3%	2.9	9 0.8	
East Contra Costa	1542	1.7%		2 -0,3	
Fremont/Newark/Ur	1				
ion City	1848	3.4%	2.5	5 0.2	
North Alameda	1947	2.3%	5.7	0.9	
San					
Leandro/Hayward	1661	4.9%	1.5	5 0.0	
San Ramon/Walnut					
Creek	1785	4.0%	3.3	3 0.4	
West Contra Costa	1938				
Total Metro Area	1789	3.2%	3.1	0.5	
Source: Reis, Inc.					



The Future of Obama-care?

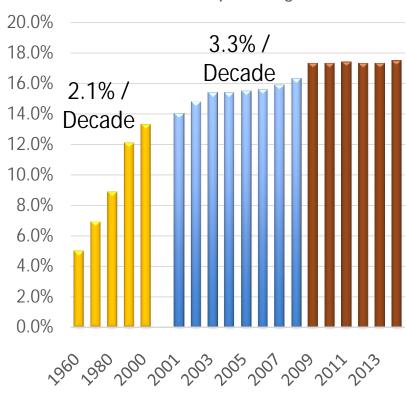
US Population Insurance Status

		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 20000 18000 16000 14000 12000 10000 8000 May-97 Mar-99 Jan-01 Nov-02 Sep-04 Jul-06 May-08 Jul-95 —Manufacturing Healthcare

The Healthcare Crisis

National Health Spending % GDP

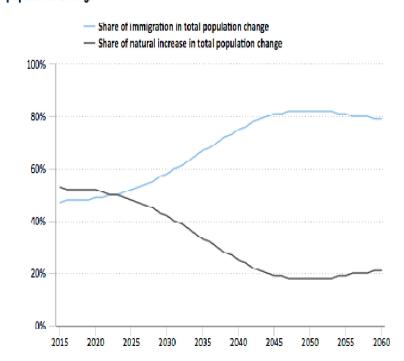


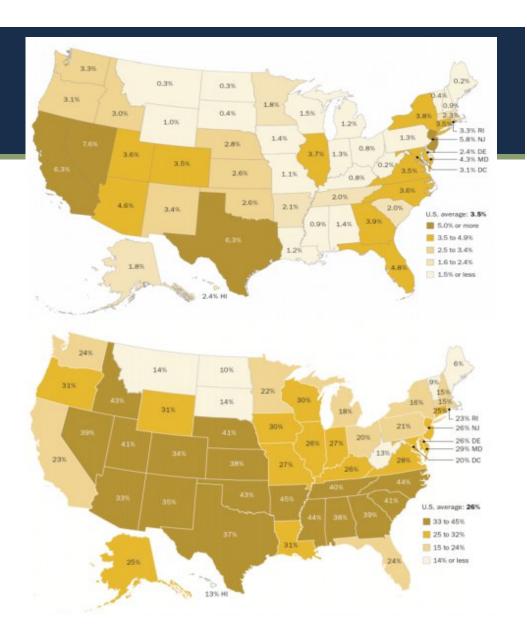
Per Capita Healthcare Spending 2015, PPP Adjusted

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

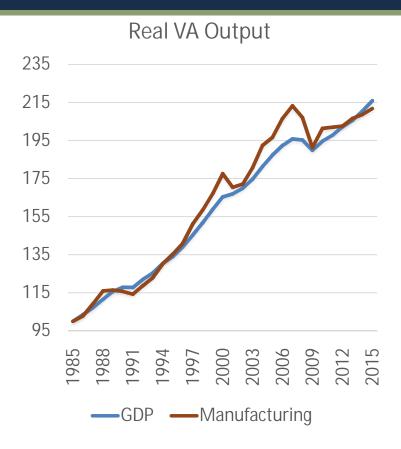
Immigration

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



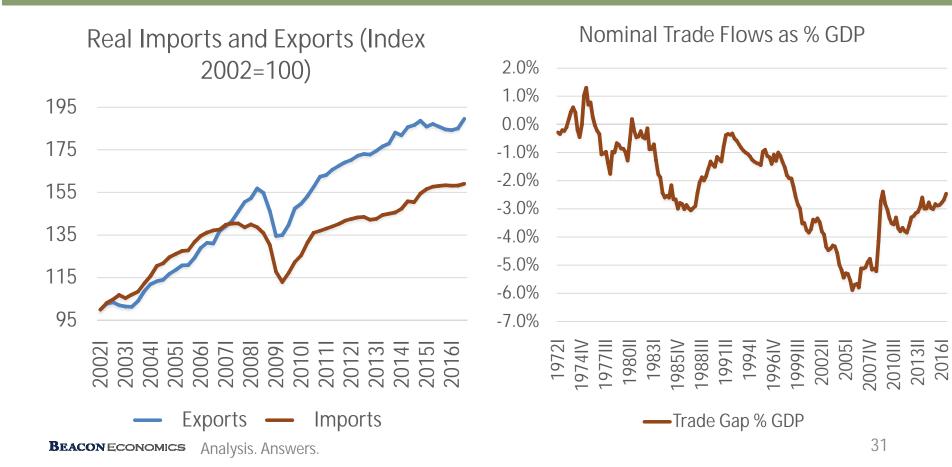


Manufacturing and Technology



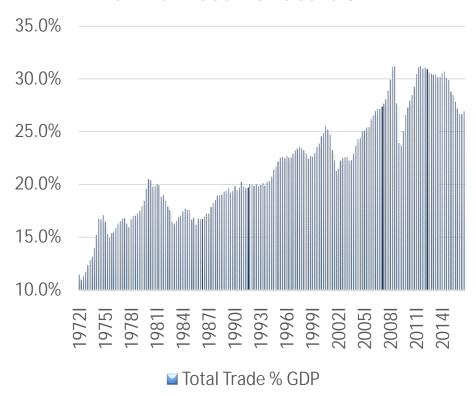
Growth in Real Output	75-95	95-15	Jobs	Prod.
Total	90.8%	56.5%	-5018	61%
Computer	1651.4%	1277.6%	-761	548%
Petroleum Prod	773.6%	126.0%	-9	40%
Motor vehicles	61.2%	78.5%	-353	85%
Primary metals	-34.0%	43.9%	-240	61%
Other transportation	-8.7%	33.6%	-111	33%
Chemical products	84.2%	28.1%	-160	37%
Plastics	133.6%	3.1%	-248	12%
Electrical eq	55.9%	-3.1%	-205	44%
Fabricated metal	54.3%	-3.7%	-287	8%
Printing	73.4%	-5.6%	-372	41%
Nonmetallic mineral	21.5%	-7.4%	-131	7%
Food and beverage	63.7%	-9.3%	40	5%
Wood products	24.1%	-9.8%	-240	30%
Furniture	70.0%	-19.9%	-271	9%
Paper	52.2%	-28.1%	-258	10%
Textile mills	100.0%	-46.4%	-396	14%
Apparel	13.3%	-62.6%	-527	15%

Trade Indicators



Foreign Trade

Nominal Trade Flows as % GDP

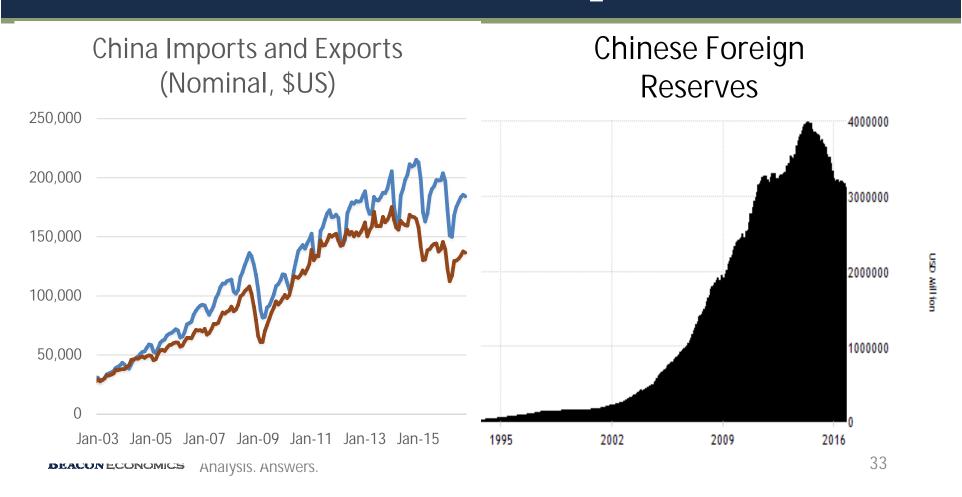


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Goods Trade 2016 YTD

	Balance	Total Trade	Share
Total, All	-\$546	\$2,697	100.0%
China	-\$258	\$416	15.4%
Canada	-\$6	\$407	15.1%
Mexico	-\$47	\$391	14.5%
Japan	-\$51	\$143	5.3%
Germany	-\$49	\$123	4.5%
Korea, South	-\$23	\$84	3.1%
United Kingdom	\$2	\$82	3.0%
France	-\$12	\$58	2.2%
India	-\$19	\$50	1.8%
Taiwan	-\$10	\$48	1.8%
Italy	-\$21	\$46	1.7%
Switzerland	-\$11	\$44	1.6%
Netherlands	\$19	\$42	1.6%
Brazil	\$3	\$41	1.5%
Ireland	-\$26	\$40	1.5%

Chinese Output

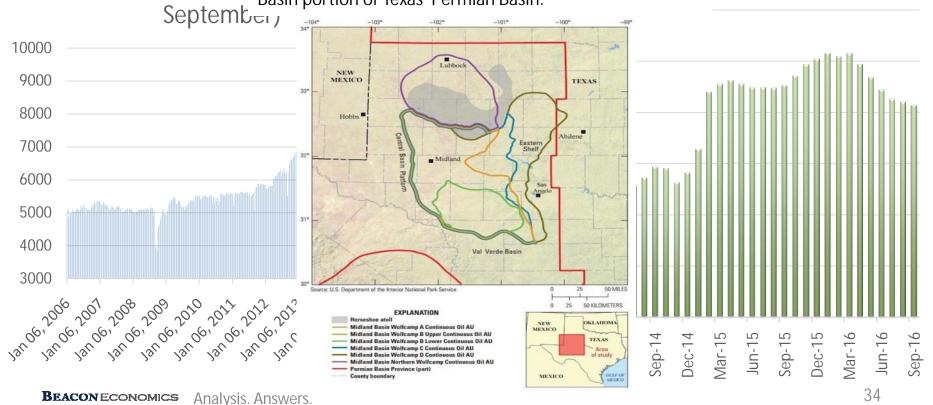


The largest oil deposit ever found in America was just discovered in Texas

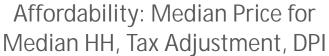
An estimated average of 20 billion barrels of oil and 1.6 billion barrels of natural gas liquids are available for the taking in the Wolfcamp shale, which is in the Midland Basin portion of Texas' Permian Basin.

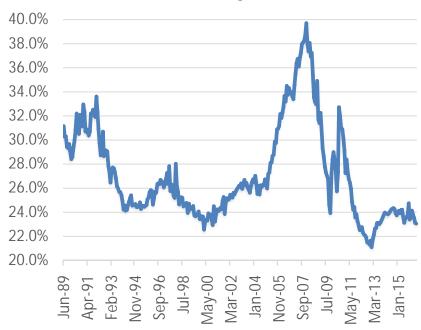
Daily Oil Production

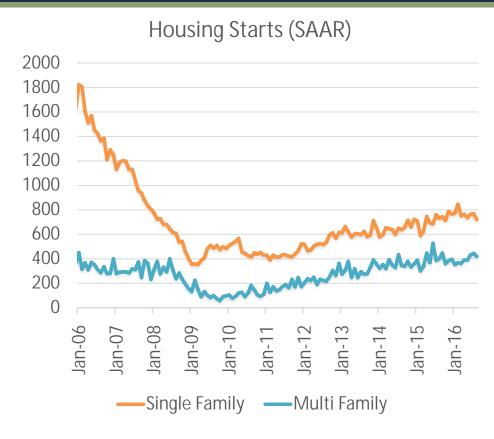
ted Wells



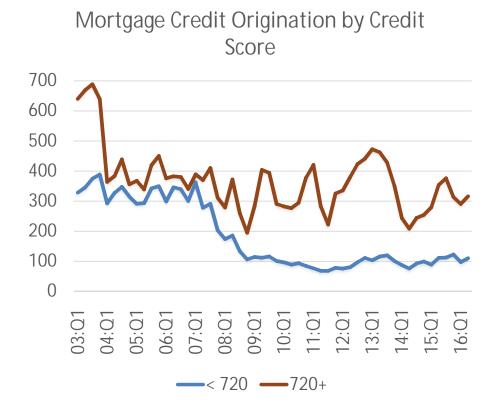
Housing Markets

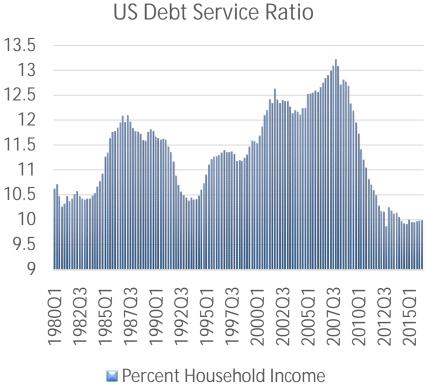






Mortgage Impediments



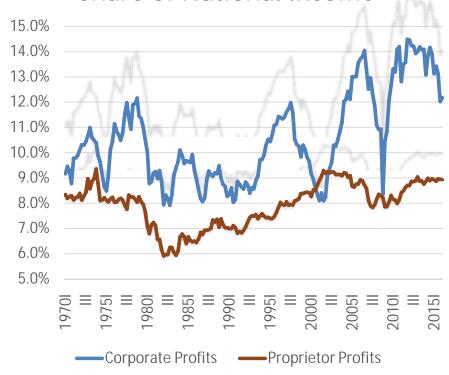


US Taxes / Investment

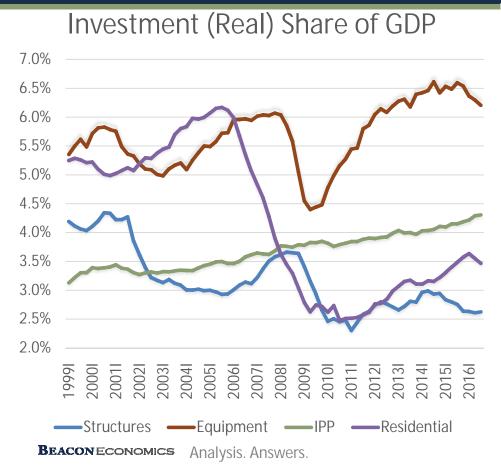
Corporate Effective Tax Rate State and Federal



Share of National Income



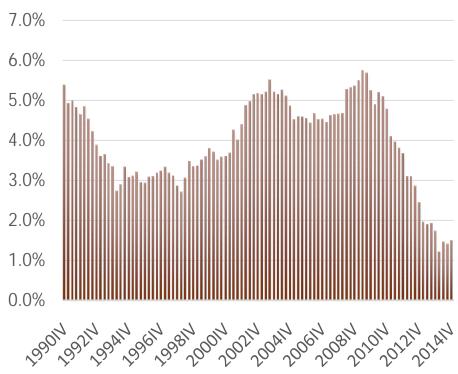
US Investment



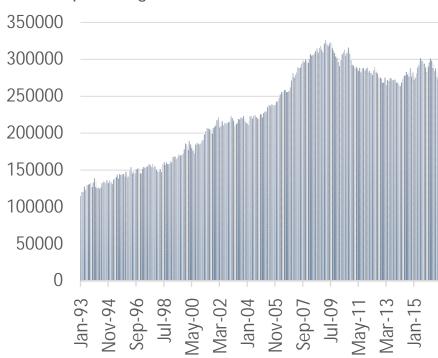
Dool Investment		2000-
Real Investment	2015	2015
Structures	452.1	-81.4
Commercial and health care	132.3	-80.0
Manufacturing	69.1	13.5
Power and communication	86.2	13.7
Mining exploration, shafts	91.4	10.9
Equipment	1072.5	345.6
Information equipment	338.7	158.3
Industrial equipment	207.3	8.8
Transportation equipment	302.2	98.1
Intellectual property products	680	253.9
Software	333.1	157.2
Research and development	270.2	77.2
Entertainment, literary	77.8	18.5
Residential	564.5	-73.4
		38

Public Construction





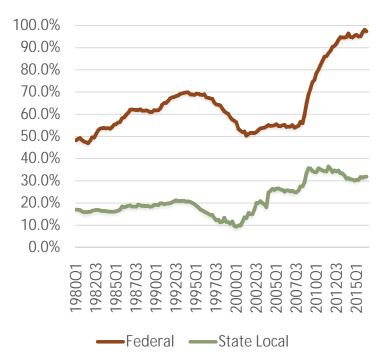
Spending on Current Infrastructure



Federal Budget

	2016		
	I	II	
Current receipts	3,443	3,473	
Current tax receipts	2,107	2,141	61.4%
Personal current taxes	1,521	1,537	43.9%
Taxes on production and imports	138	137	4.0%
Taxes on corporate income	425	445	12.9%
Contributions for social insurance	1,215	1,226	34.9%
Current expenditures	4,111	4,137	
Consumption expenditures	969	975	23.9%
Defense	586	591	14.6%
Current transfer payments	2,630	2,632	63.5%
Government social benefits	2,029	2,045	49.2%
Other current transfer payments	601	587	14.3%
Interest payments	454	472	11.2%
Subsidies	58	59	1.4%

Government Gross Debt as % of GDP



The Trump Factor

Positives

- Something will get done in Washington DC
- Institutions should be able to control worst impulses
- Infrastructure investment: stimulative if done right
- Tax cuts: stimulative if done right
- Financial deregulation good for housing, banks
- Americans hate Obamacare, but they tend to like the Affordable Care Act

Negatives

- Federal deficit likely to explode
- Potential for major trade war / strain on global relations
- Increase in wealth inequality
- Federal Reserve to cede control to Congress
- Corruption factor, personal baggage
- Backwards steps in immigration policies / skilled labor issues
- Backwards steps in environmental policies
- Revenge of the Left



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