BEACON ECONOMICS

Analysis. Answers

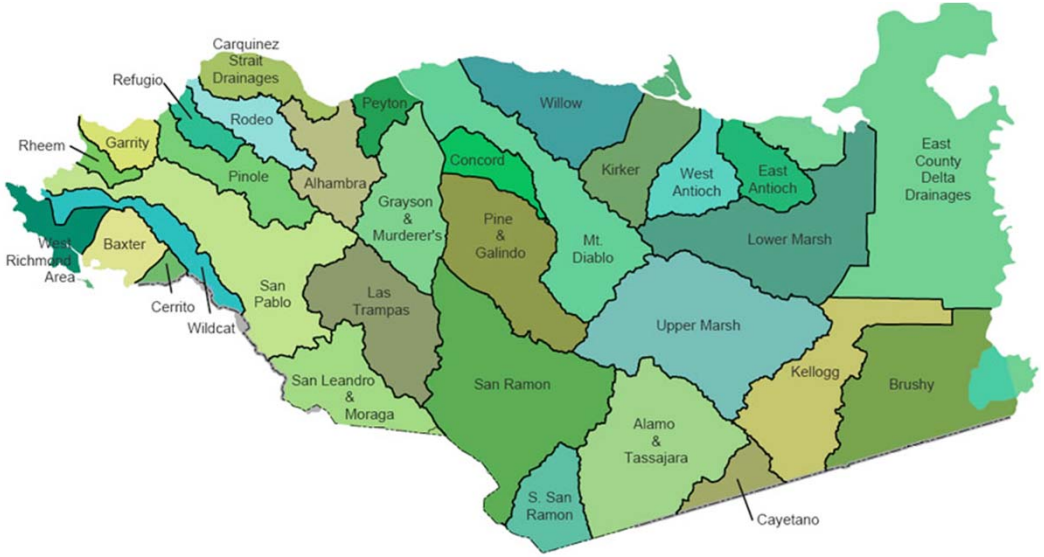
The Economic Outlook

Focus on Contra Costa

January 2016

Christopher Thornberg

Founding Partner, Beacon Economics



Word of the Day

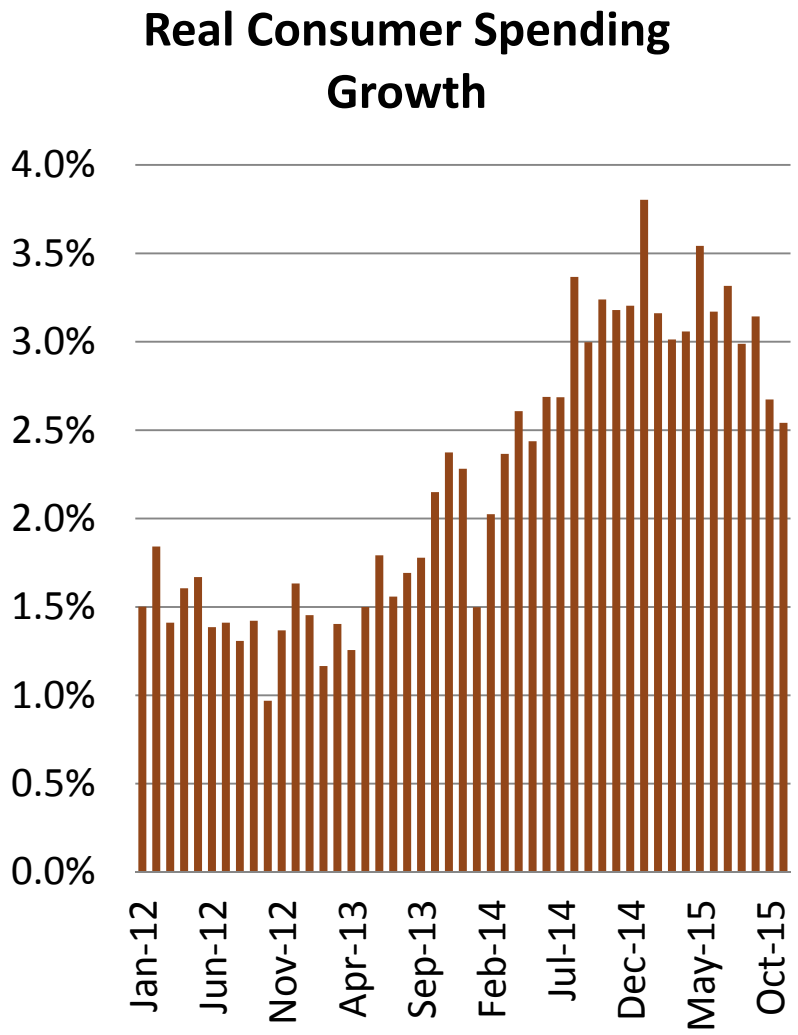
The Right Answer

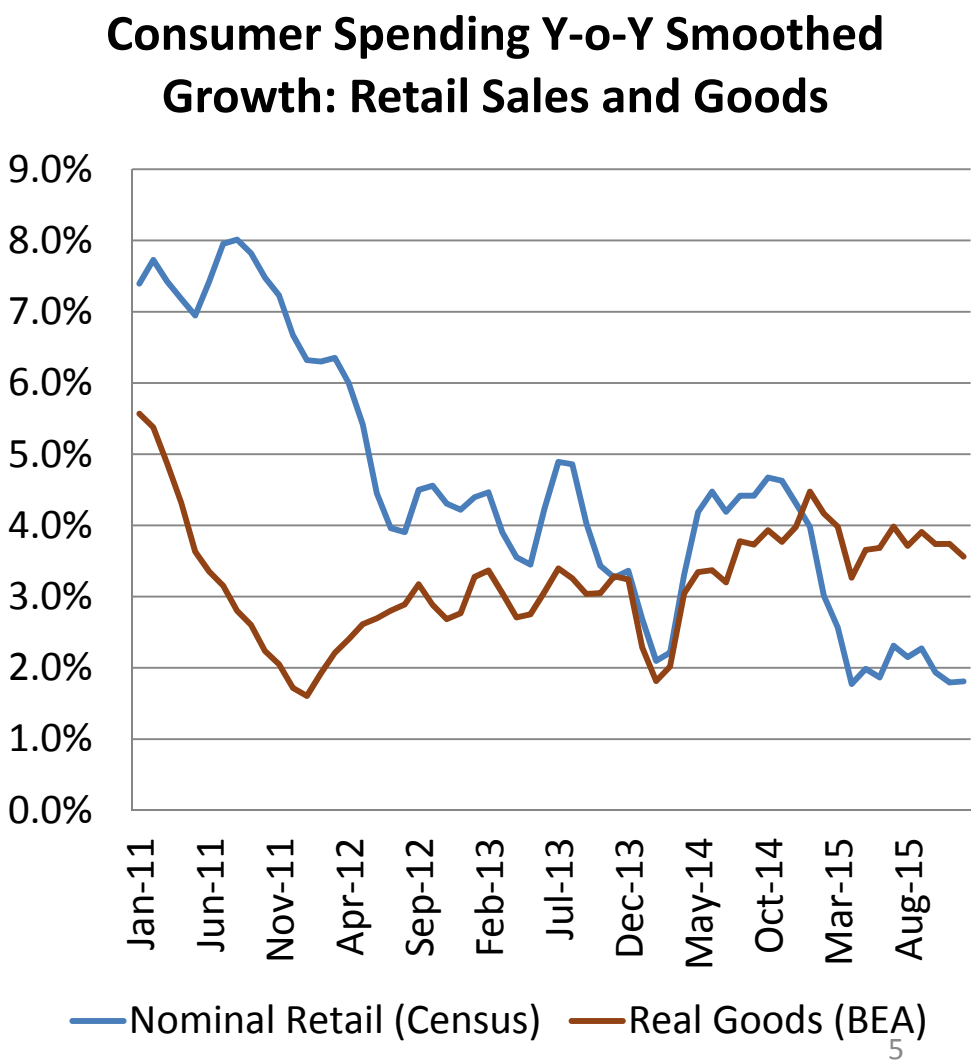
- US Economy Still Moving Along
  - 2015: Better than it looked
  - Labor markets have turned a corner
  - Forget the market turmoil: no bubble
  - Housing still chugging along
  - Credit expanding on many levels
  - Commodity prices are down
  - California still chugging along
- Issues? Sure…
  - Still in slow growth mode
  - State and Local Budgets still stressed
  - Global economy—particularly Asia
  - Bad Financial Regulations
  - Pensions / Entitlements
  - Growing Inequality / Political Gridlock

2015: Better that it looks

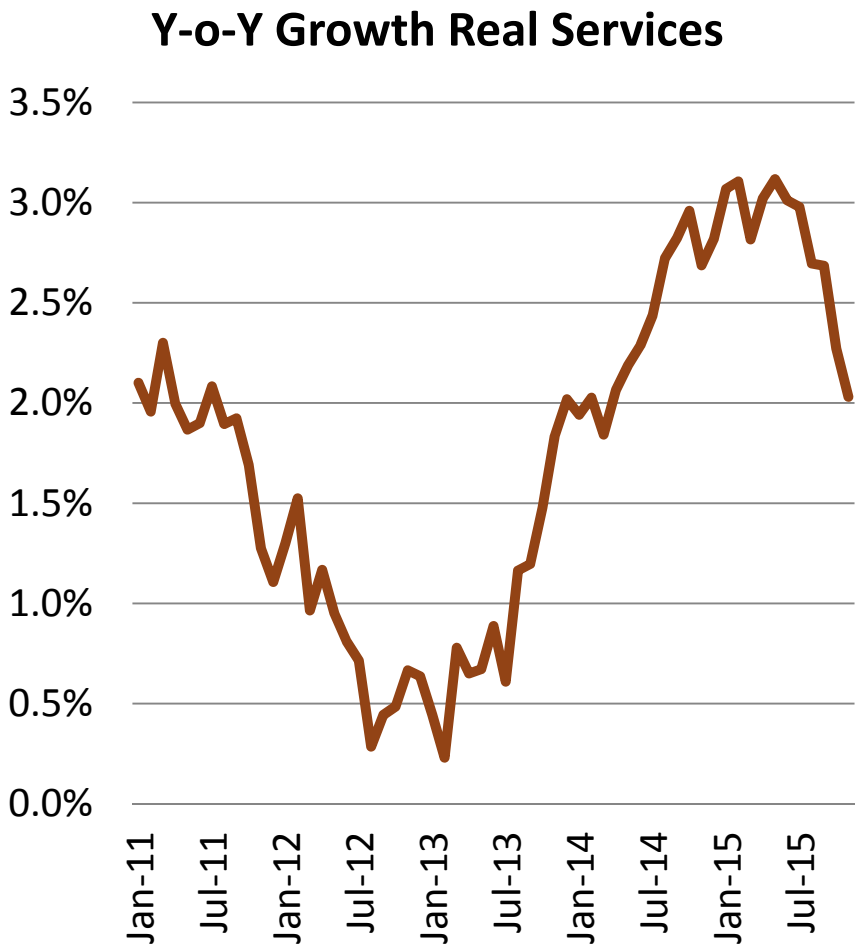
				2015			Beacon
	2013	2014	2015	I	II	III	IV
GDP	**2.45**	**2.53**	***2.09***	**0.60**	**3.90**	**2.10**	***1.80***
Final Demand	**1.64**	**3.11**	***2.67***	**1.65**	**3.70**	**2.91**	***2.44***
Personal consumption	1.56	2.16	*1.82*	1.19	2.42	2.05	*1.62*
Durable goods	0.34	0.53	*0.42*	0.14	0.57	0.47	*0.49*
Nondurable goods	0.41	0.36	*0.45*	0.10	0.62	0.58	*0.50*
Services	0.82	1.27	*0.95*	0.94	1.23	1.00	*0.64*
Gross investment	1.15	0.80	*0.55*	1.39	0.85	-0.05	*0.01*
Structures	0.18	0.14	*-0.08*	-0.22	0.18	-0.21	*-0.07*
Equipment	0.23	0.30	*0.22*	0.14	0.03	0.55	*0.16*
IPP	0.13	0.25	*0.19*	0.29	0.33	-0.03	*0.17*
Residential	0.11	0.16	*0.27*	0.32	0.30	0.24	*0.21*
Change inventories	0.52	-0.05	*-0.02*	0.87	0.02	-0.59	*-0.35*
Net exports	0.29	-0.53	*-0.56*	-1.92	0.18	-0.22	*-0.28*
Exports	0.68	0.32	*-010*	-0.81	0.64	0.11	*-0.33*
Imports	-0.39	-0.85	*-0.46*	-1.12	-0.46	-0.33	*0.05*
Government	-0.55	0.07	*0.29*	-0.01	0.46	0.29	*0.43*
Federal	-0.53	-0.05	*0.07*	0.08	0.00	0.01	*0.22*
State and local	-0.02	0.12	*0.22*	-0.09	0.46	0.29	*0.21*

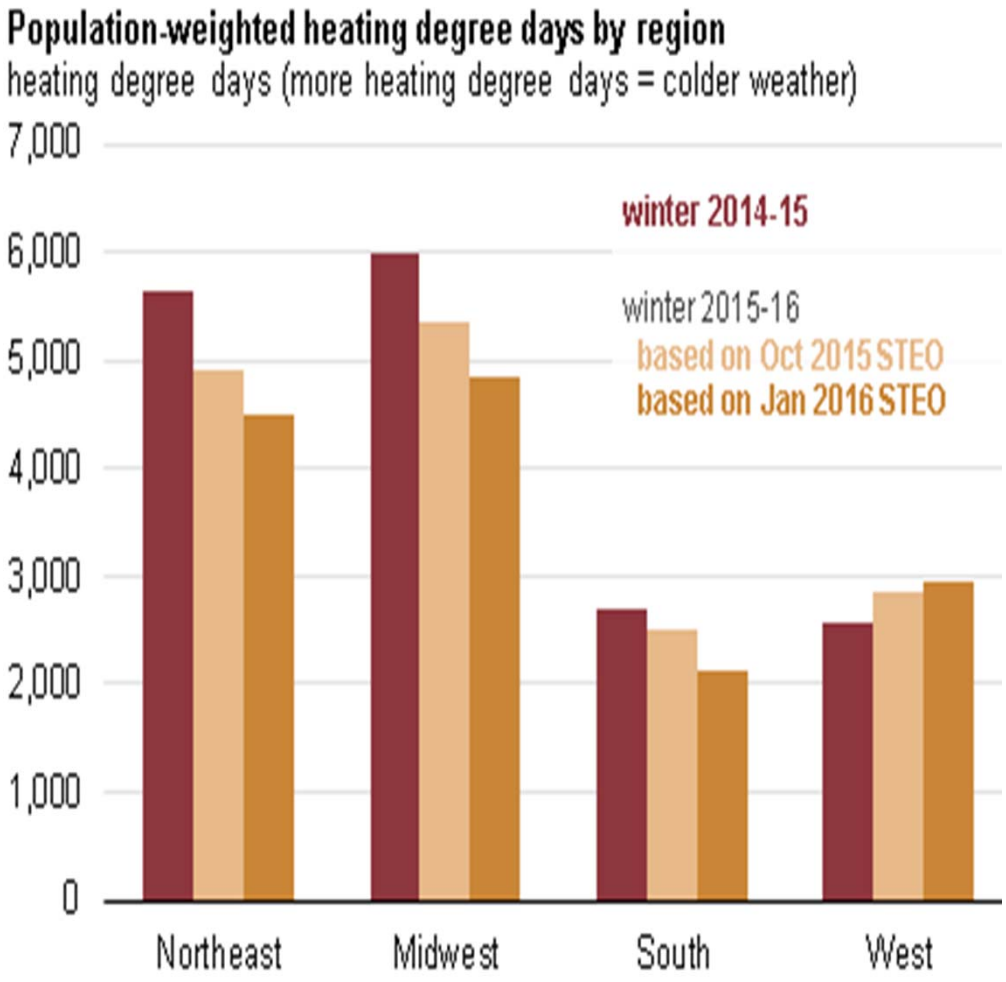
Consumer Spending



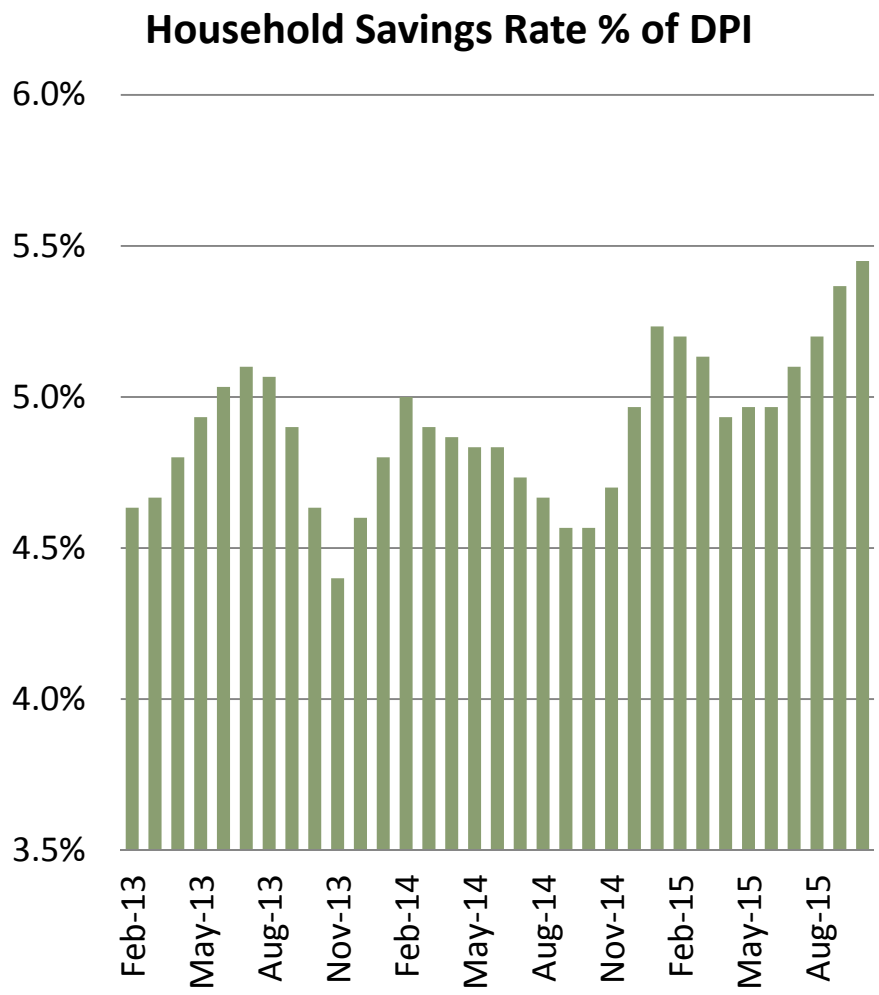


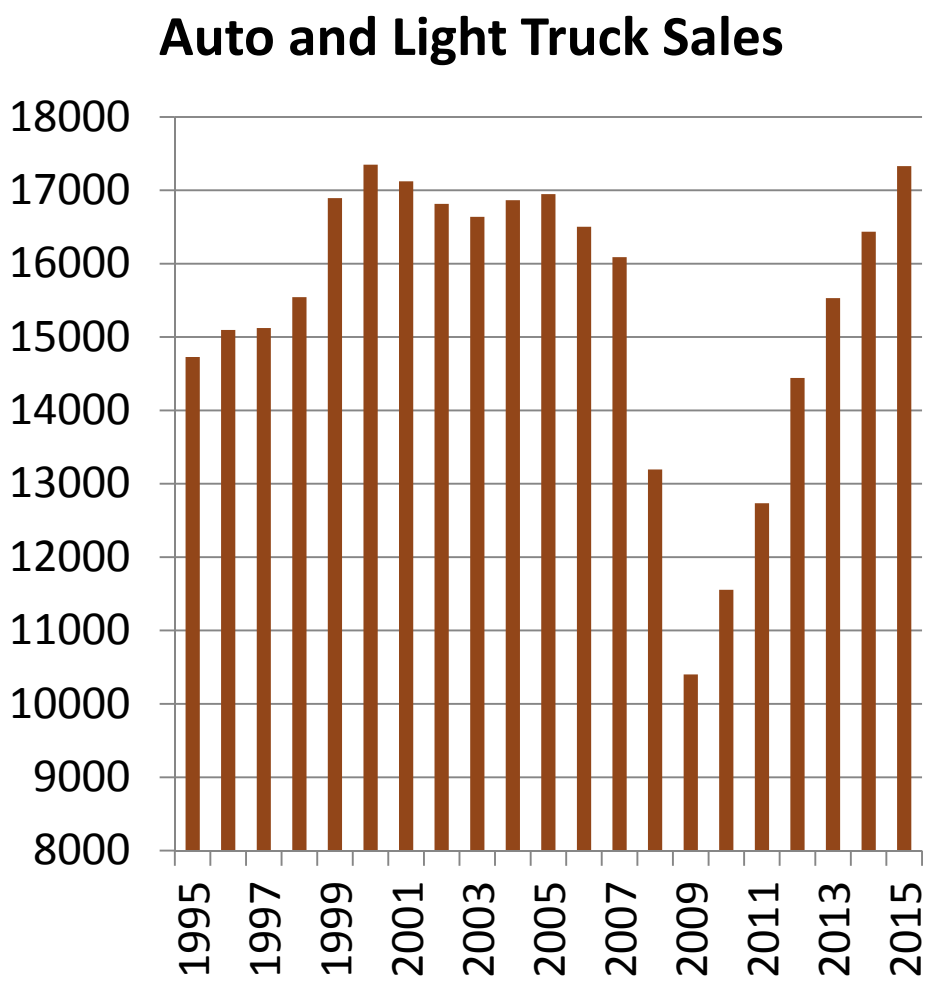
Services and the Weather



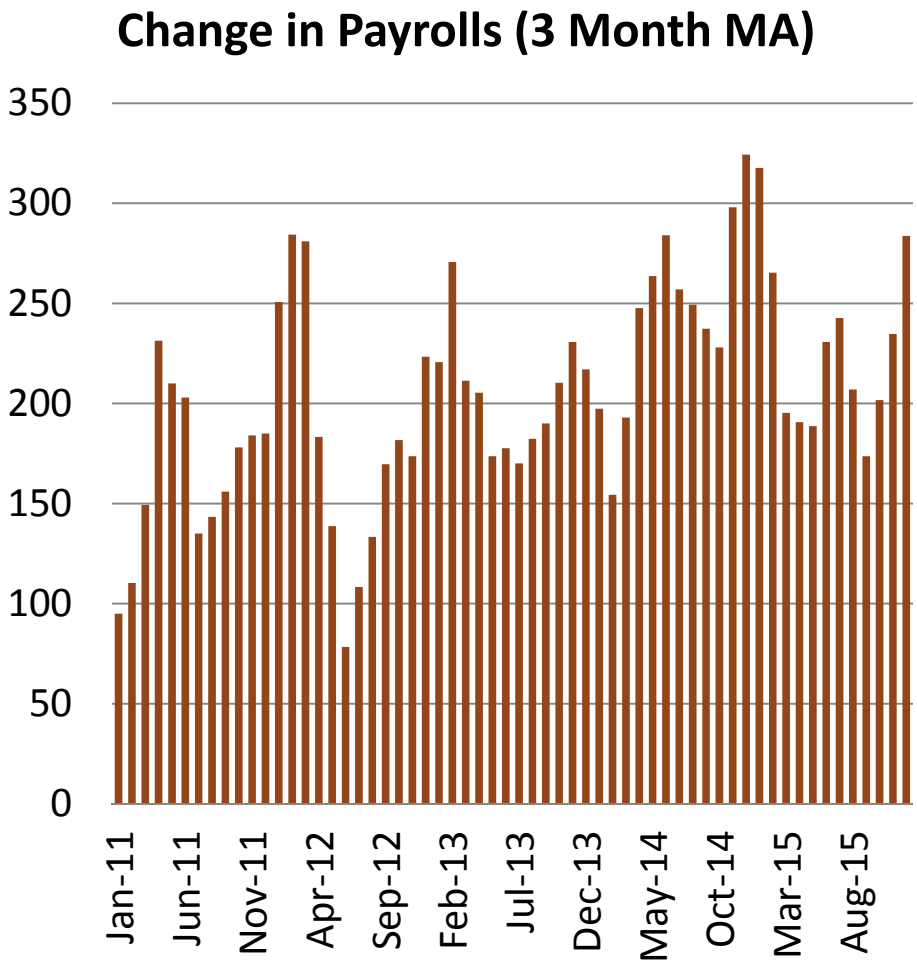


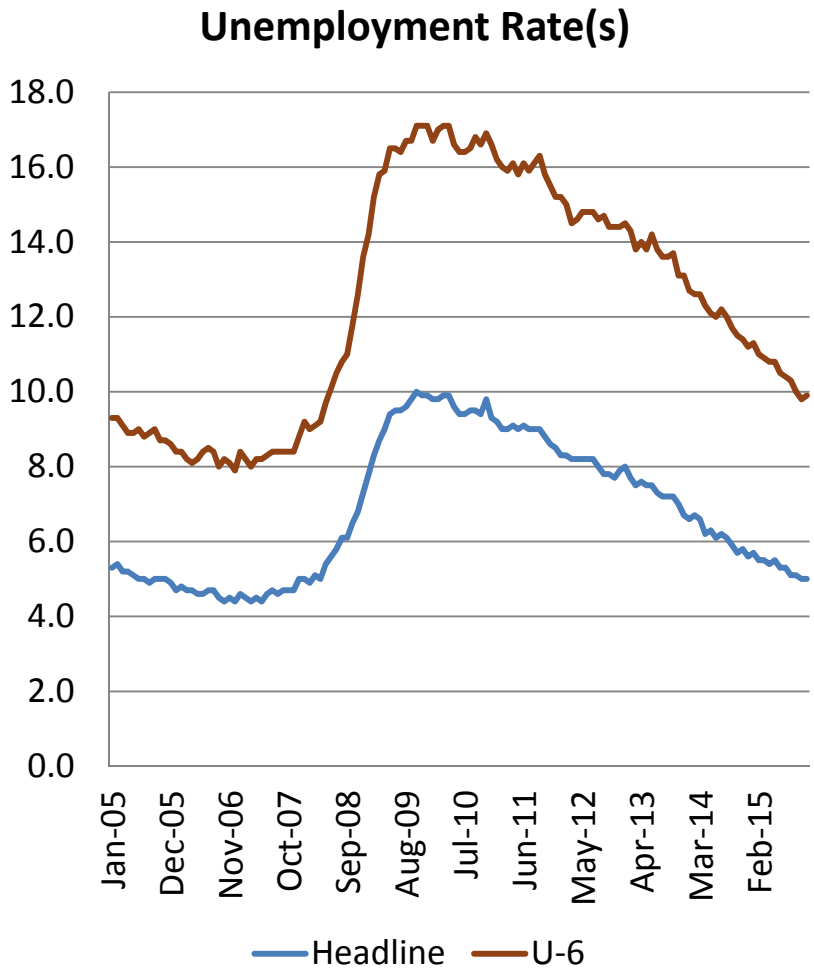
Consumer Spending



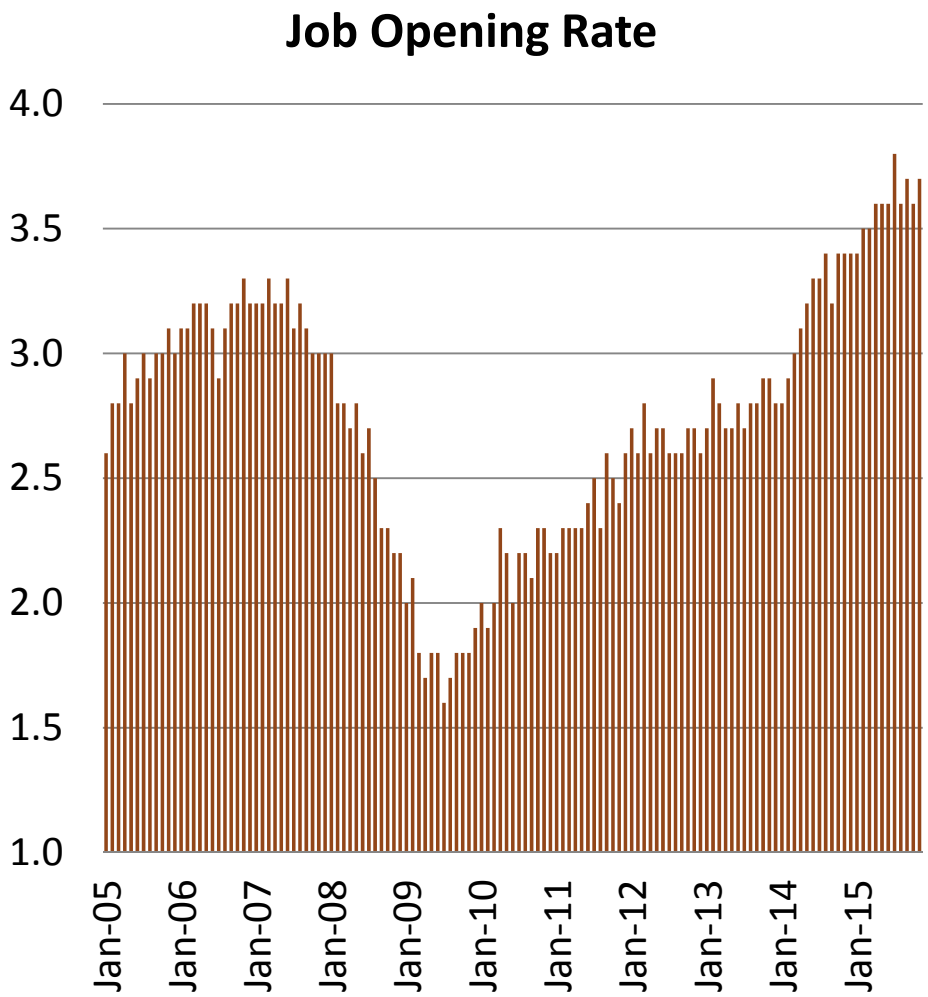


Labor Markets

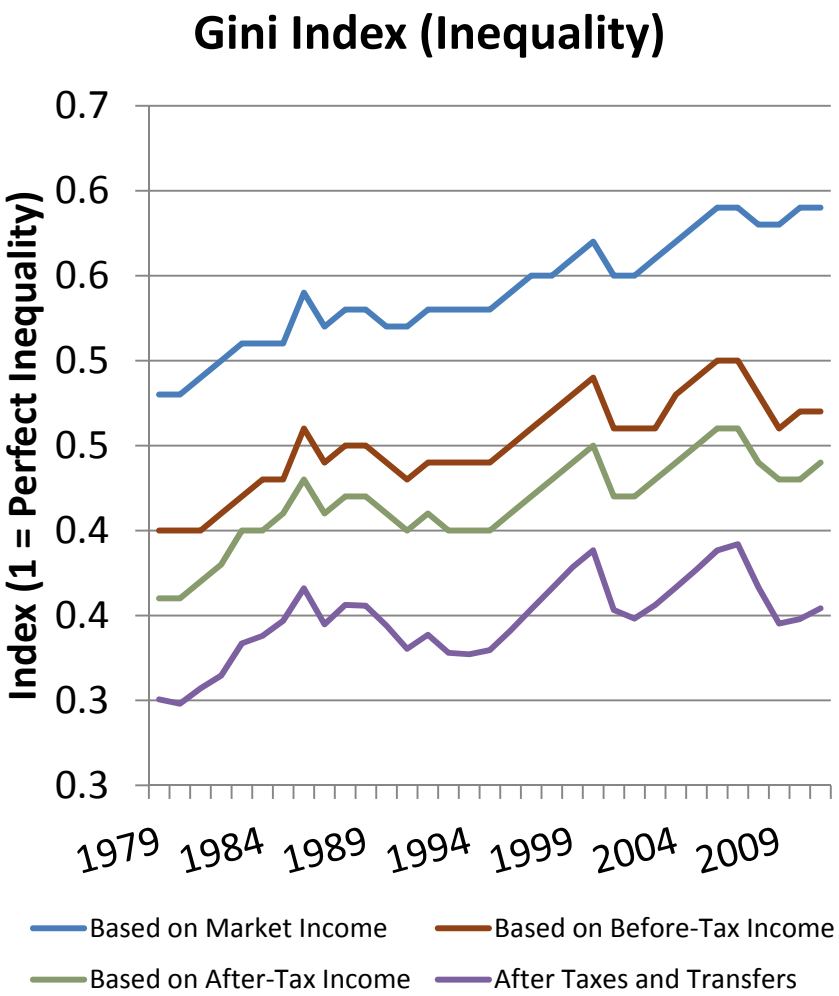


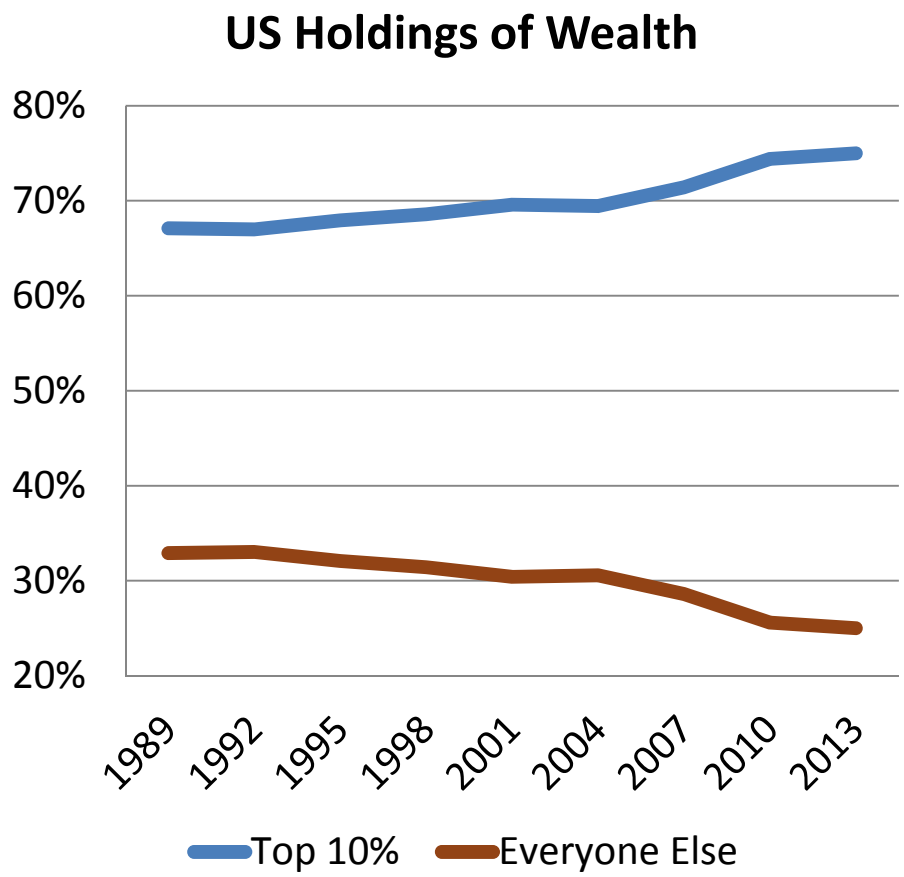


Other Labor Statistics



Growing Inequality

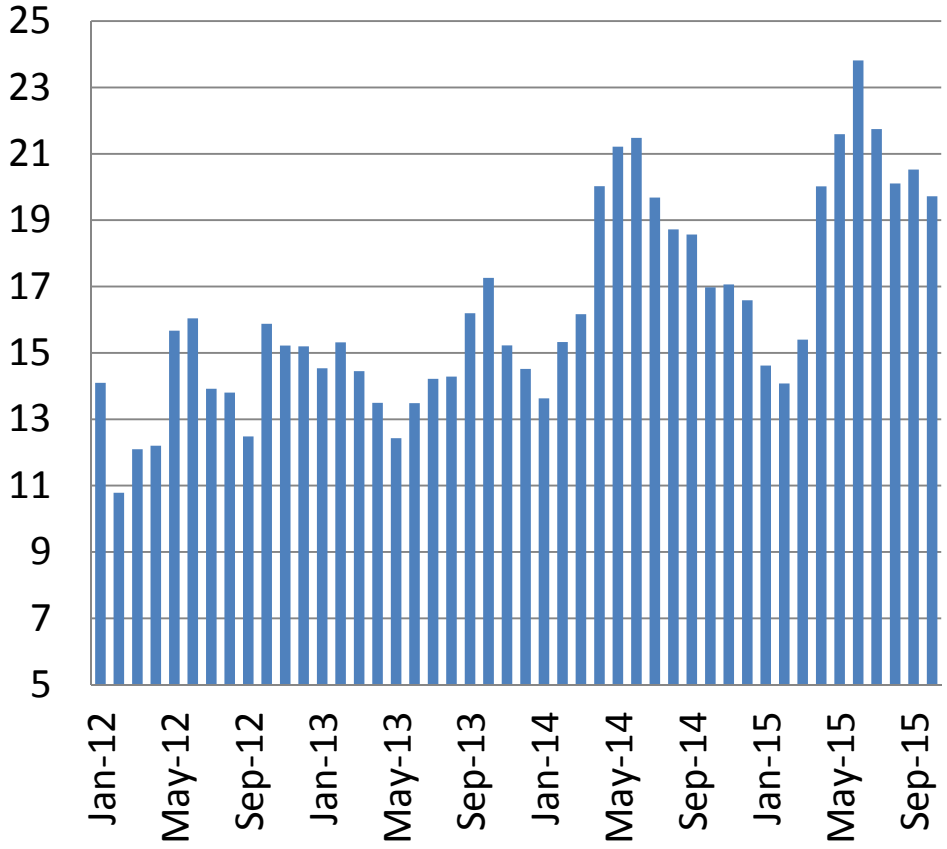




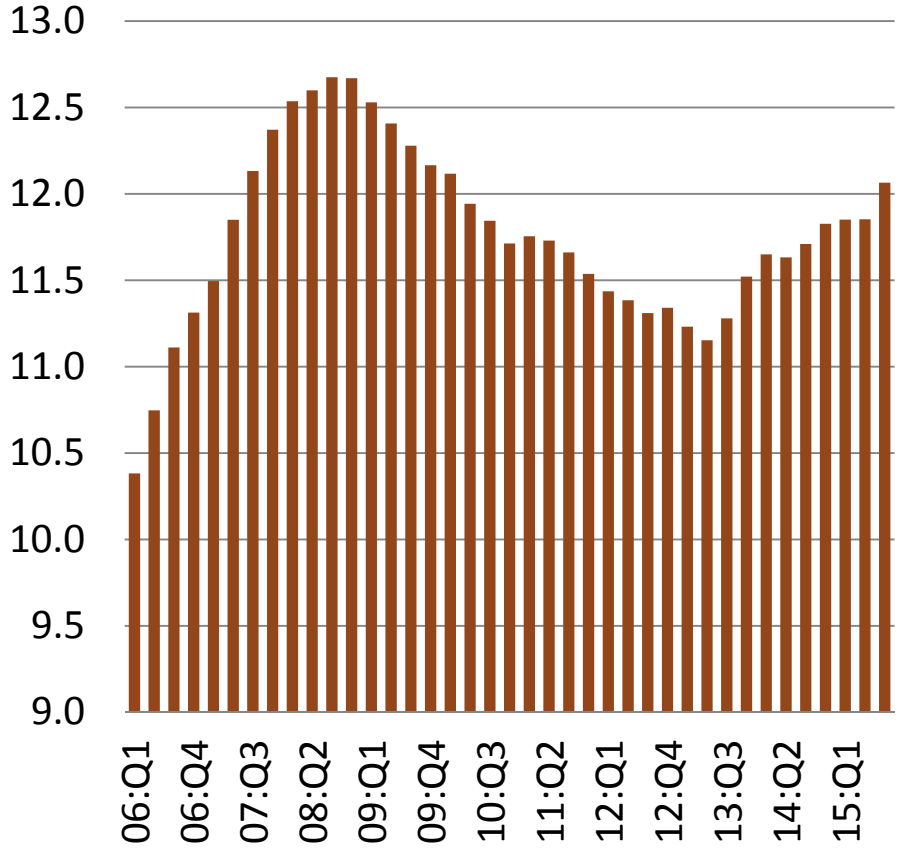
Top 1% own 40% to 50% of all wealth in the world

Consumer Credit

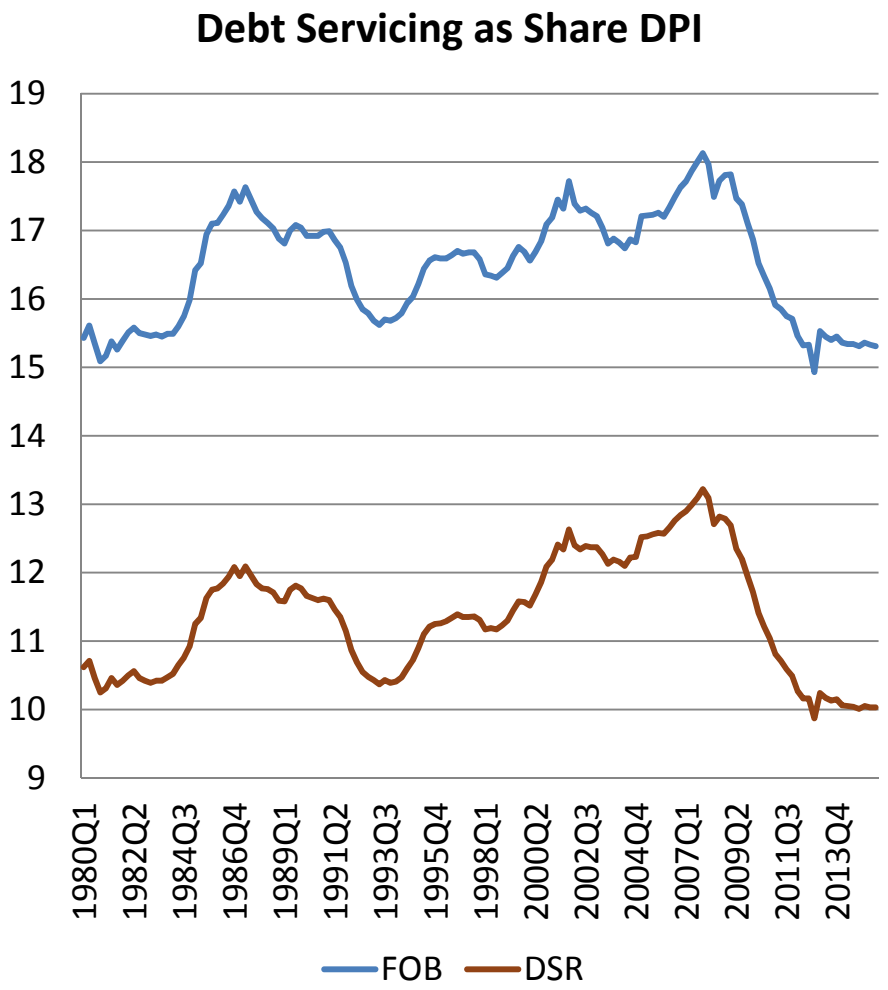
Change Consumer Credit ($Bil, 3 Month MA)

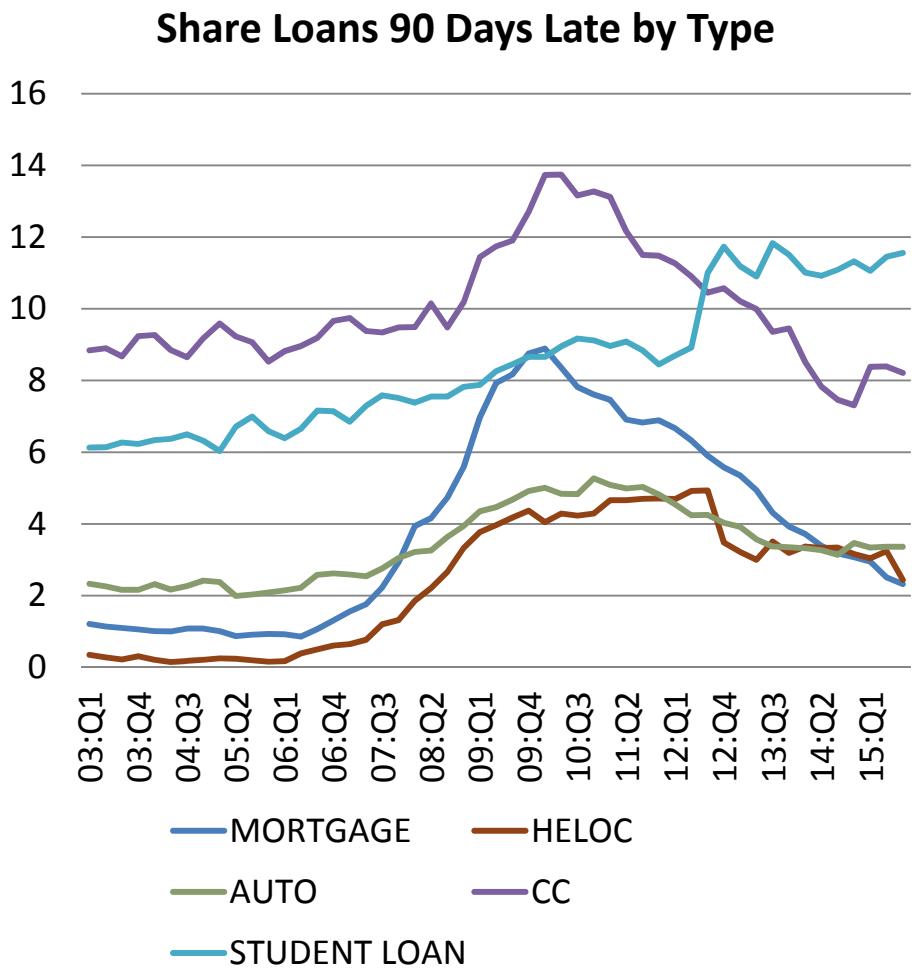


Outstanding Consumer Debt $Trillions

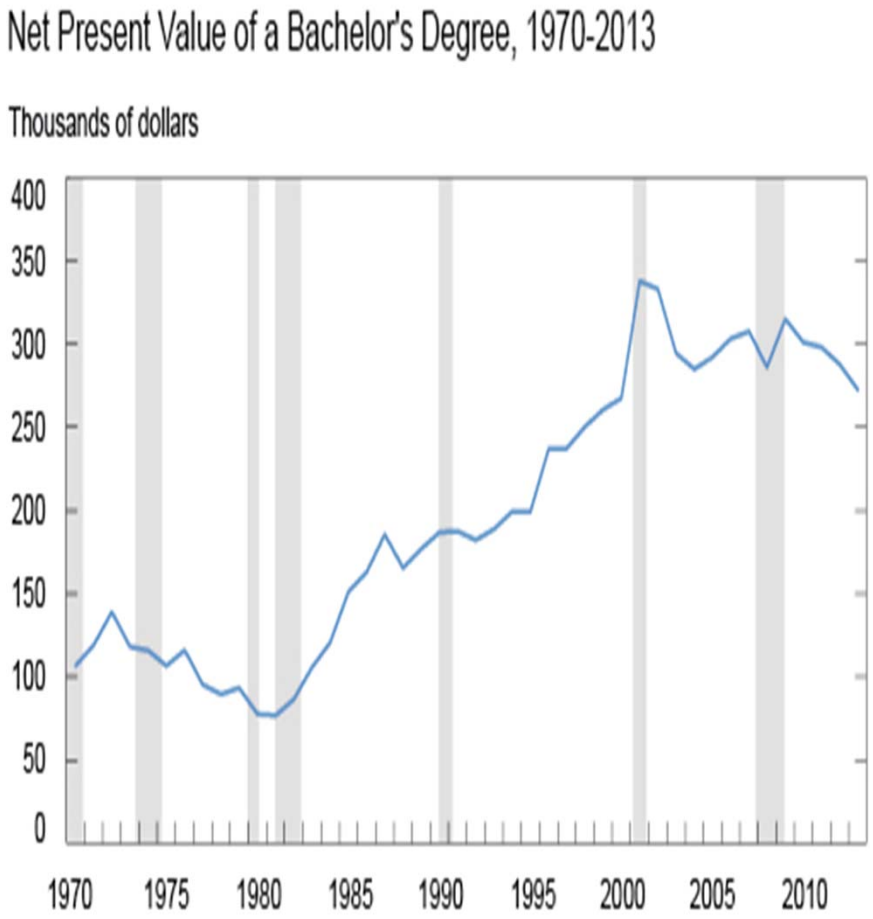


Consumer Credit





Degrees Among 21-27 with Bachelor

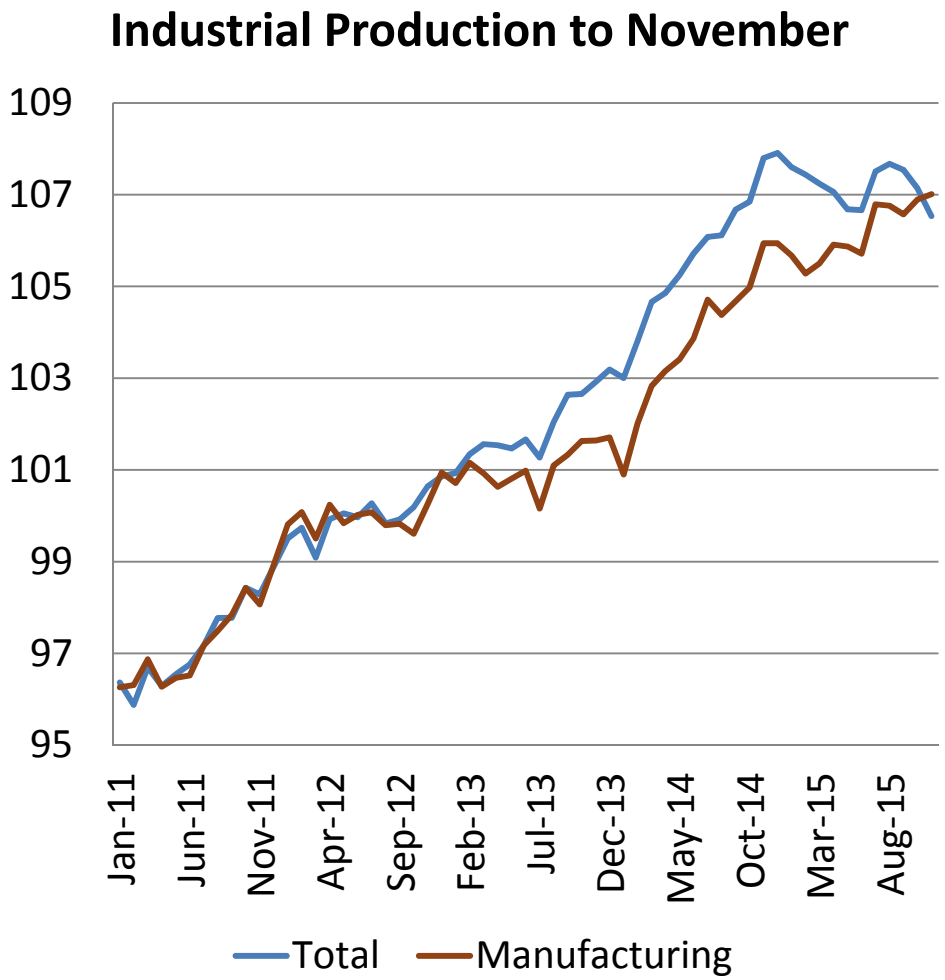


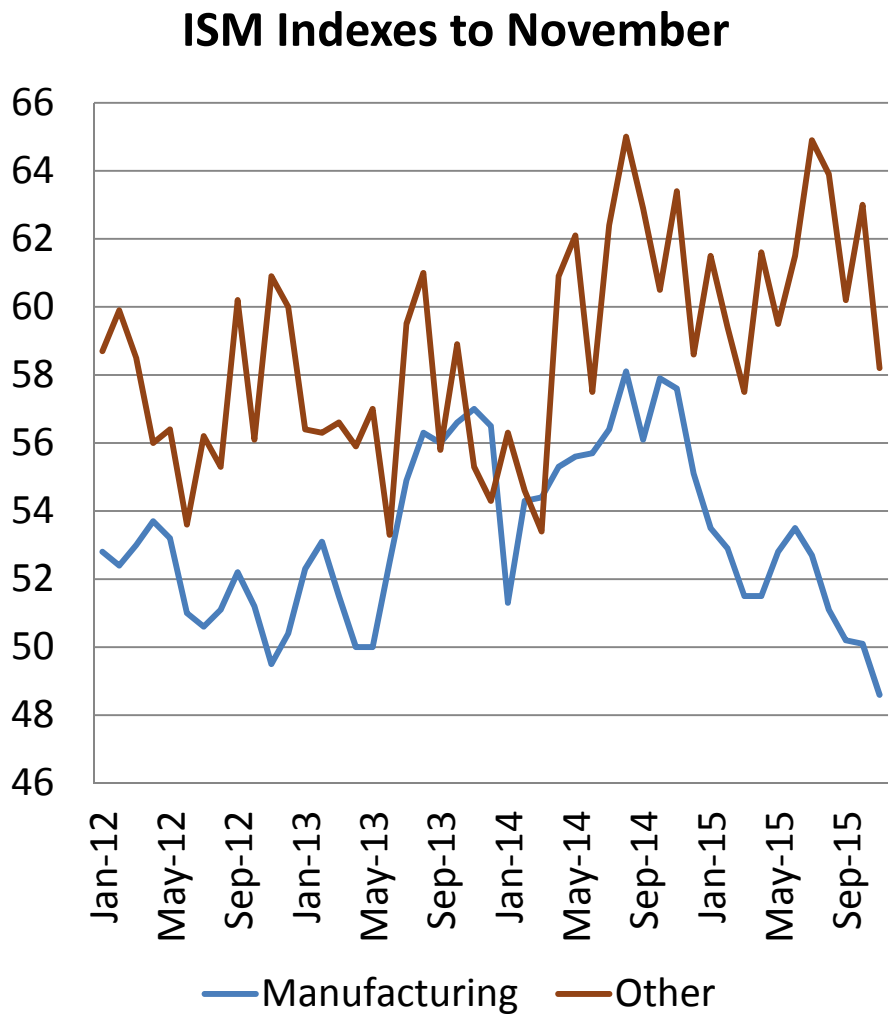
BEACON ECONOMICS Analysis. Answers.

Annual Income	
PETROLEUM ENGINEERING	55,103
COMPUTER ENGINEERING	50,542
CHEMICAL ENGINEERING	48,668
COMPUTER SCIENCE	46,060
AEROSPACE ENGINEERING	44,651
INDUSTRIAL AND ORGANIZATI	43,804
MECHANICAL ENGINEERING	43,495
ELECTRICAL ENGINEERING	42,238
MATHEMATICS AND COMPUTER	41,640
PHARMACY PHARMACEUTICAL S	40,933
OPERATIONS LOGISTICS AND	40,840
FINANCE	**40,236**

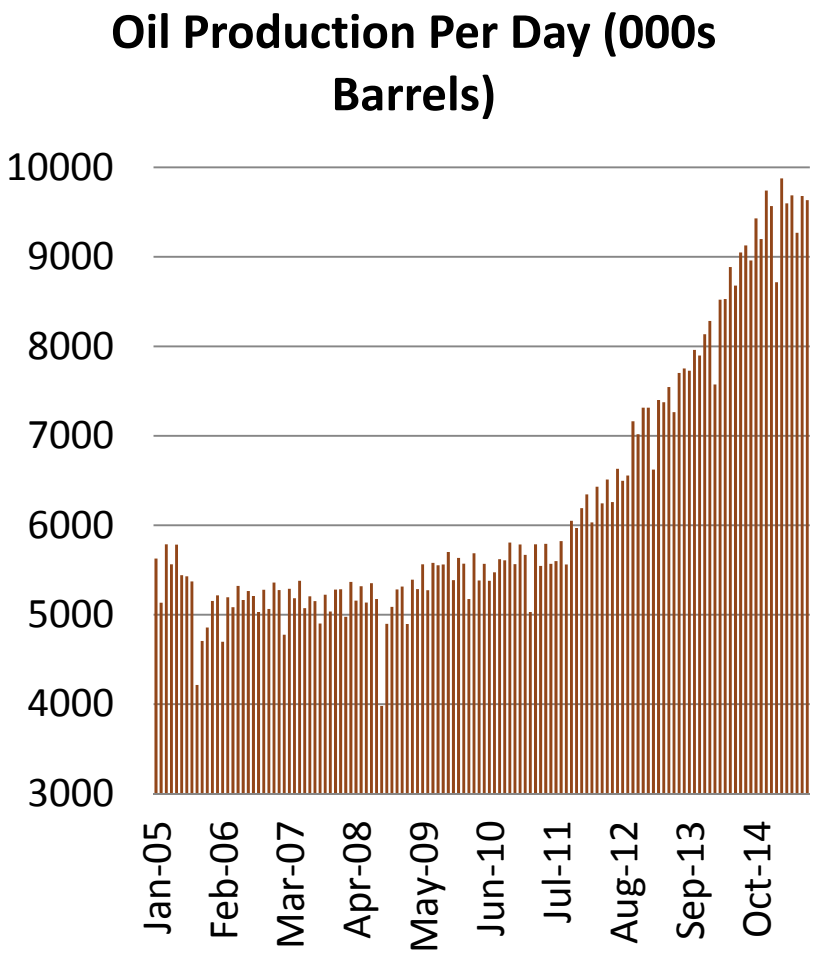
Diploma's Awarded	
PSYCHOLOGY	289,968
BUSINESS MANAGEMENT AND A	217,369
BIOLOGY	178,560
GENERAL BUSINESS	171,875
NURSING	170,595
COMMUNICATIONS	162,915
MARKETING AND MARKETING R	160,309
ACCOUNTING	146,322
ENGLISH LANGUAGE AND LITE	132,367
CRIMINAL JUSTICE AND FIRE	123,509
POLITICAL SCIENCE AND GOV	123,106
FINANCE	**123,068**

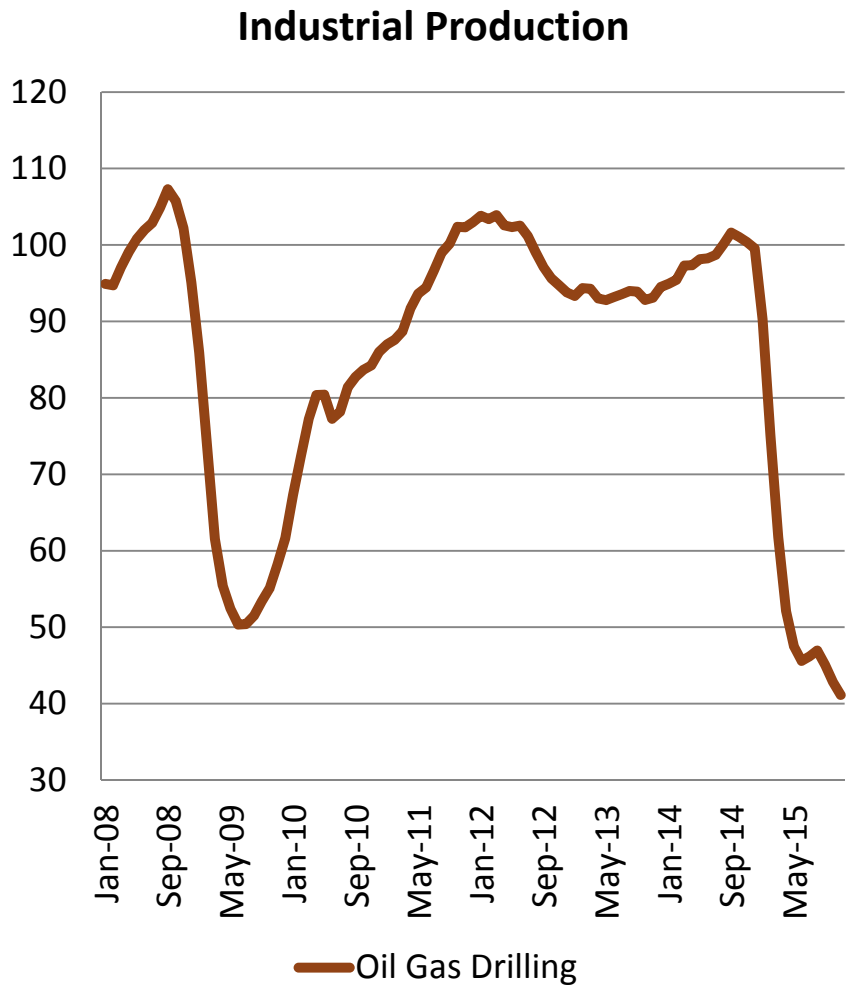
Production


Industrial Production to November
109
107
105
103
101
99
97
95
Jan-11
Jun-11
Nov-11
Apr-12
Sep-12
Feb-13
Jul-13
Dec-13
May-14
Oct-14
Mar-15
Aug-15
Total
Manufacturing

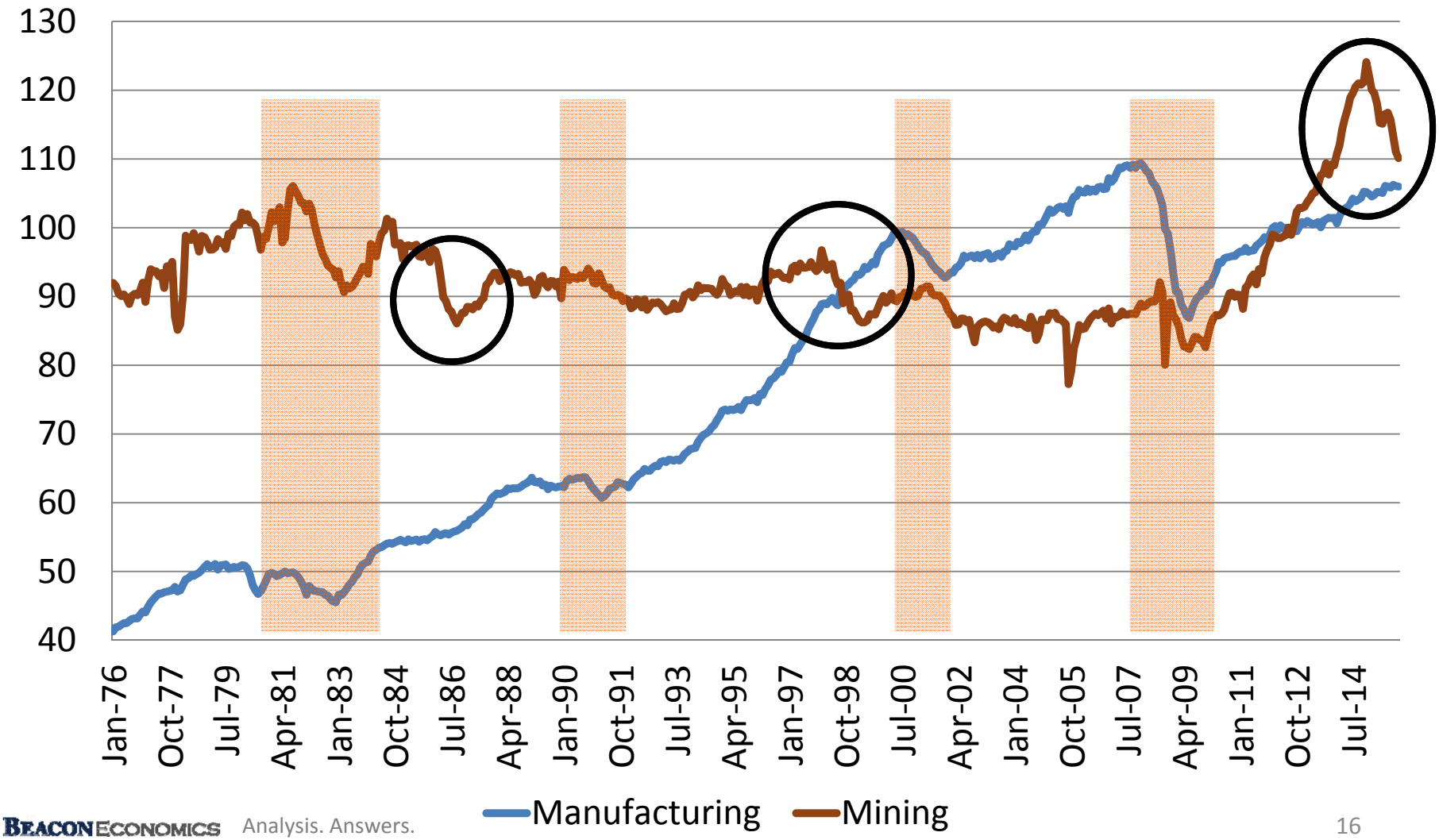

ISM Indexes to November
66
64
62
60
58
56
54
52
50
48
46
Jan-12
May-12
Sep-12
Jan-13
May-13
Sep-13
Jan-14
May-14
Sep-14
Jan-15
May-15
Sep-15
Manufacturing
Other

Oil Activity

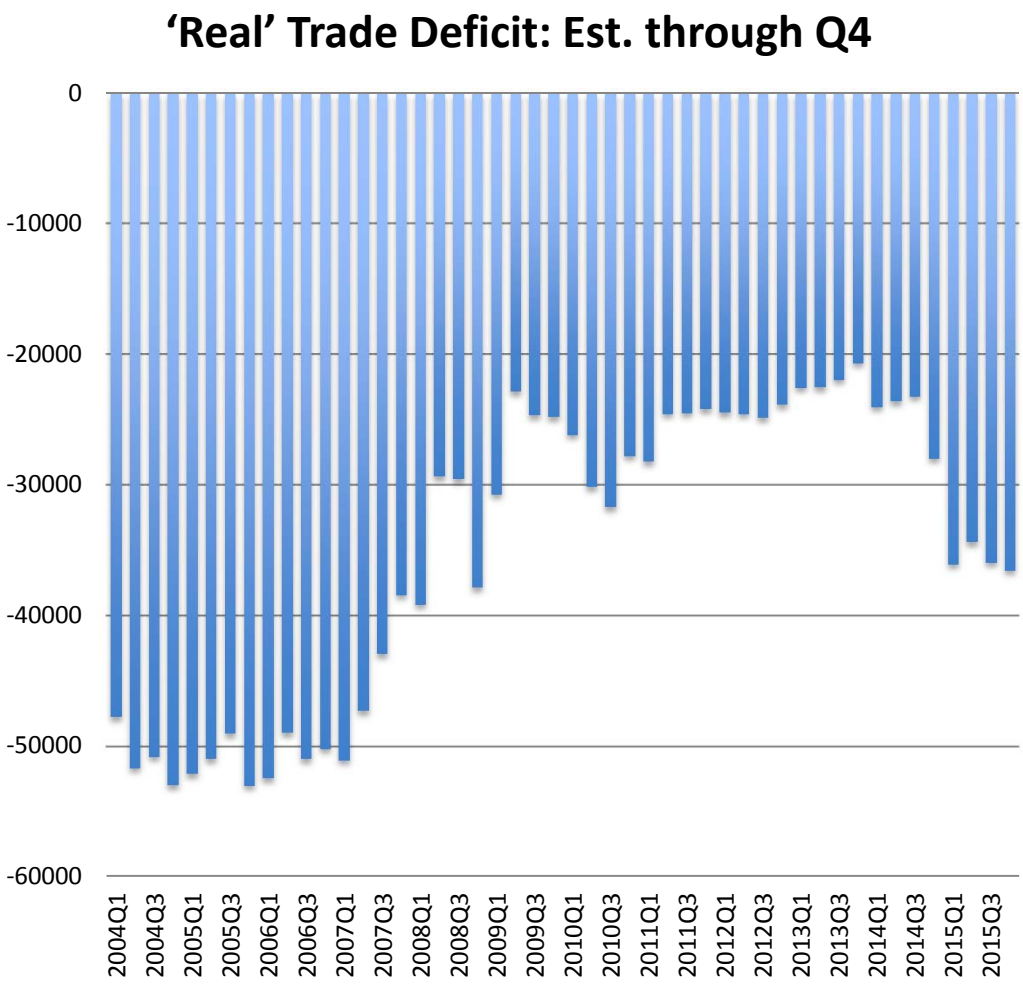




Mining and Manufacturing: IP



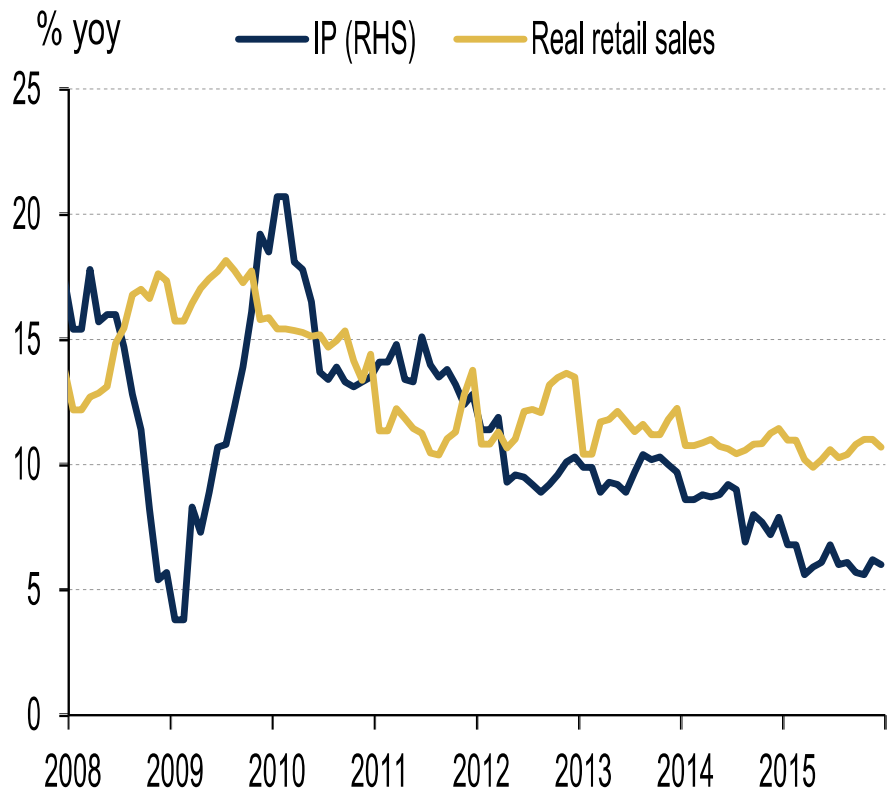
Trade

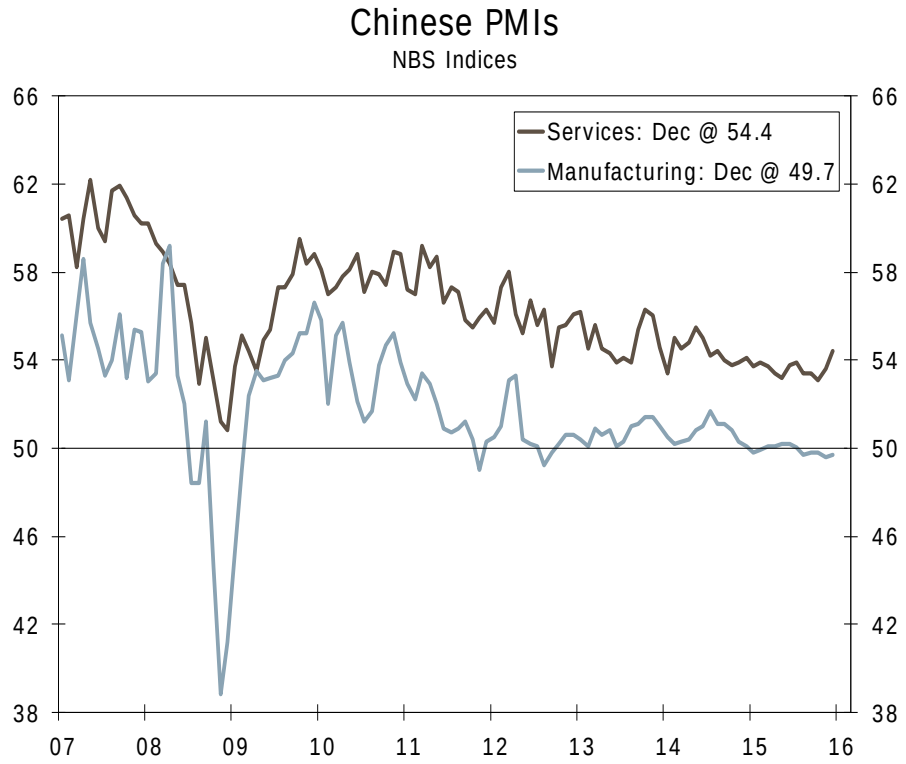


Change in Nominal Goods Trade
2014 to 2015

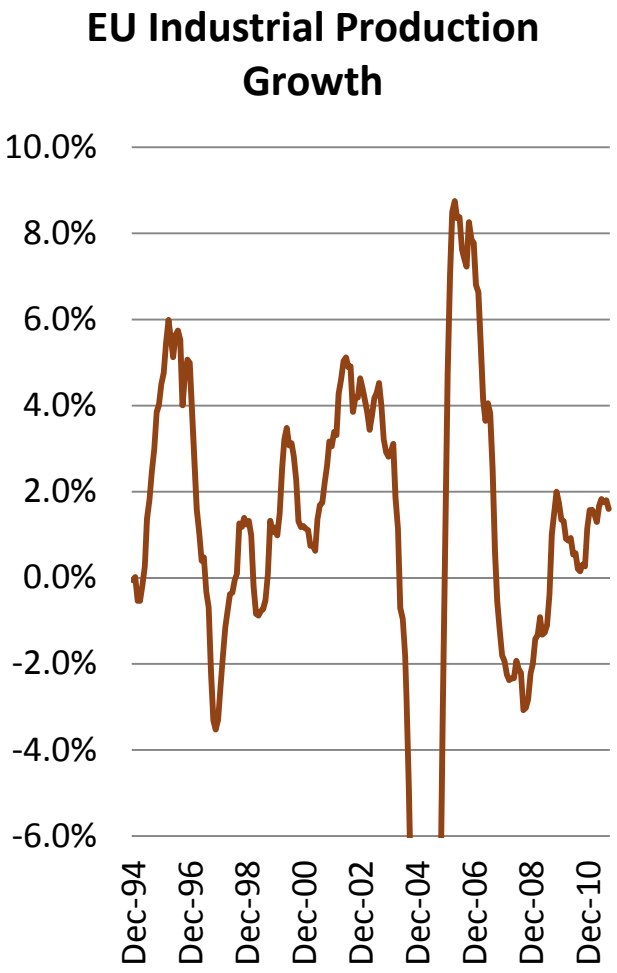
	Exports	Imports	Bal.
Total	-104.4	-87.3	-17.1
Canada	-28.8	-45.8	17
Netherlands	-2.8	-3.9	1.1
Belgium	-0.6	-1.2	0.6
India	0.3	-0.1	0.4
Germany	0.2	0.3	-0.1
Taiwan	-0.5	0.1	-0.6
Japan	-3.5	-2.7	-0.8
France	-1.1	0.6	-1.7
UK	2.8	4.5	-1.7
Italy	-0.9	1.7	-2.6
Korea, South	-0.6	2.8	-3.4
Mexico	-3.6	1.3	-4.9
Brazil	-10	-2.3	-7.7
China	-5.7	17.8	-23.5

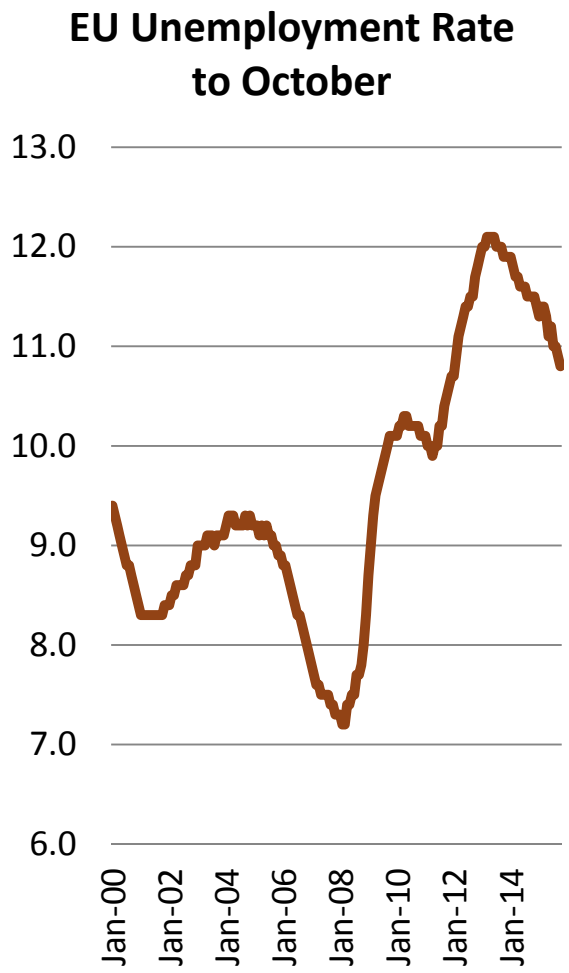
China: Slowed, not stopped

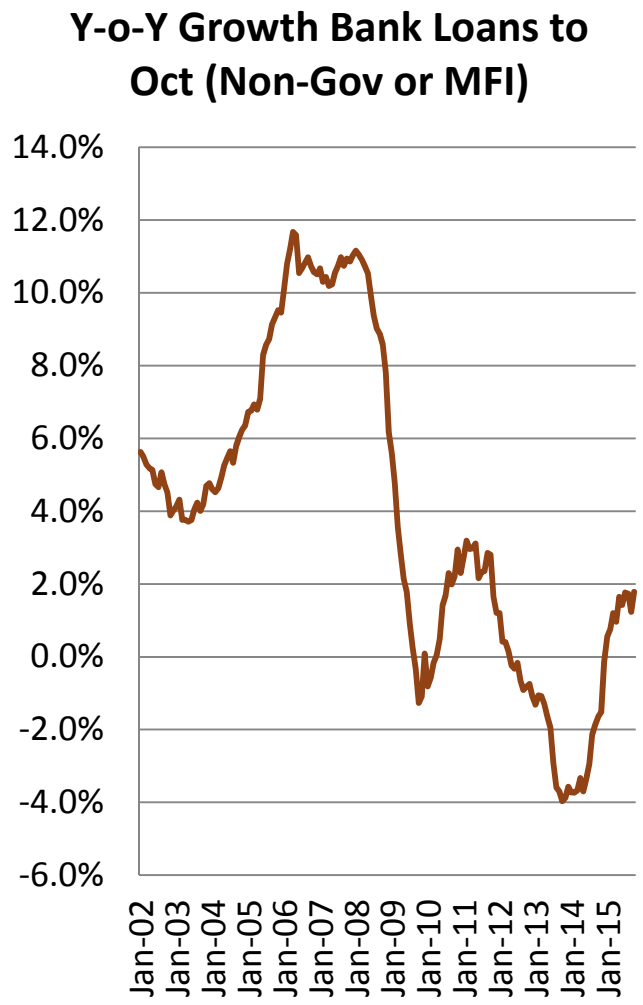




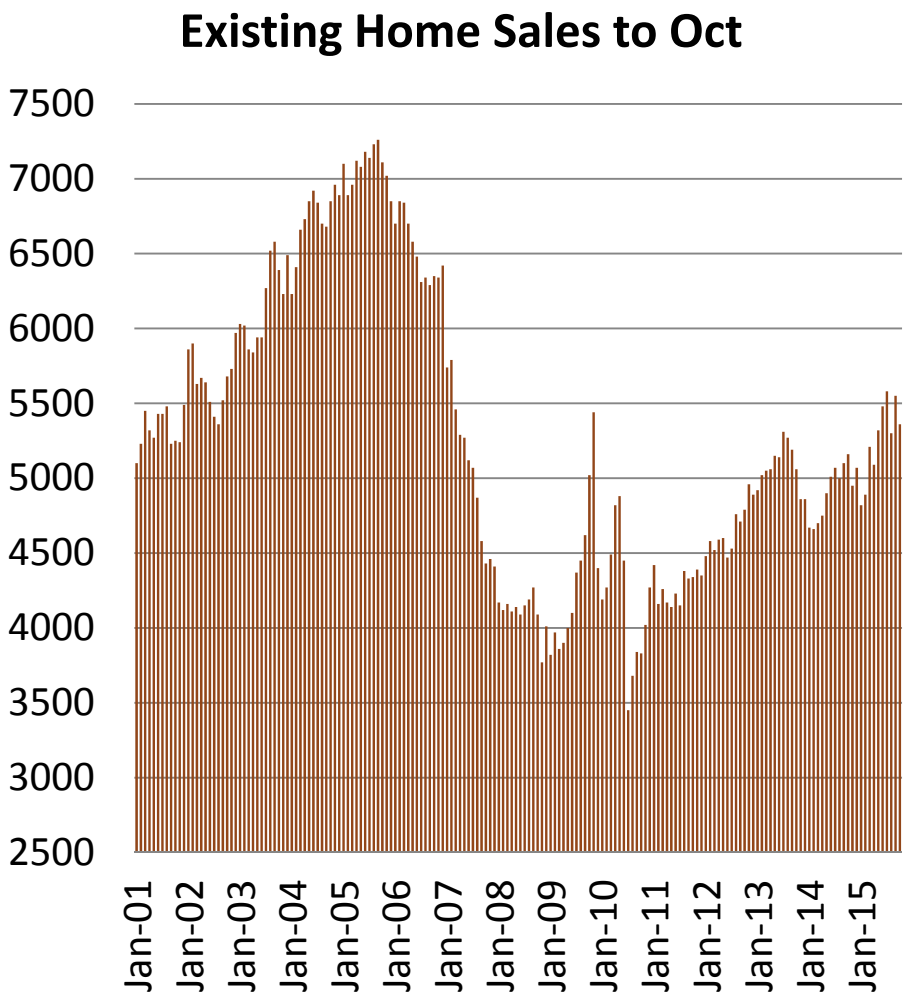
Europe

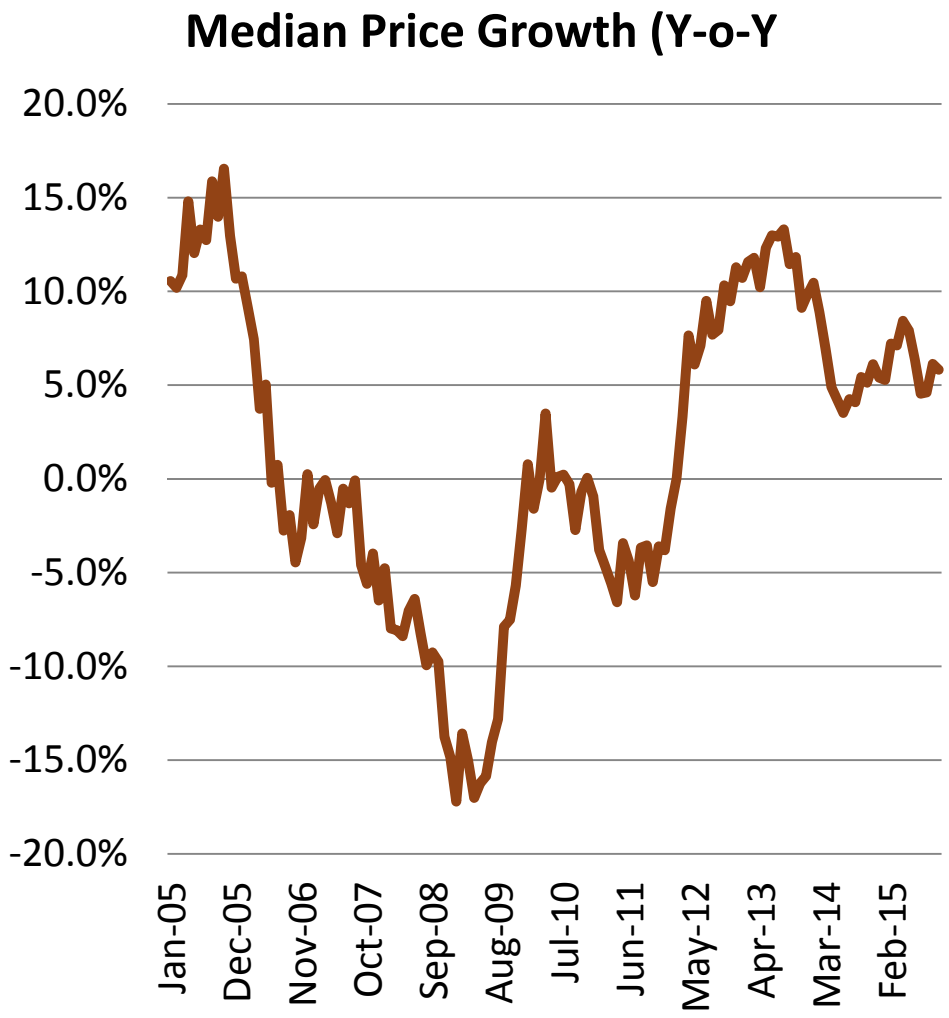

EU Industrial Production Growth
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
-2.0%
-4.0%
-6.0%
Dec-94
Dec-96
Dec-98
Dec-00
Dec-02
Dec-04
Dec-06
Dec-08
Dec-10


EU Unemployment Rate to October
13.0
12.0
11.0
10.0
9.0
8.0
7.0
6.0
Jan-00
Jan-02
Jan-04
Jan-06
Jan-08
Jan-10
Jan-12
Jan-14


Y-o-Y Growth Bank Loans to Oct (Non-Gov or MFI)
14.0%
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
-2.0%
-4.0%
-6.0%
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15

Housing Markets



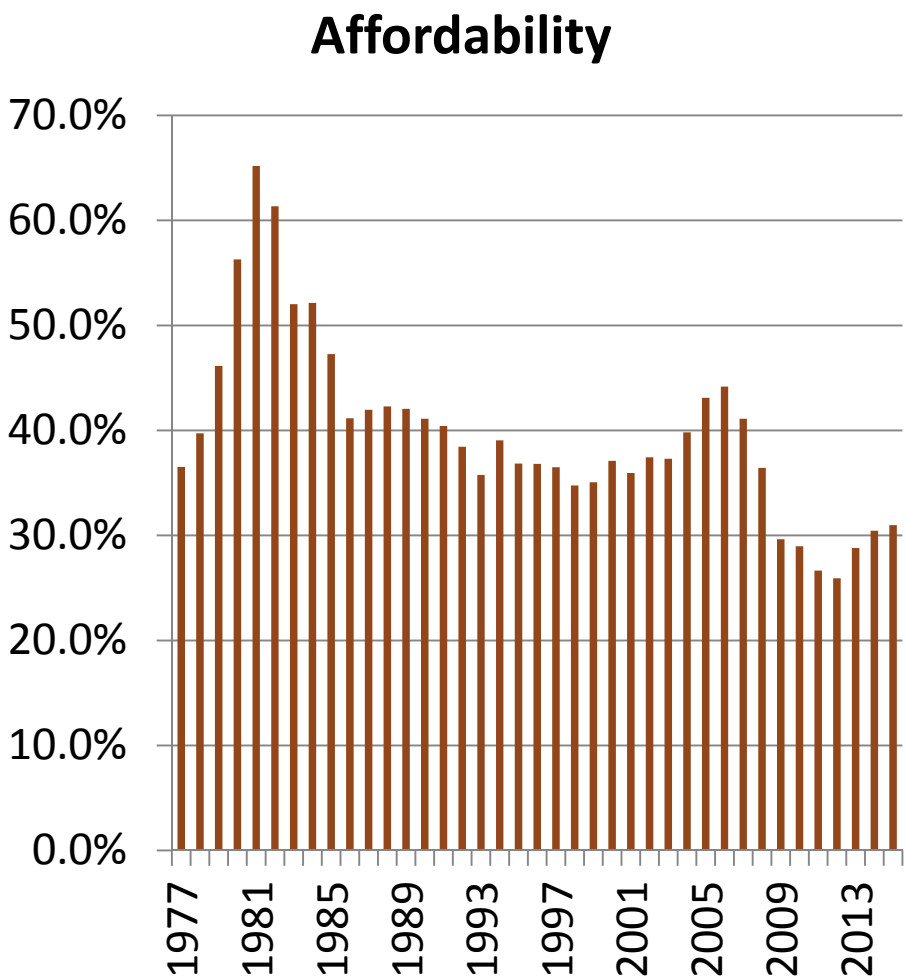


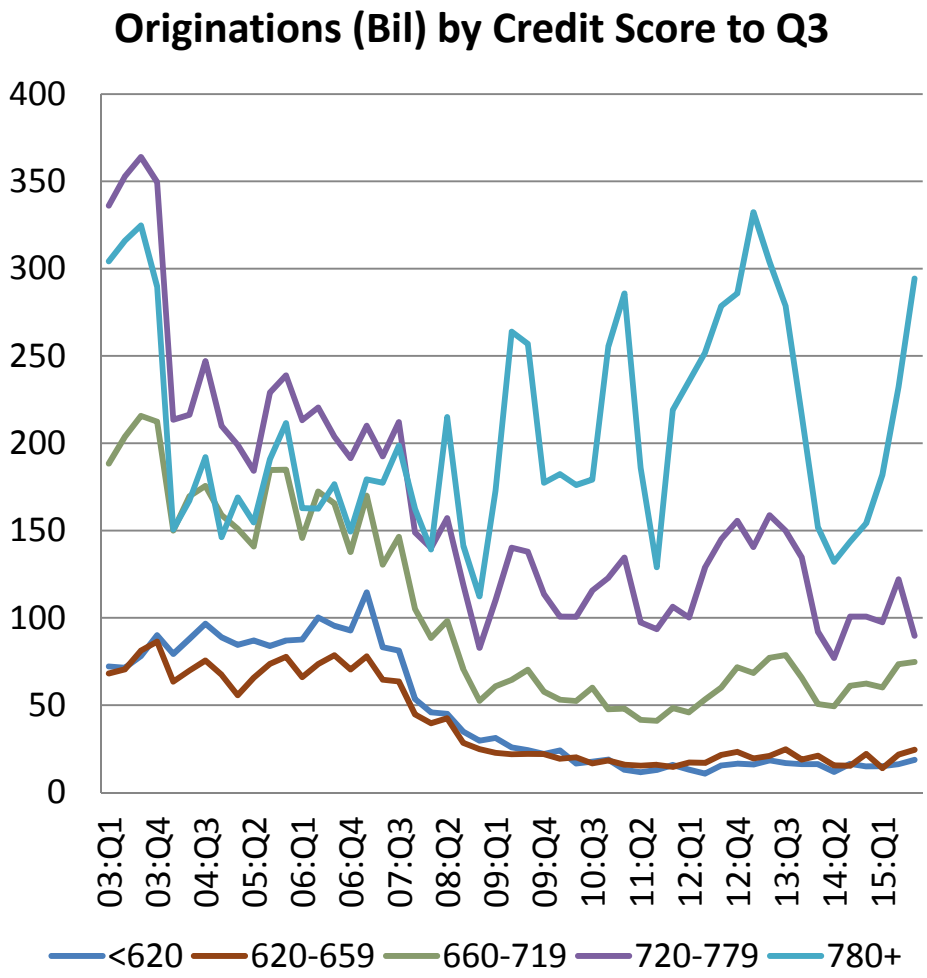
Case-Shiller Regional Price Trends

	13-14	14-15	*Diff*
OR-Portland	6.2%	11.0%	*4.8%*
CA-San Francisco	9.5%	10.9%	*1.5%*
CO-Denver	7.1%	10.9%	*3.7%*
TX-Dallas	7.7%	9.3%	*1.6%*
WA-Seattle	6.2%	8.8%	*2.6%*
FL-Miami	9.5%	8.0%	*-1.5%*
FL-Tampa	6.1%	6.4%	*0.3%*
CA-San Diego	4.7%	6.3%	*1.6%*
CA-Los Angeles	4.9%	6.1%	*1.3%*
GA-Atlanta	4.4%	6.1%	*1.6%*
NV-Las Vegas	7.8%	5.8%	*-2.1%*

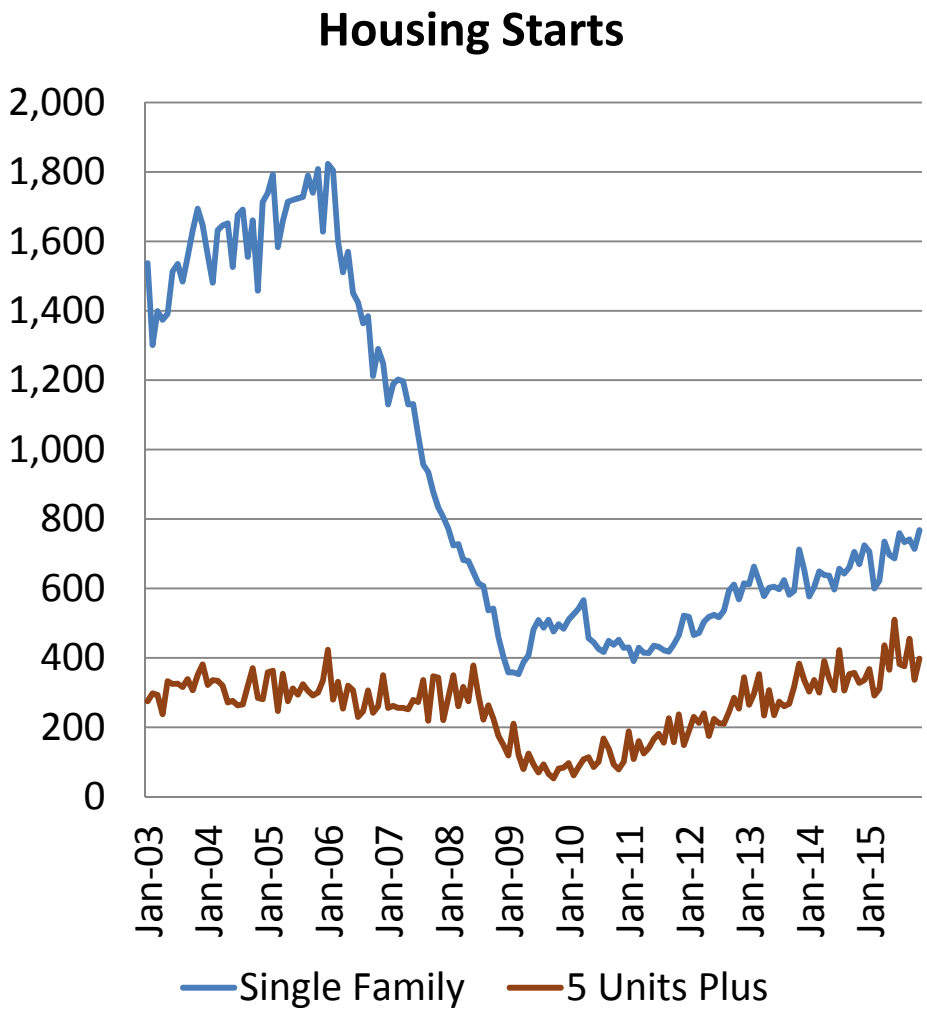
	13-14	14-15	*Diff*
AZ-Phoenix	2.2%	5.7%	*3.5%*
Composite-20	**4.4%**	**5.6%**	***1.1%***
MI-Detroit	3.6%	5.3%	*1.6%*
MA-Boston	4.3%	5.2%	*0.9%*
National-US	**4.6%**	**5.2%**	***0.5%***
NC-Charlotte	2.7%	4.7%	*2.0%*
MN-Minneapolis	2.1%	4.0%	*2.0%*
NY-New York	1.8%	3.1%	*1.3%*
OH-Cleveland	0.8%	2.2%	*1.5%*
DC-Washington	2.0%	1.7%	*-0.3%*
IL-Chicago	1.8%	1.4%	*-0.4%*

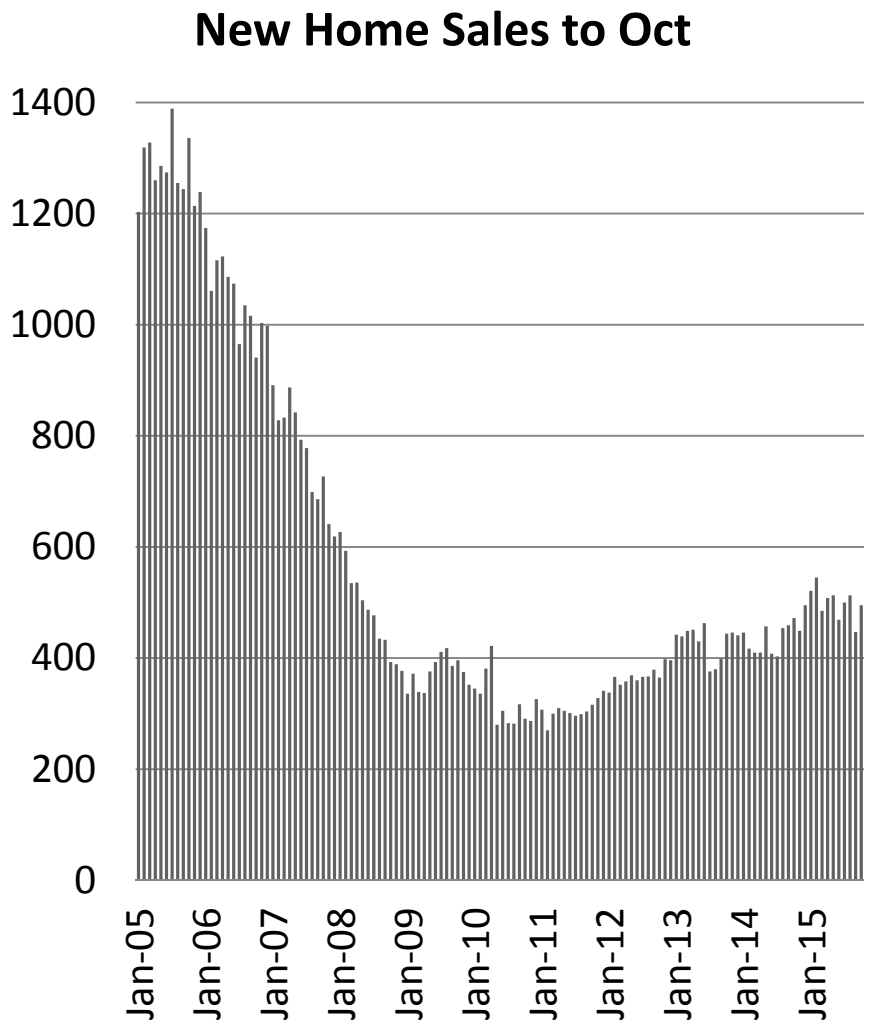
Affordability vs Access



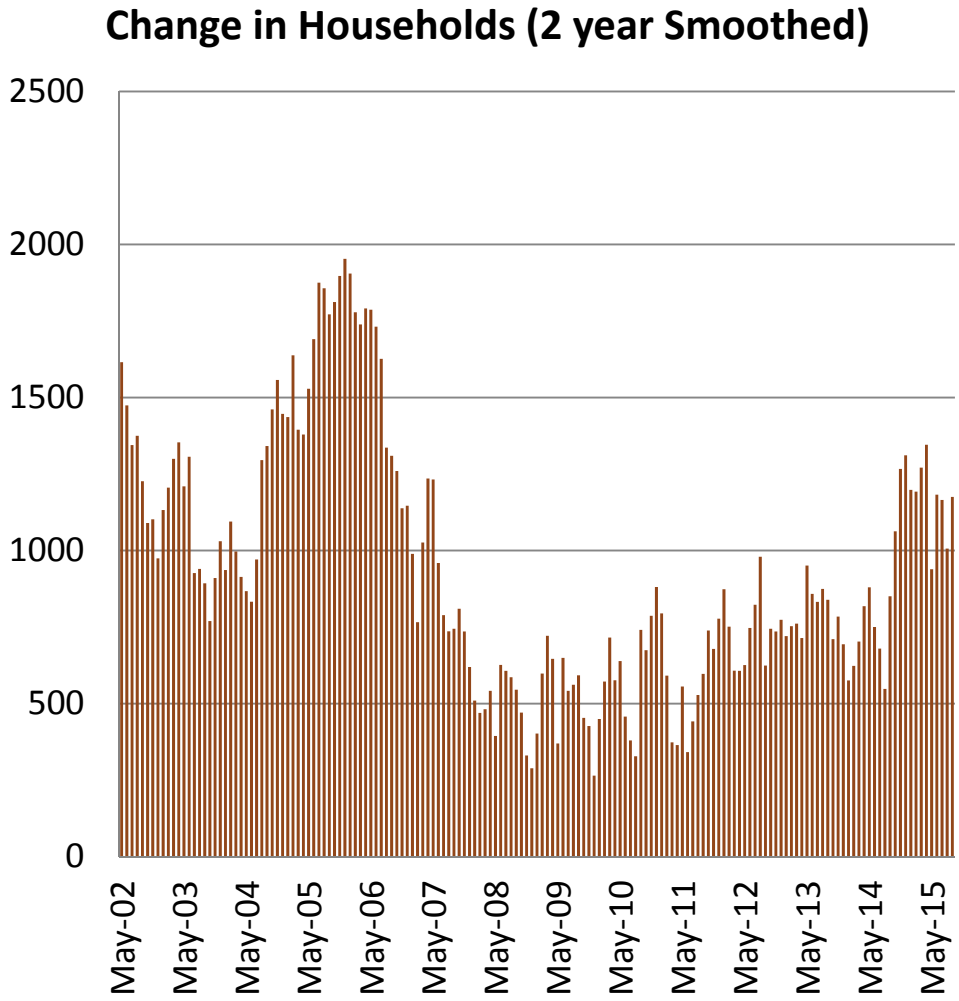


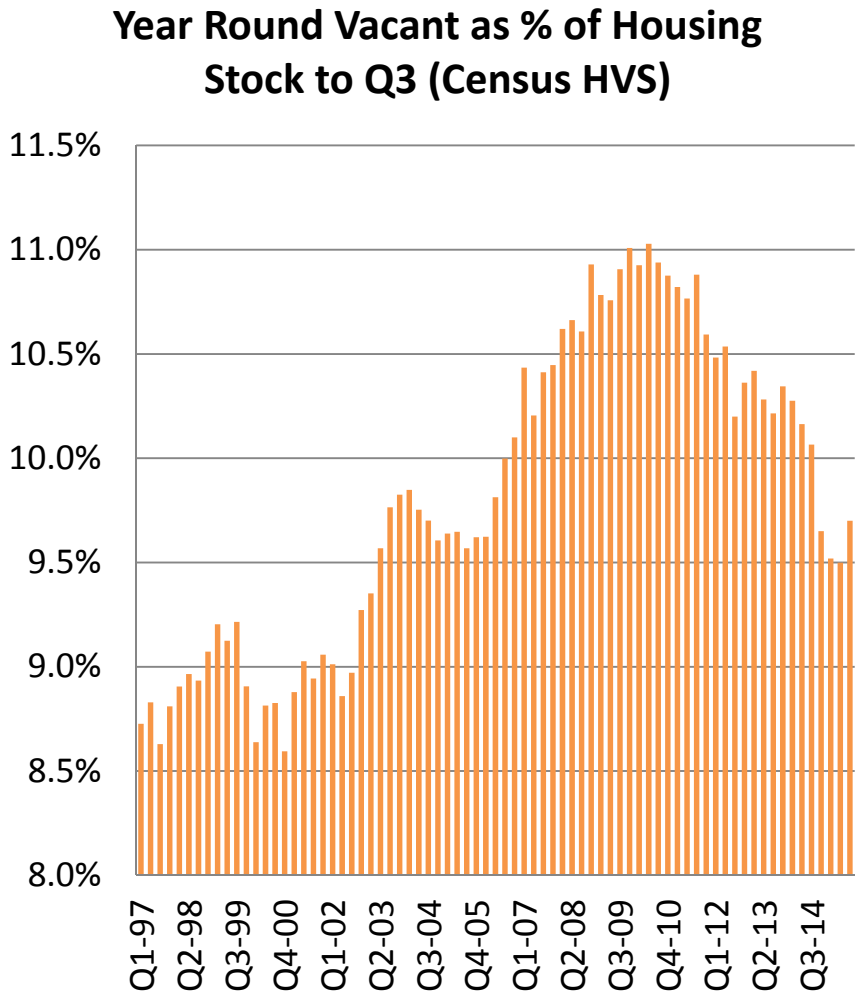
Construction



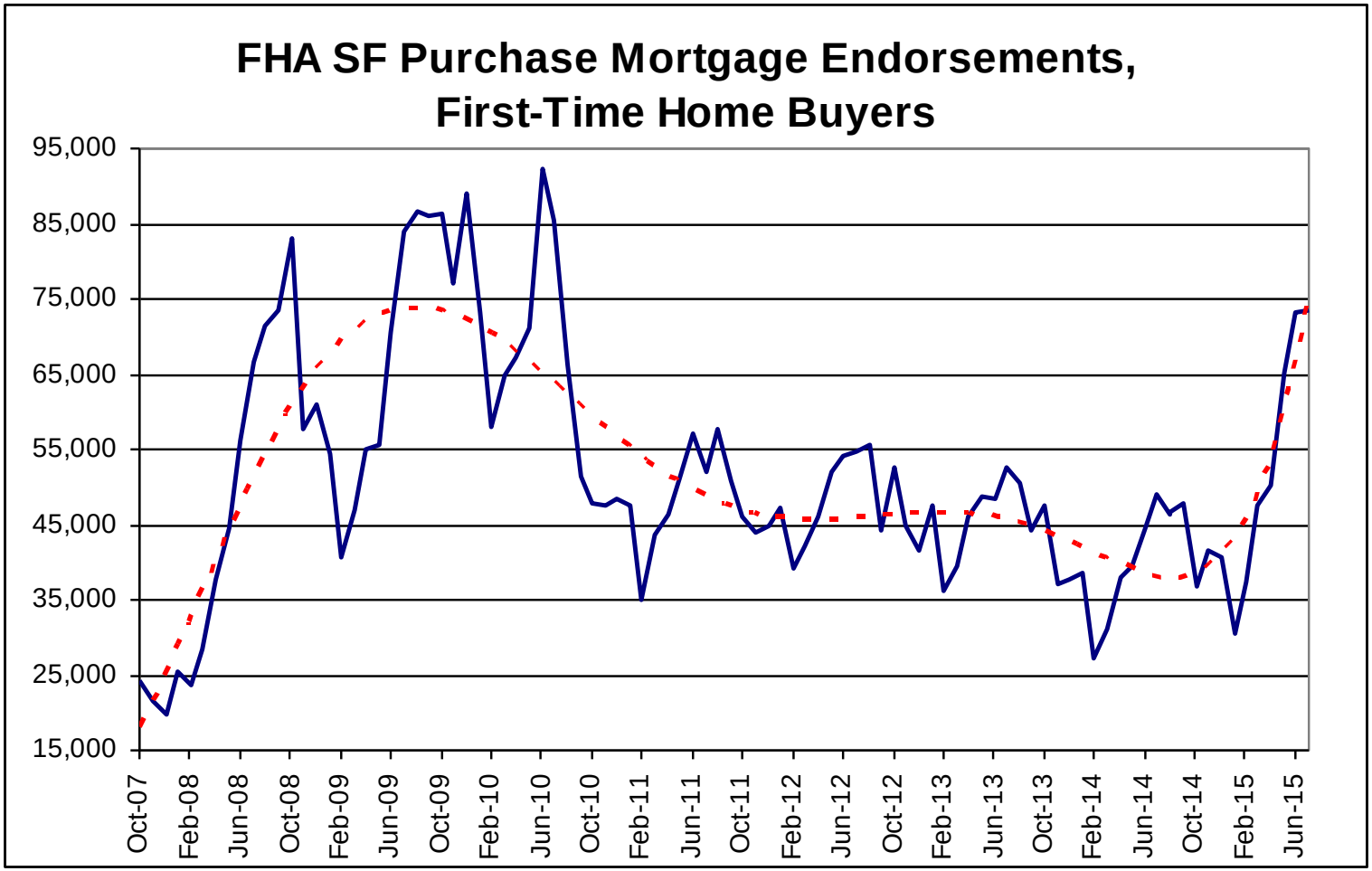


Improved Outlook

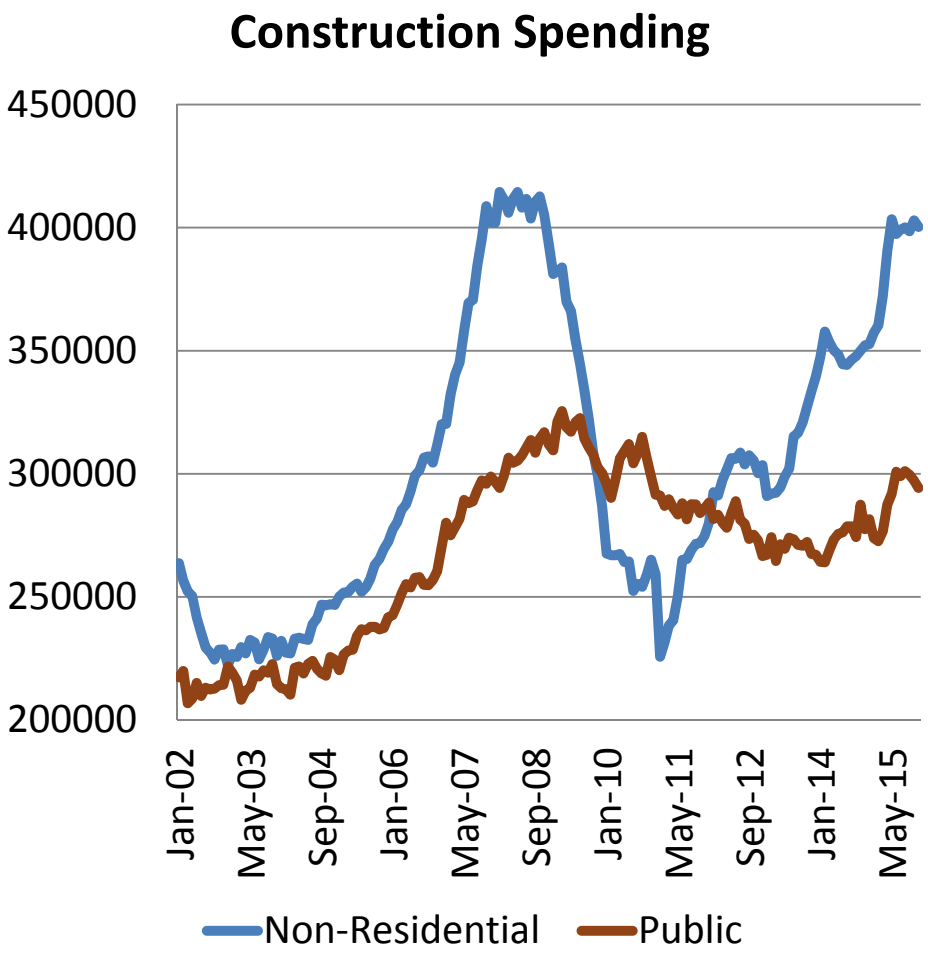




FHA Stats

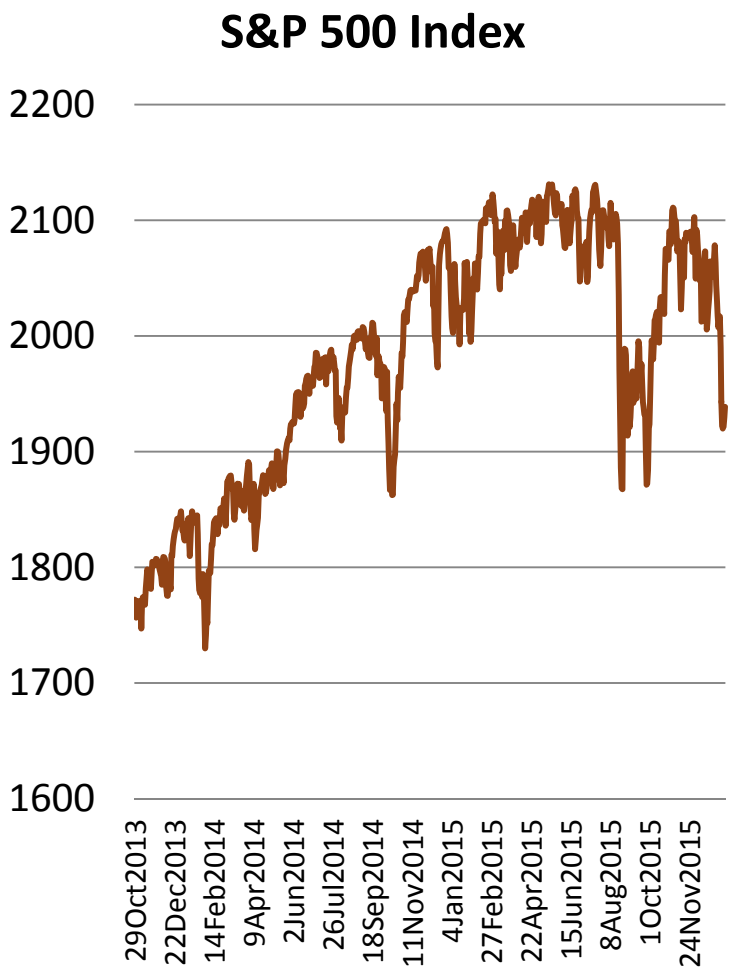

FHA SF Purchase Mortgage Endorsements,
First-Time Home Buyers
95,000
85,000
75,000
65,000
55,000
45,000
35,000
25,000
15,000
Oct-07
Feb-08
Jun-08
Oct-08
Feb-09
Jun-09
Oct-09
Feb-10
Jun-10
Oct-10
Feb-11
Jun-11
Oct-11
Feb-12
Jun-12
Oct-12
Feb-13
Jun-13
Oct-13
Feb-14
Jun-14
Oct-14
Feb-15
Jun-15

Non Residential Trends



	2013	2014	2015
Lodging	13.0	15.7	20.3
Office	30.1	38.3	47.5
Retail	32.8	37.0	39.3
Warehouse	8.7	13.7	16.3
Medical	29.7	28.6	31.2
Education	16.9	16.7	17.6
Infrastructure	108.1	120.8	109.7
Manufacturing	49.8	57.0	83.5

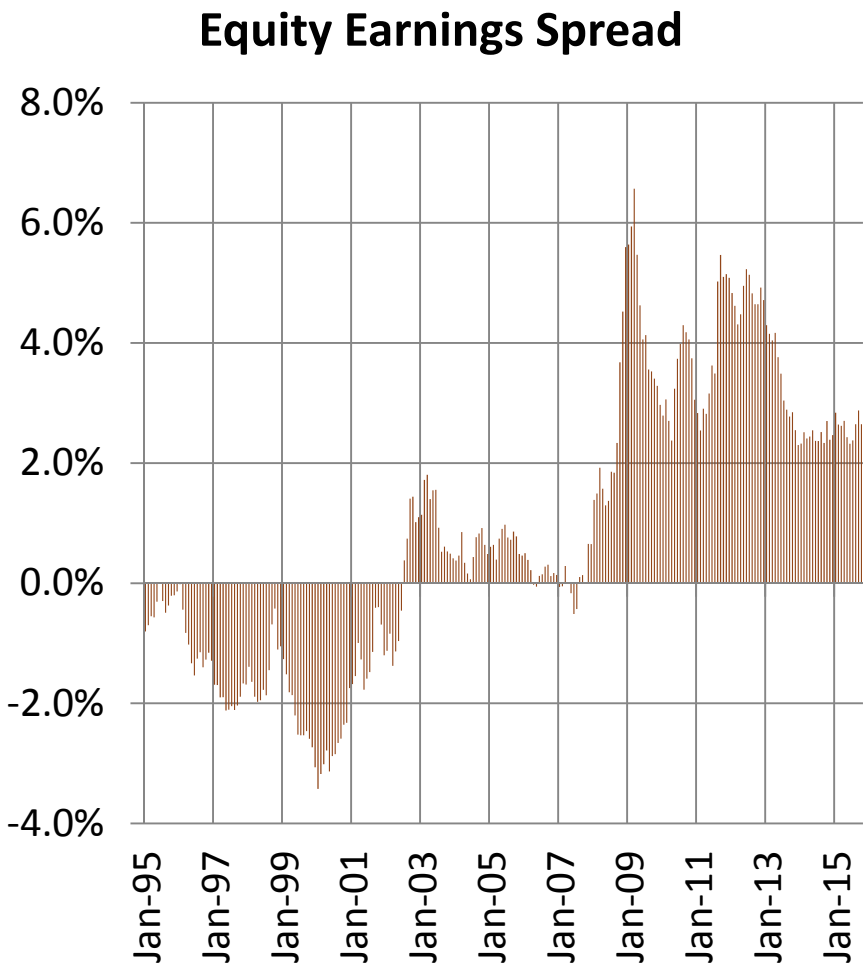
What inning is it?



There is no Bubble… (at least not yet) Why?

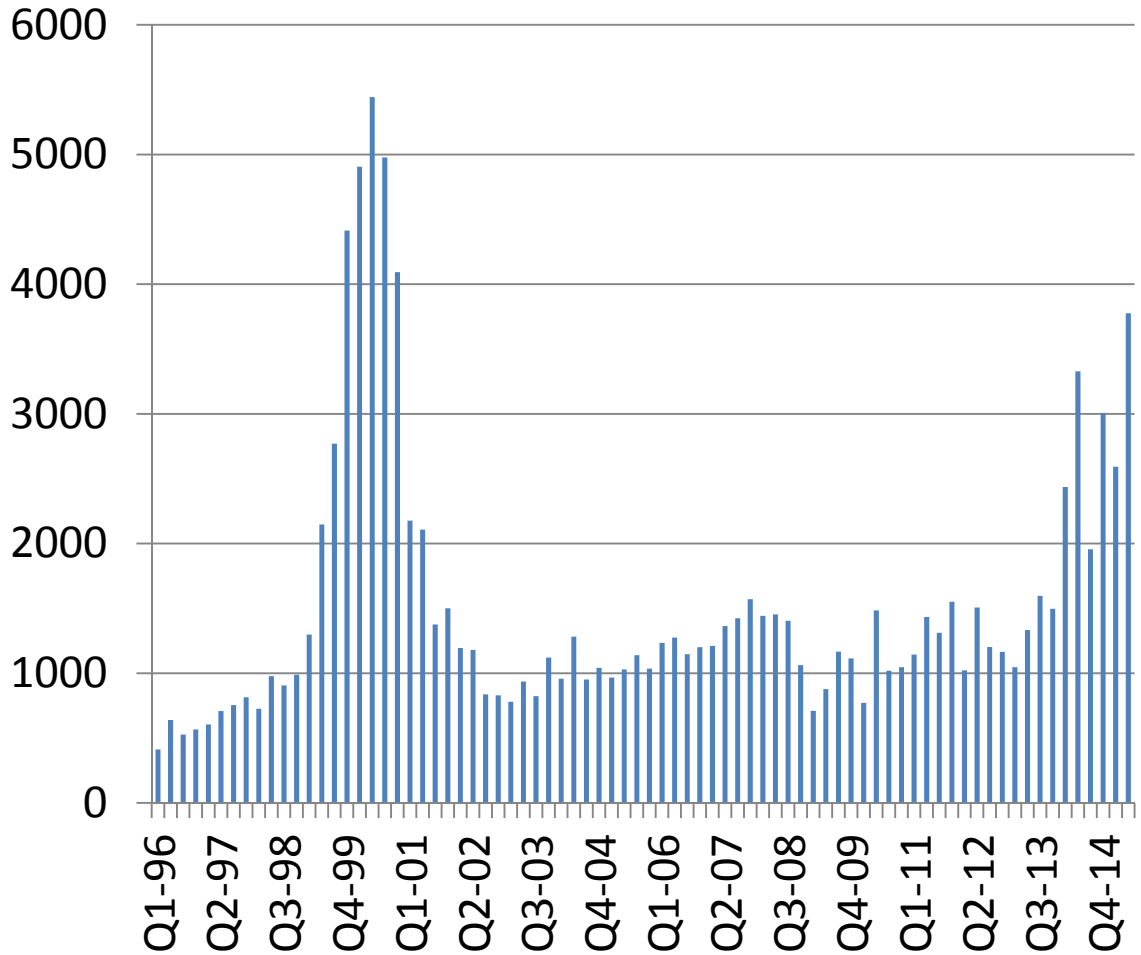
1. Asset prices are being driven by fundamentals, not speculation
2. The global savings glut is driving interest rates, not Fed policy
3. Leverage is not a factor
4. The real economy is in balance

Equity Fundamentals

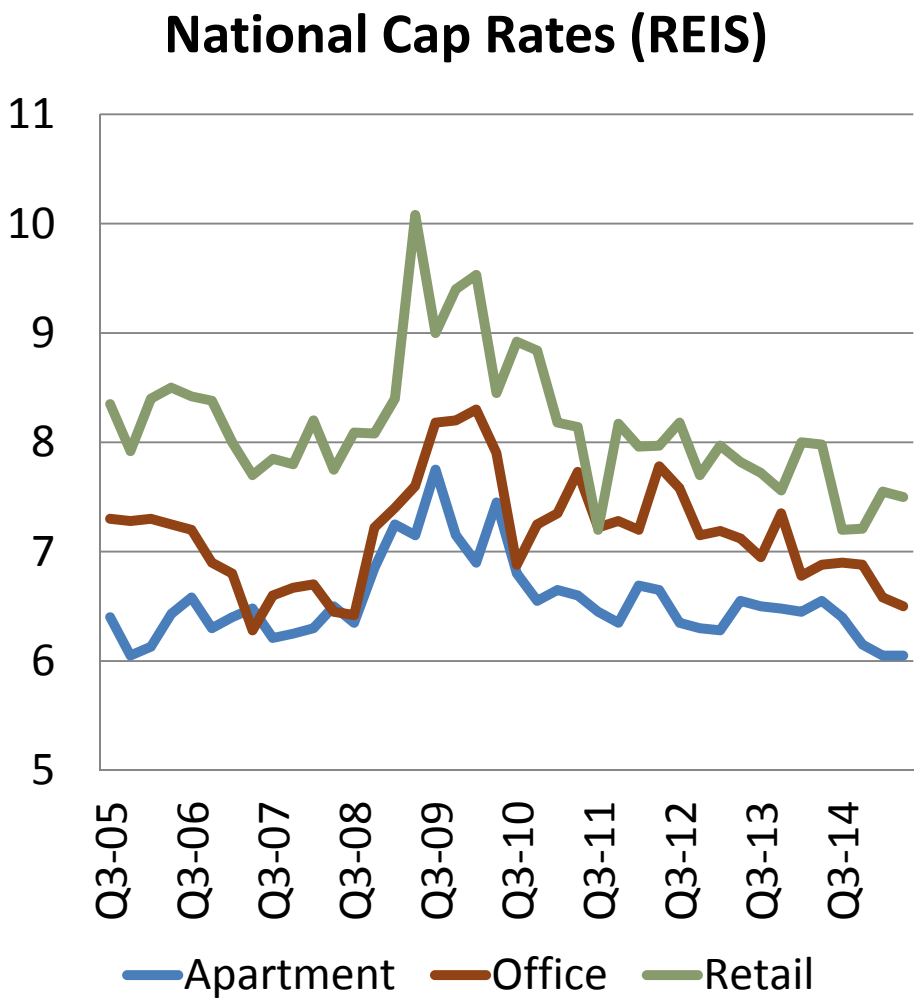


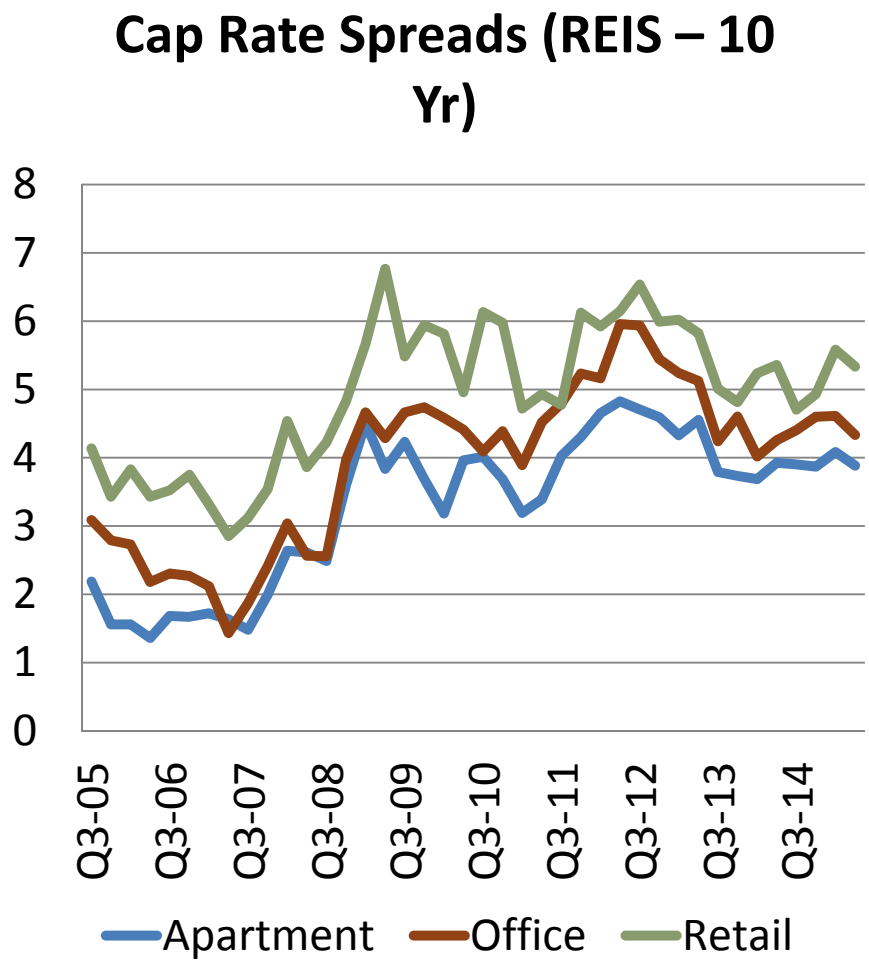
What about Tech?

Tech P/Es

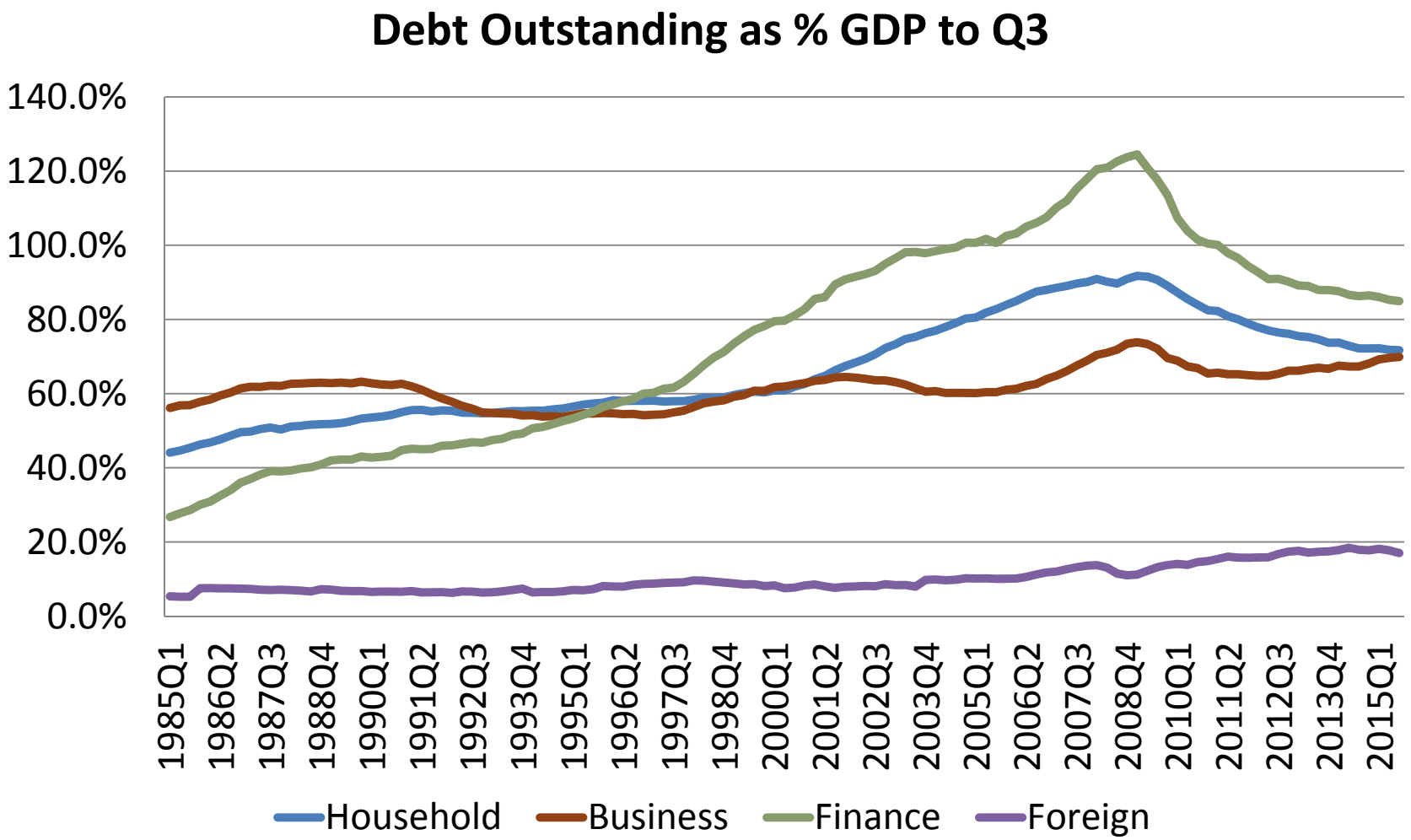


Commercial Real Estate

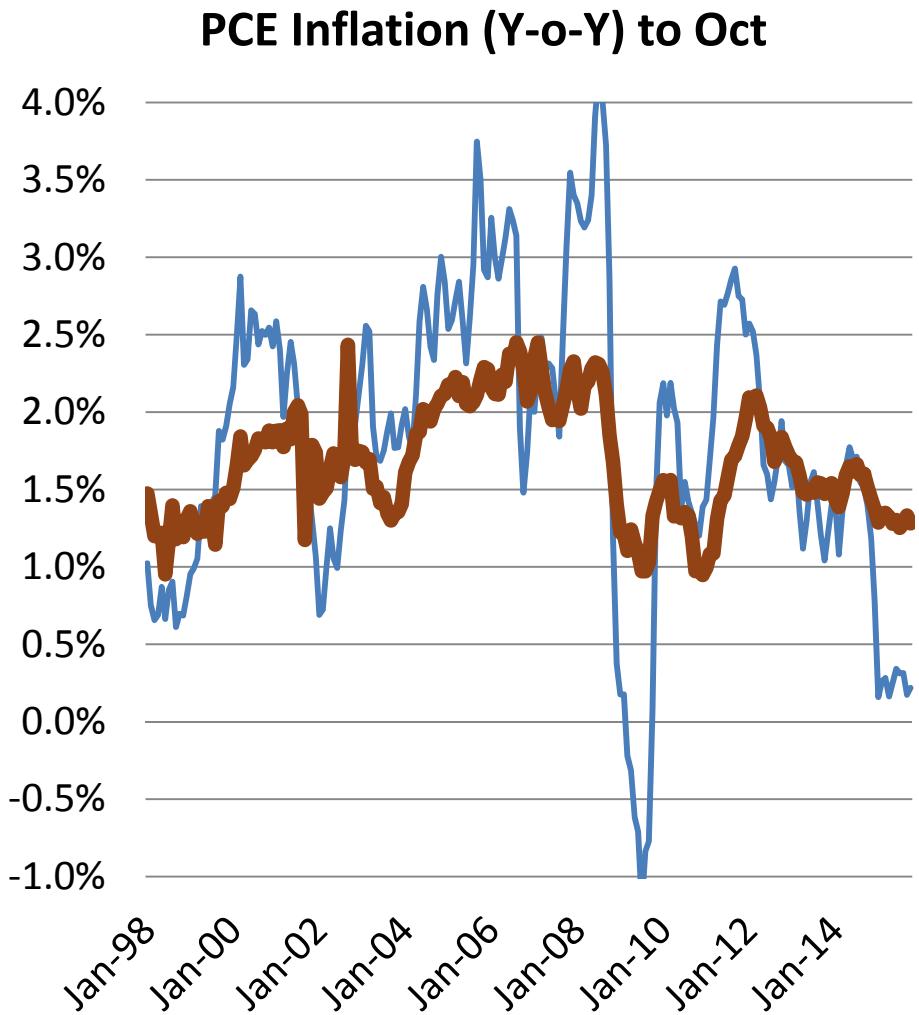


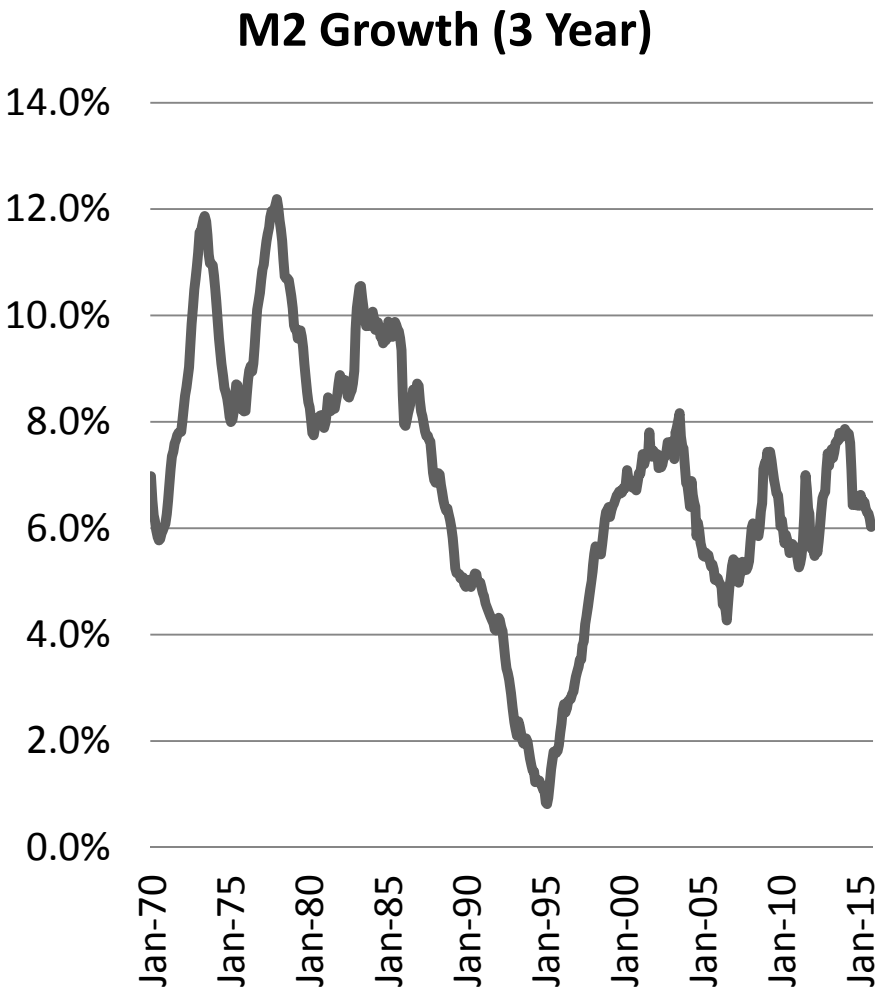


Risk Factors

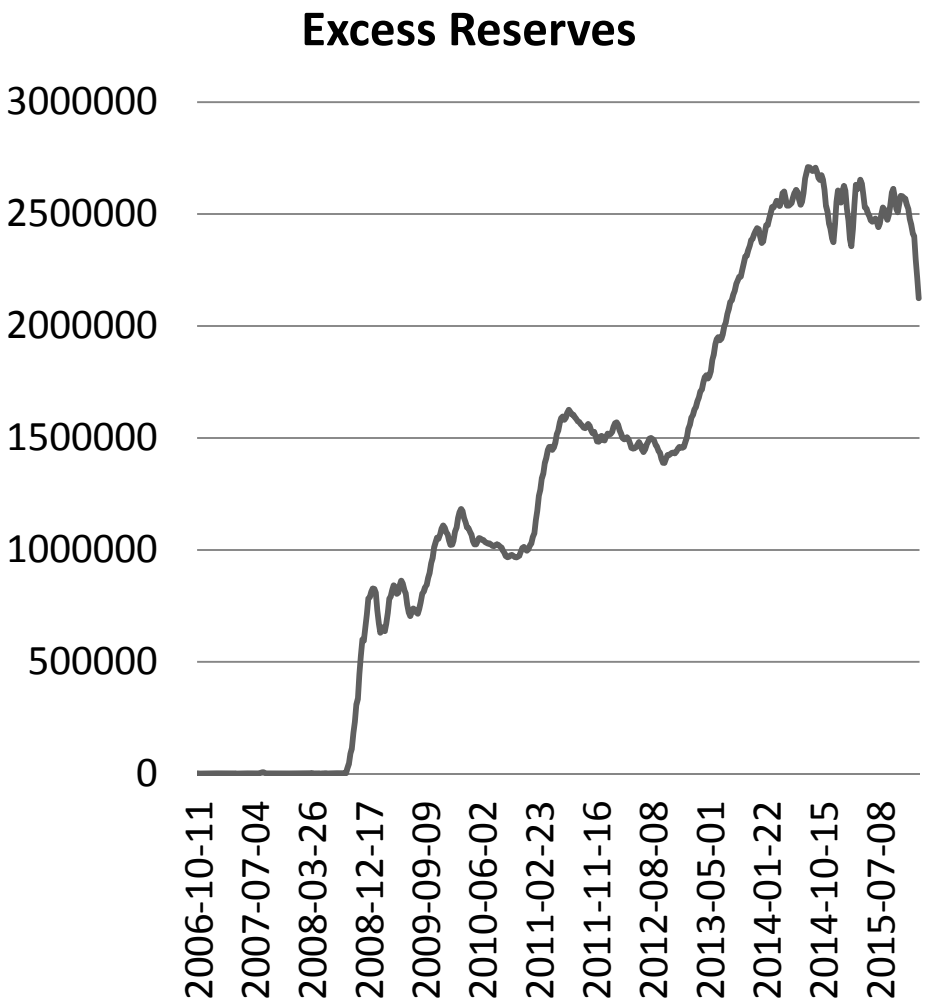


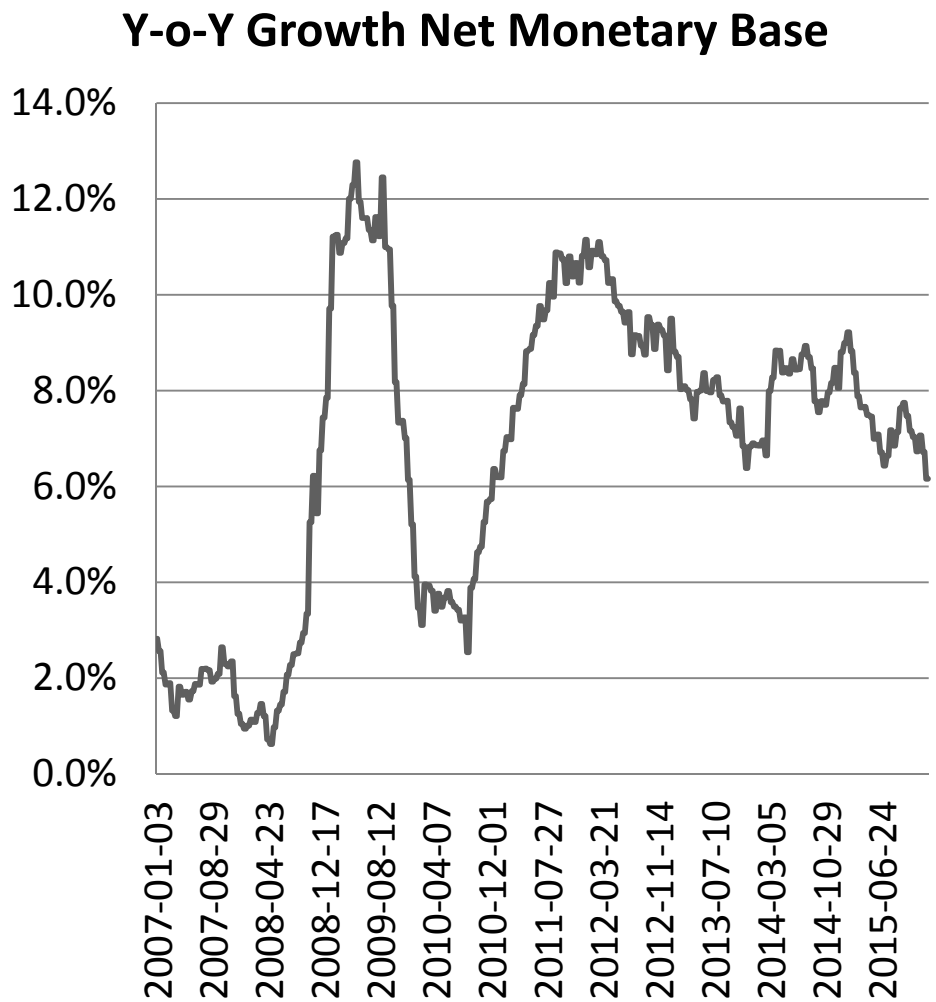
~~When~~ How Fast



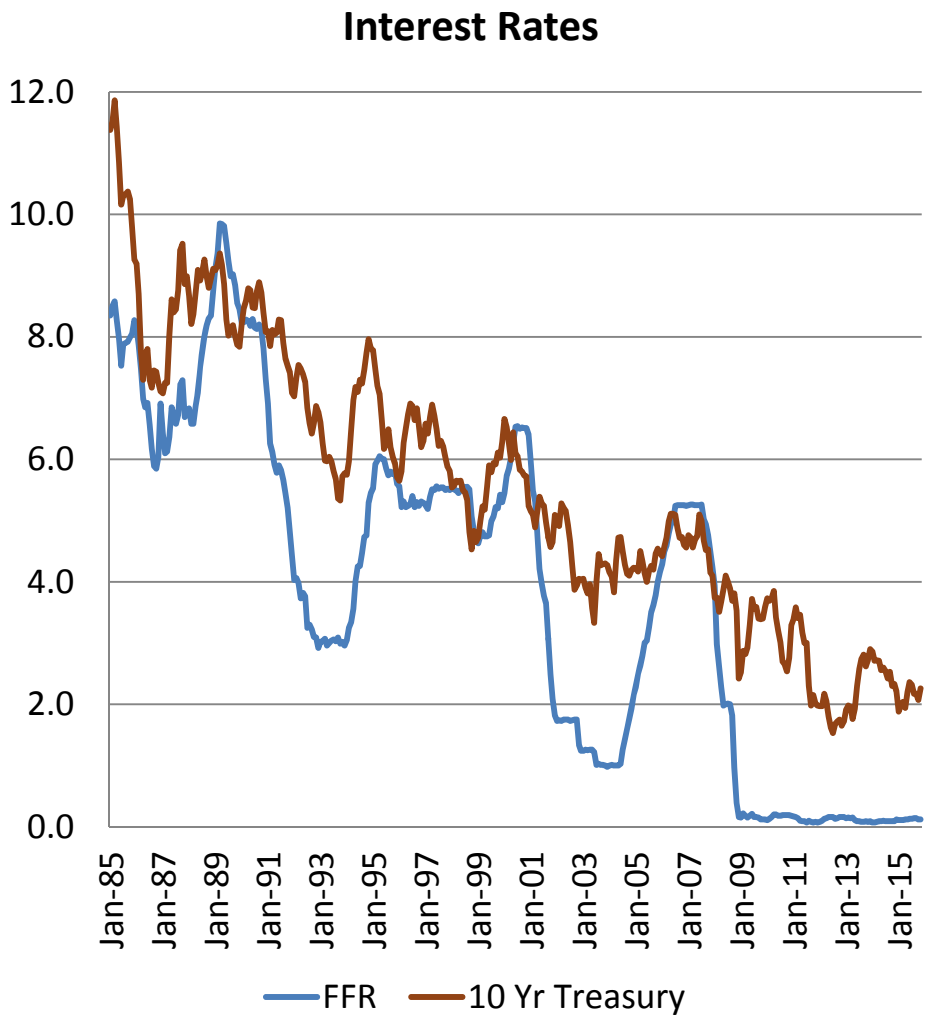


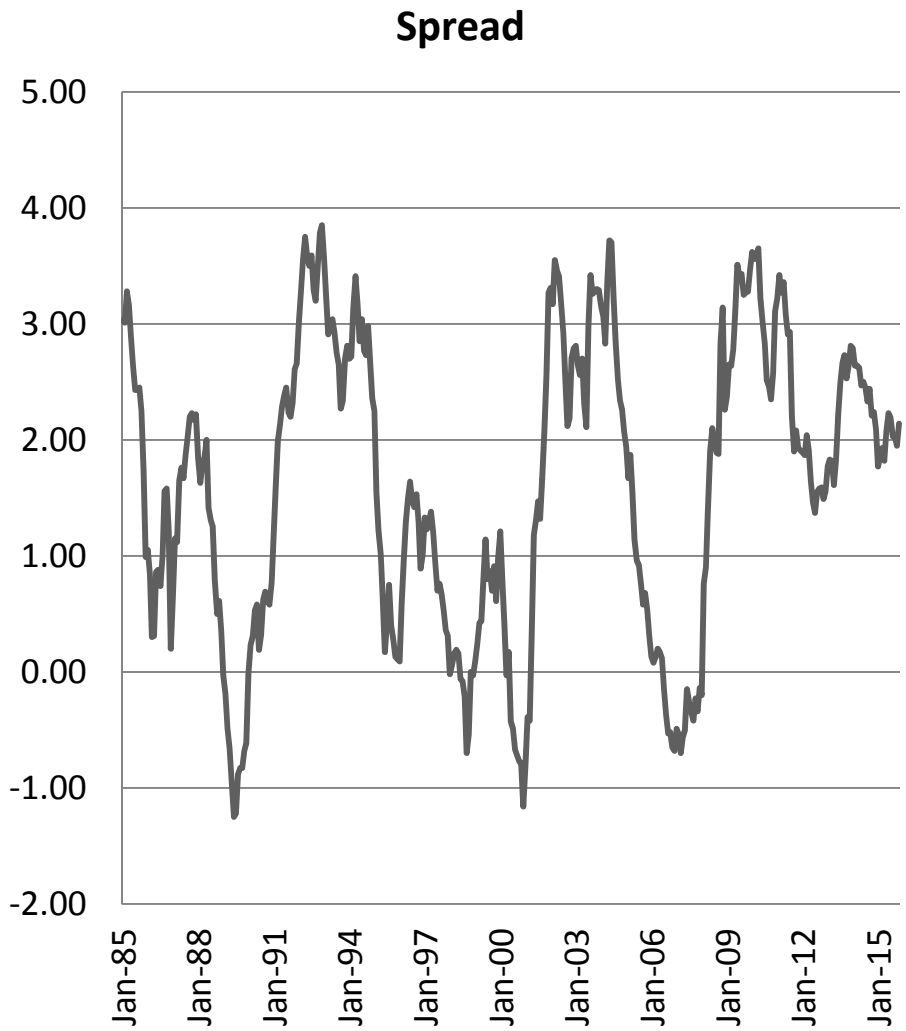
QE?


Excess Reserves
3000000
2500000
2000000
1500000
1000000
500000
0
2006-10-11
2007-07-04
2008-03-26
2008-12-17
2009-09-09
2010-06-02
2011-02-23
2011-11-16
2012-08-08
2013-05-01
2014-01-22
2014-10-15
2015-07-08

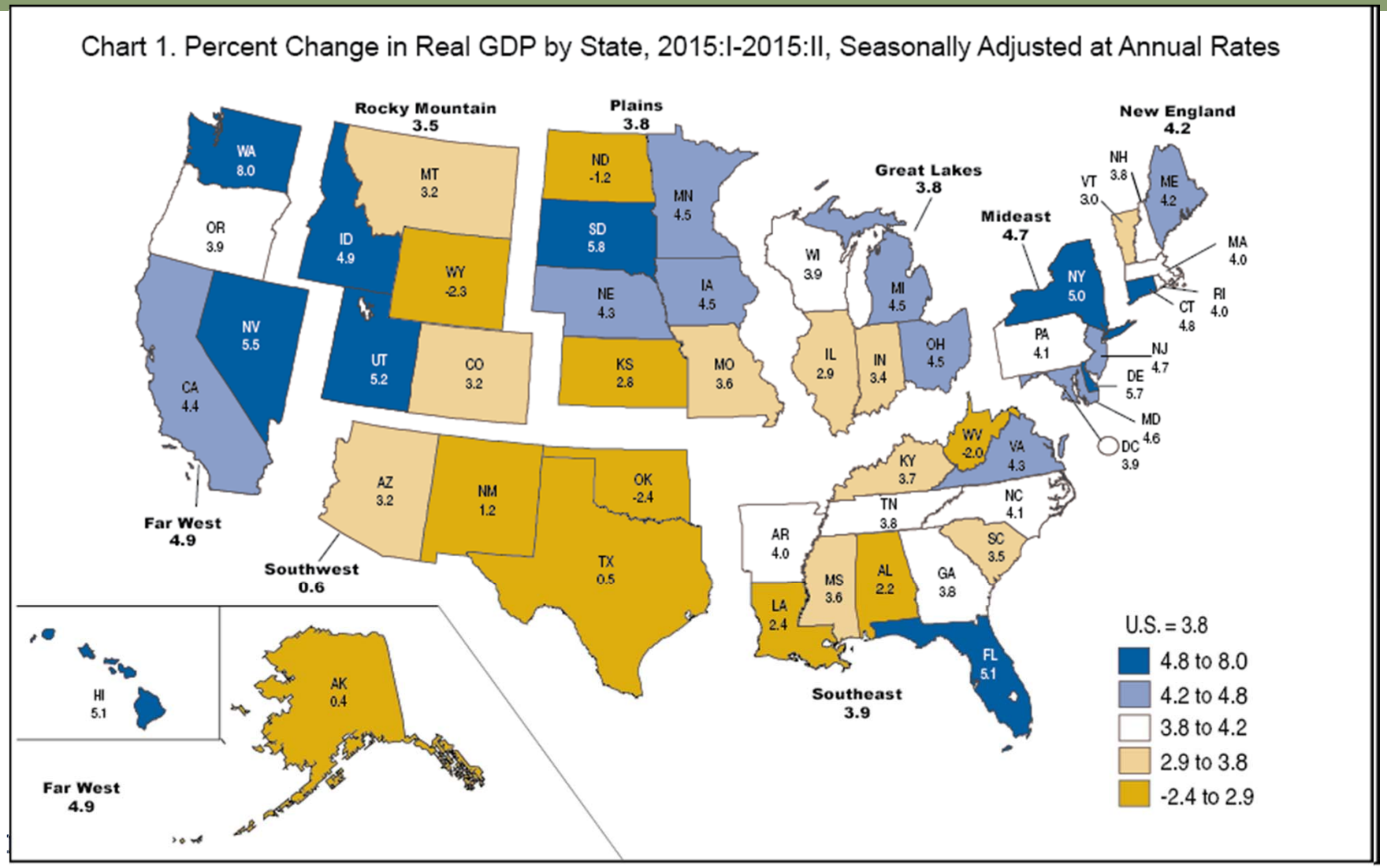

Y-o-Y Growth Net Monetary Base
14.0%
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
2007-01-03
2007-08-29
2008-04-23
2008-12-17
2009-08-12
2010-04-07
2010-12-01
2011-07-27
2012-03-21
2012-11-14
2013-07-10
2014-03-05
2014-10-29
2015-06-24

Limited Space to Turn





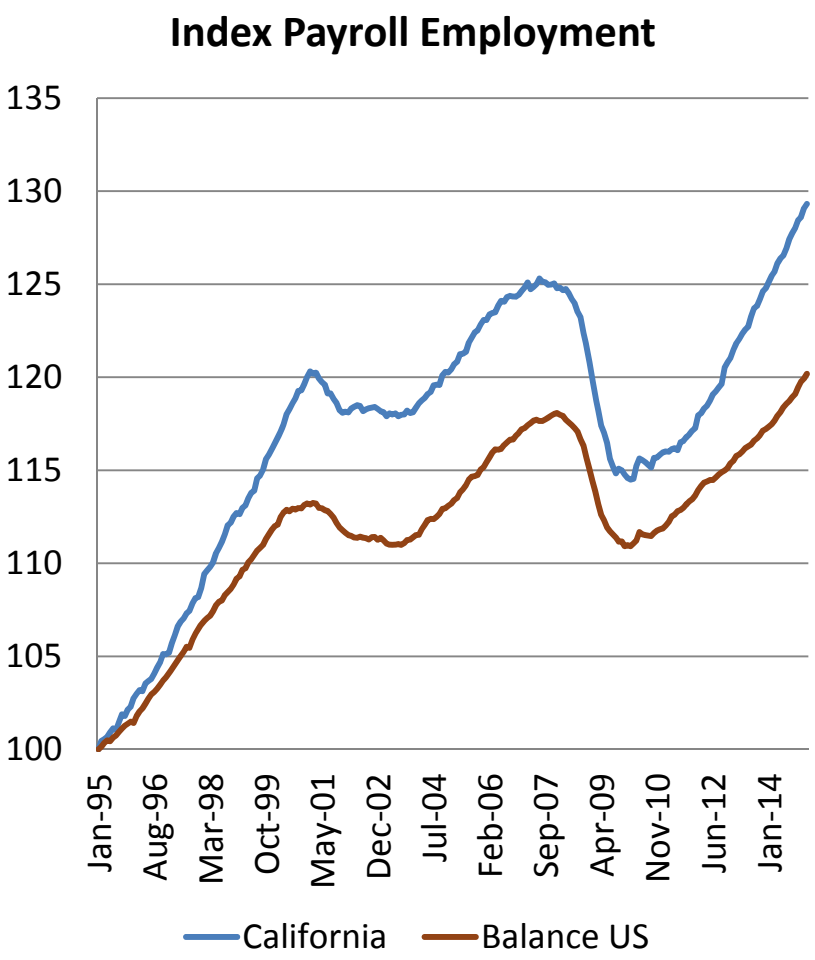
Regional Growth



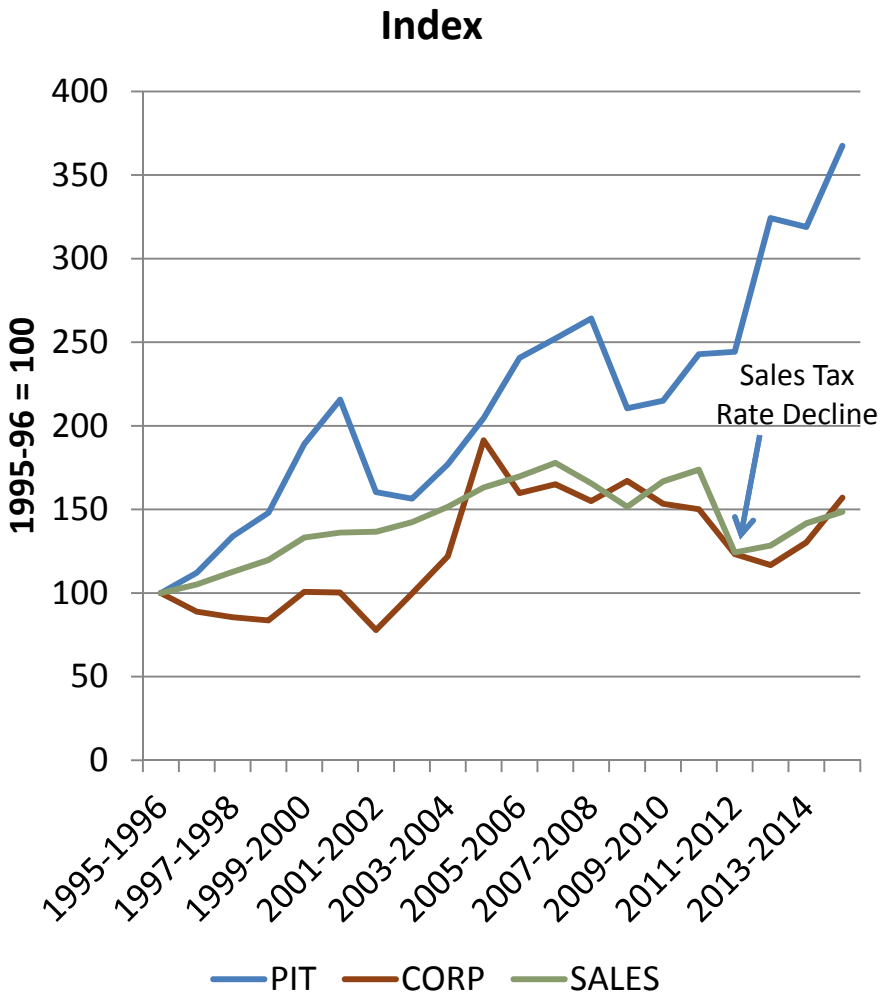
U.S. Bureau of Economic Analysis

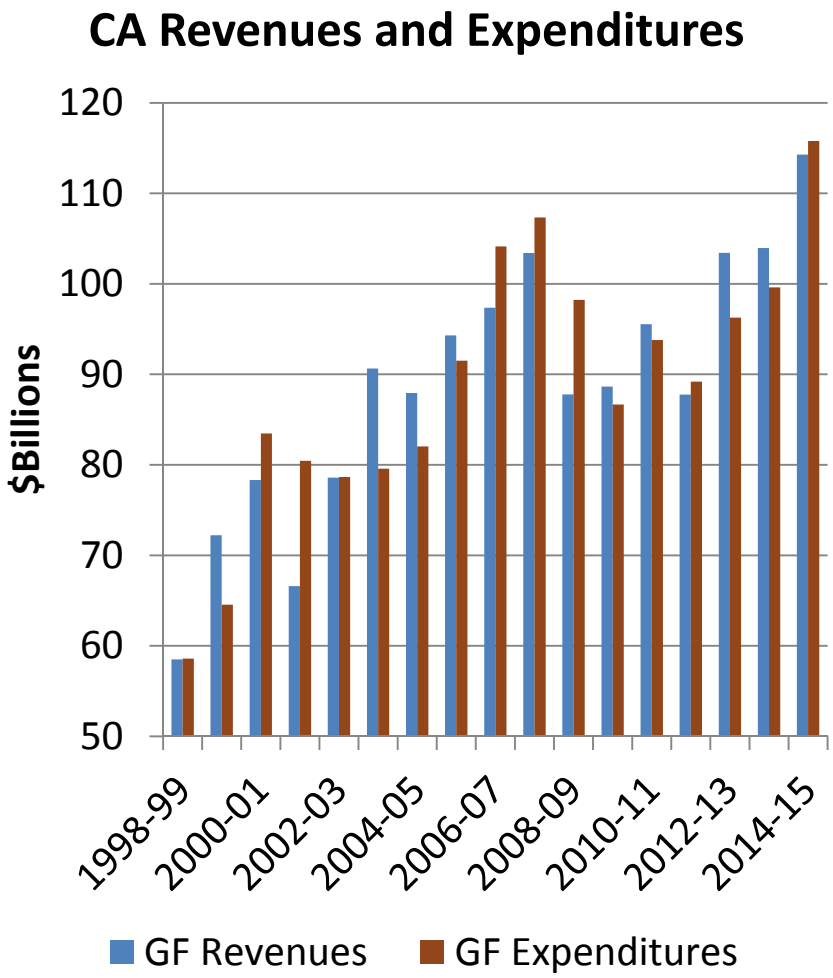
2015 Job Growth (*Ch Gr from 14*)

Idaho	4.1%	*2.0%*
Utah	3.6%	*0.8%*
Florida	3.0%	*-0.3%*
Washington	2.8%	*-0.1%*
Oregon	2.7%	*-0.3%*
South Carolina	2.6%	*0.1%*
California	**2.6%**	***-0.3%***
South Dakota	2.6%	*2.0%*
Nevada	2.5%	*-0.9%*
Arizona	2.5%	*0.7%*
Massachusetts	2.2%	*0.6%*
Georgia	2.2%	*-1.1%*
North Carolina	2.2%	*-0.1%*
Hawaii	2.1%	*1.8%*
Maryland	2.0%	*1.0%*
Indiana	1.9%	*0.7%*
N York	1.9%	*0.8%*

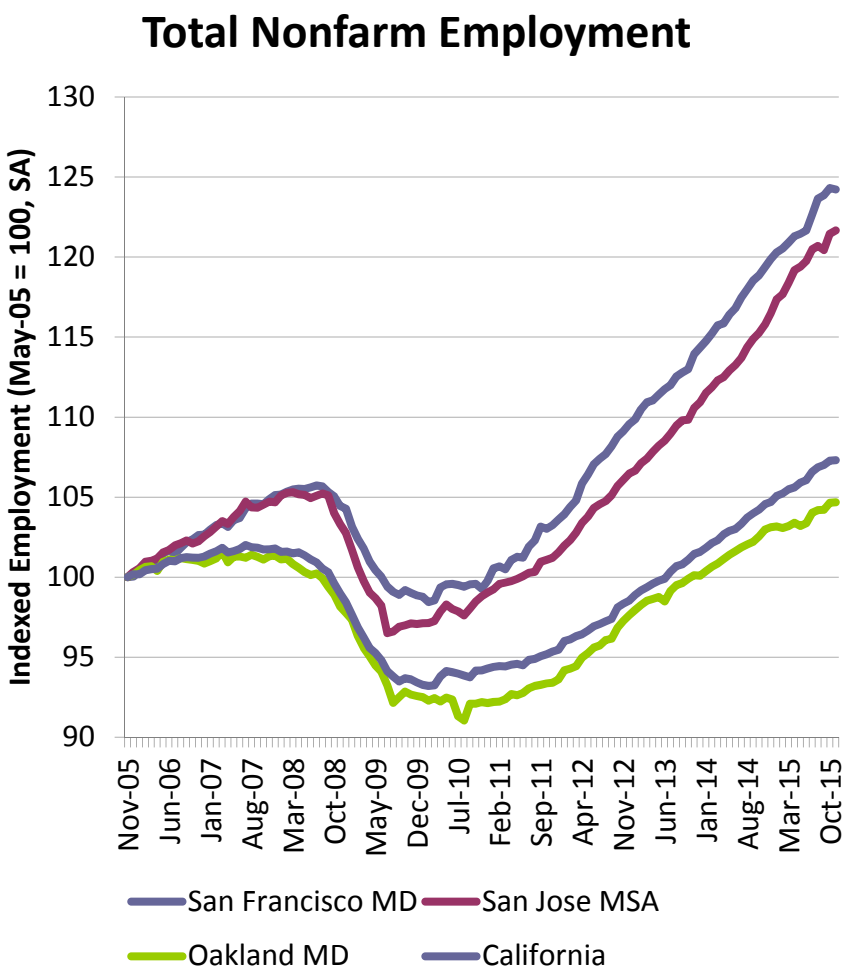


Income tax driving the show





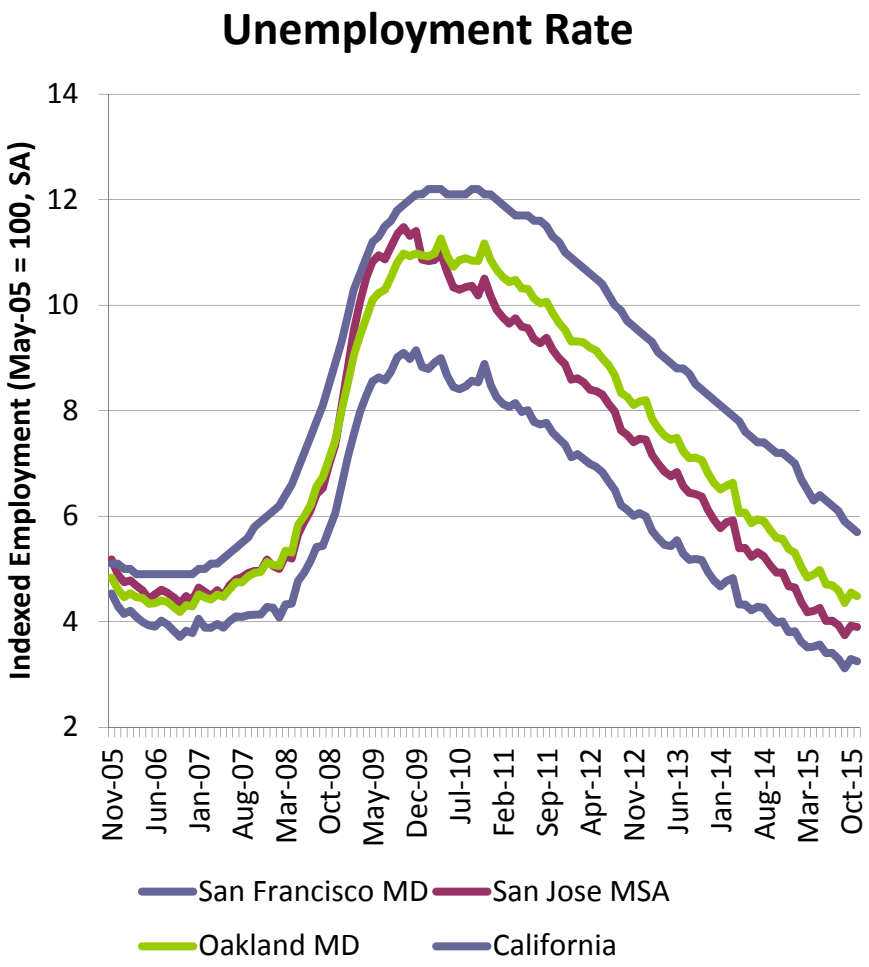
Regional Nonfarm Employment



Regional Nonfarm Employment

Metropolitan Area	Nov-15 (000s)	Growth
San Jose	1,075	5.1
San Francisco (MD)	1,070	4.1
San Rafael (MD)	117	3.9
Inland Empire	1,349	3.5
Vallejo	134	3.5
San Diego	1,404	2.7
California	16,258	2.6
Santa Rosa	198	2.6
Los Angeles (MD)	4,343	1.7
East Bay (MD)	1,096	1.7

Regional Trends



East Bay Employment by Industry

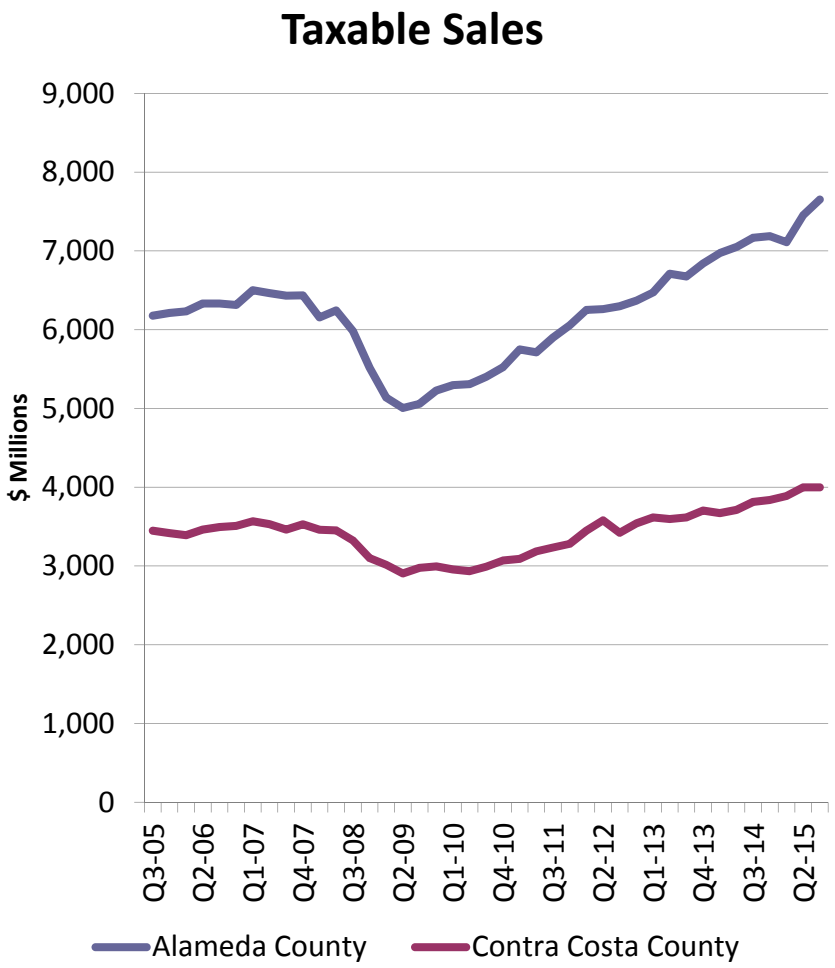
Industry	Nov-15 (000s)	Change
Total Nonfarm	1,096	1.7
Professional/Business	188	2.6
Education/Health	178	0.7
Government	169	0.8
Retail Trade	113	2.1
Leisure and Hospitality	110	5.4
Manufacturing	84	0.7
Construction	64	4.7
Financial Activities	47	-4.1
Wholesale Trade	46	-1.3

Employment

East Bay County 2-year Employment Growth (Q2-13 to Q2-15)

Industry	Contra Costa		Alameda	
	New Jobs	Growth (%)	New Jobs	Growth (%)
Total All Industries	12,099	4.2	41,920	7.3
Education/Health	4,757	8.2	2,538	2.3
Trade, Transport	4,130	7.3	7,959	6.4
Leisure and Hospitality	2,618	7.3	5,634	9.0
Financial Activities	786	3.1	-1,032	-4.3
Construction	640	3.1	4,599	13.1
Other Services	554	4.8	561	2.4
Government	-95	-0.7	323	1.4
Information	-326	-3.8	874	6.8
Manufacturing	-601	-3.8	7,943	12.8
NR/Mining	-611	-29.3	-177	-21.5

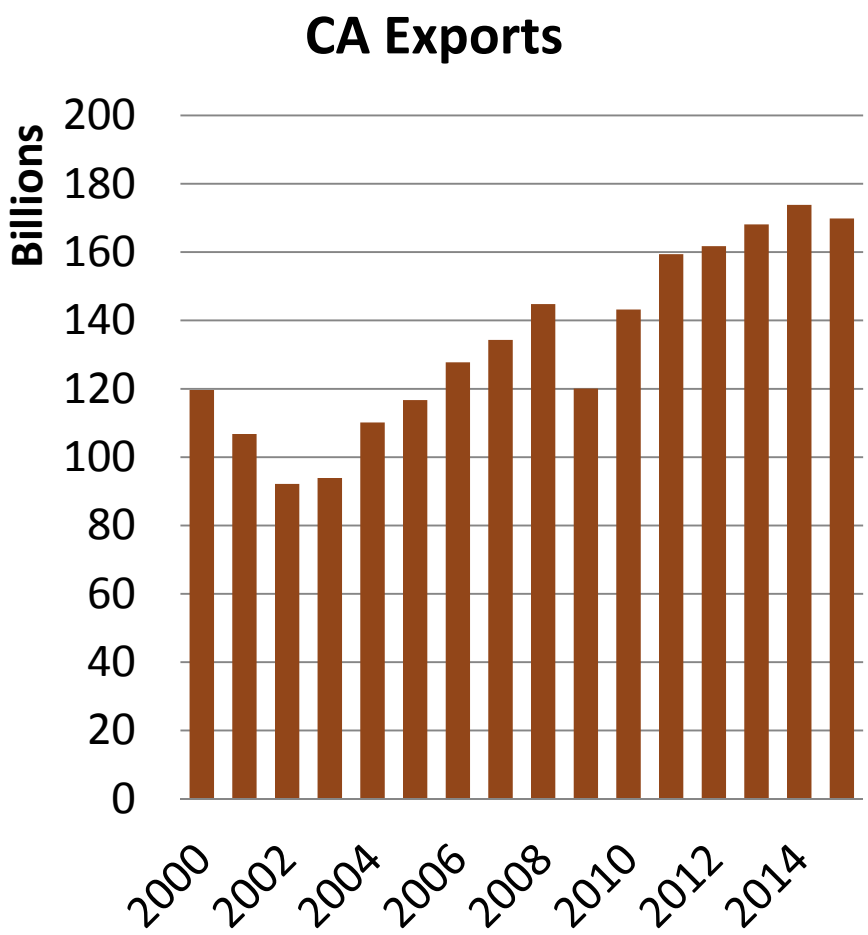
Spending



Regional Taxable Sales

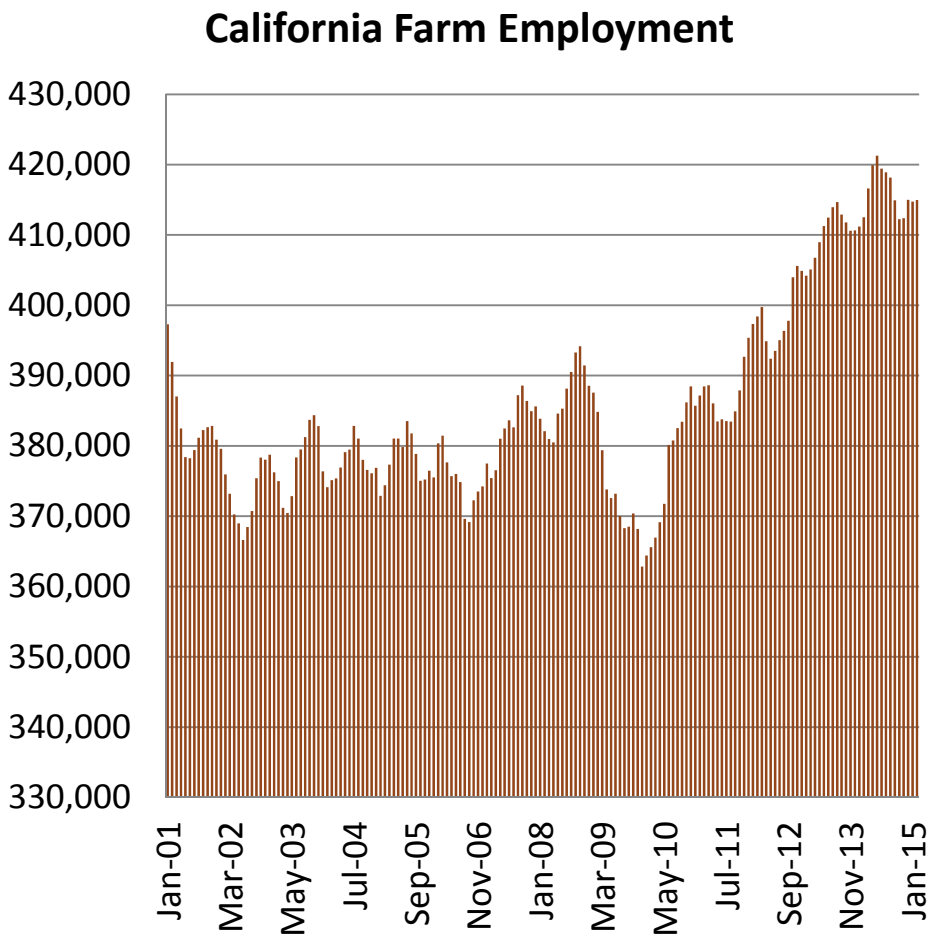
City	Q3-15 ($ 000s)	Y-o-Y Growth
Alameda	248,428	28.9
Brentwood	161,559	9.3
Concord	721,999	8.9
Fremont	953,253	8.6
Berkeley	418,111	4.4
Oakland	1,146,037	3.2
Antioch	254,743	-0.3
Hayward	698,792	-0.4
Richmond	330,884	-2.4

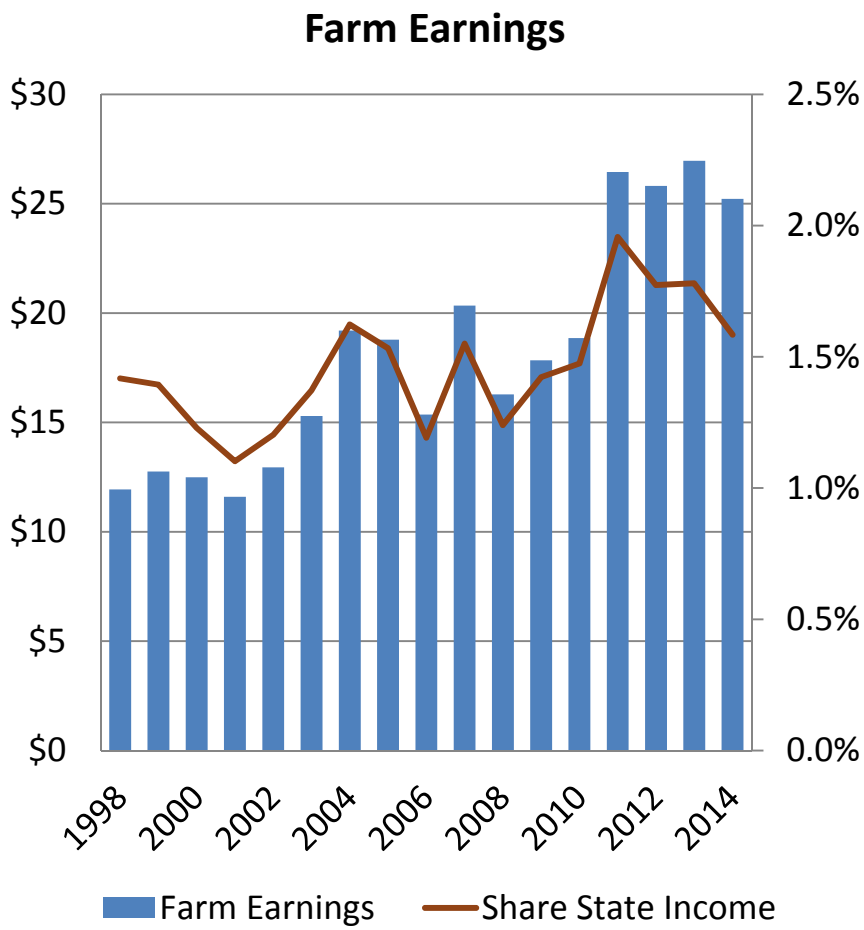
California Exports



Share Growth 2009-2015 Est	
TOTAL ALL INDUSTRIES	
Computer And Electronic Products	19.8%
Agricultural Products	12.6%
Machinery, Except Electrical	10.6%
Transportation Equipment	10.3%
Miscellaneous Manufactured	10.3%
Electrical Equipment	7.3%
Chemicals	6.6%
Used Or Second-Hand Merchandise	5.7%
Food And Kindred Products	4.9%
Petroleum And Coal Products	4.7%
Primary Metal Manufacturing	2.7%
Fabricated Metal Products, Nesoi	1.8%
Beverages And Tobacco Products	1.6%
Plastics And Rubber Products	1.5%
Apparel And Accessories	1.3%

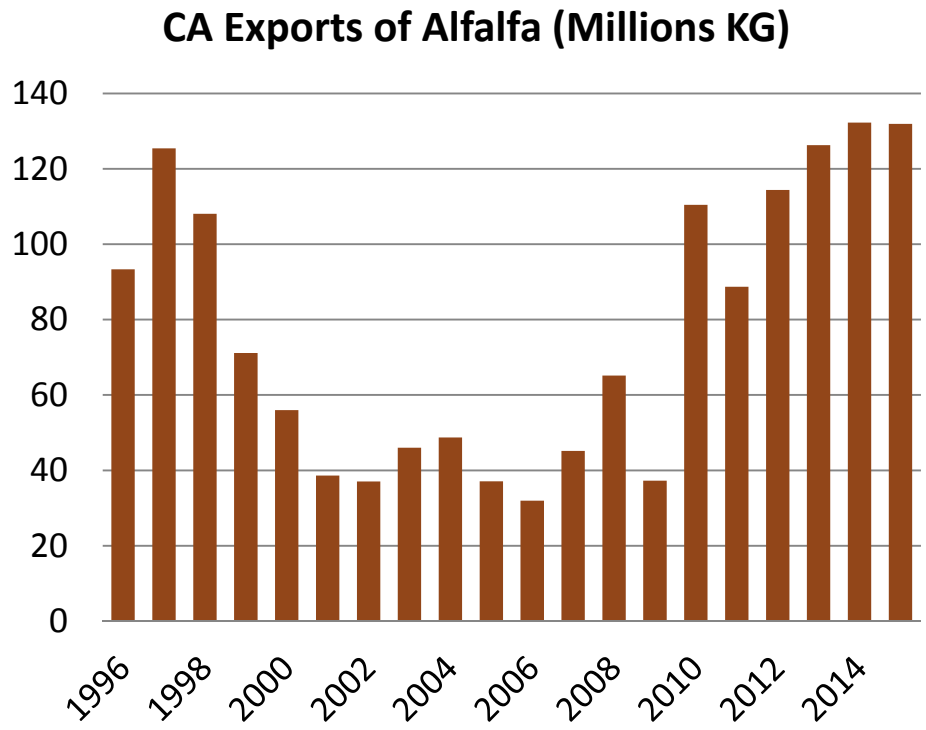
Ag and the Drought





Looking Closer

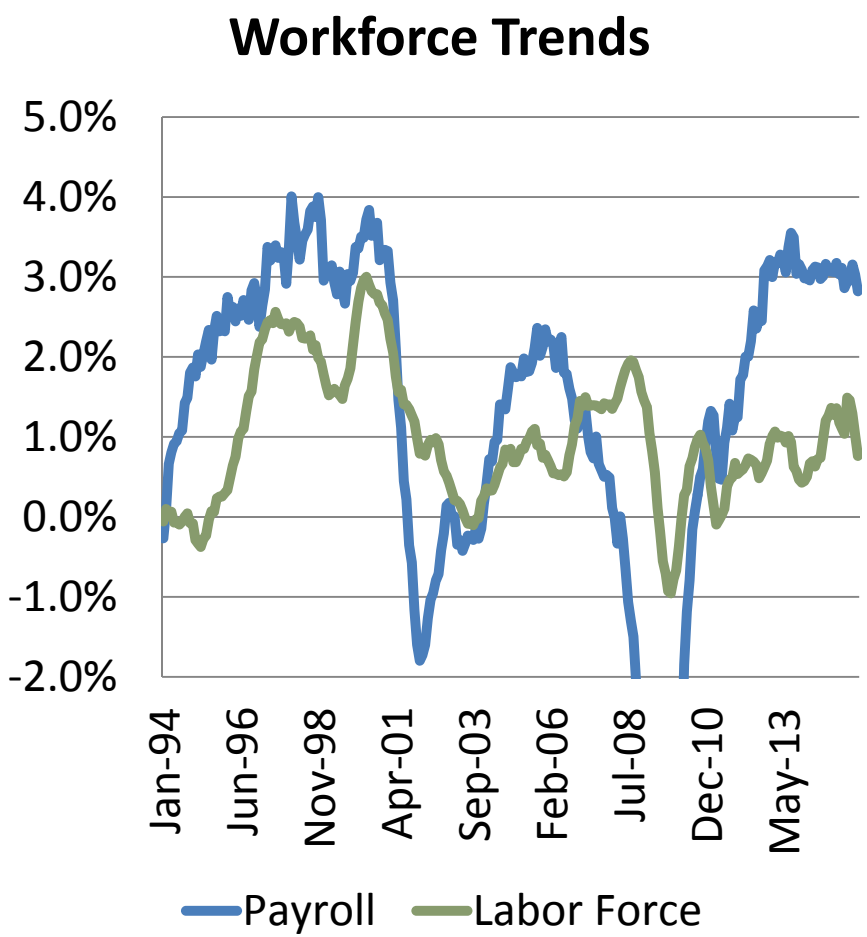
Insurable Crops	2006	2014
	6,664,689	6,055,791
Forage Production	1,060,000	930,000
Almonds	580,000	860,000
Wheat	530,000	585,000
Grapes (Wine)	445,147	570,000
Rice	526,000	495,000
Corn	540,000	430,000
Cotton	600,000	315,000
Walnuts	215,000	290,000
Tomatoes	306,465	288,000
Citrus – 8 types	267,913	270,000

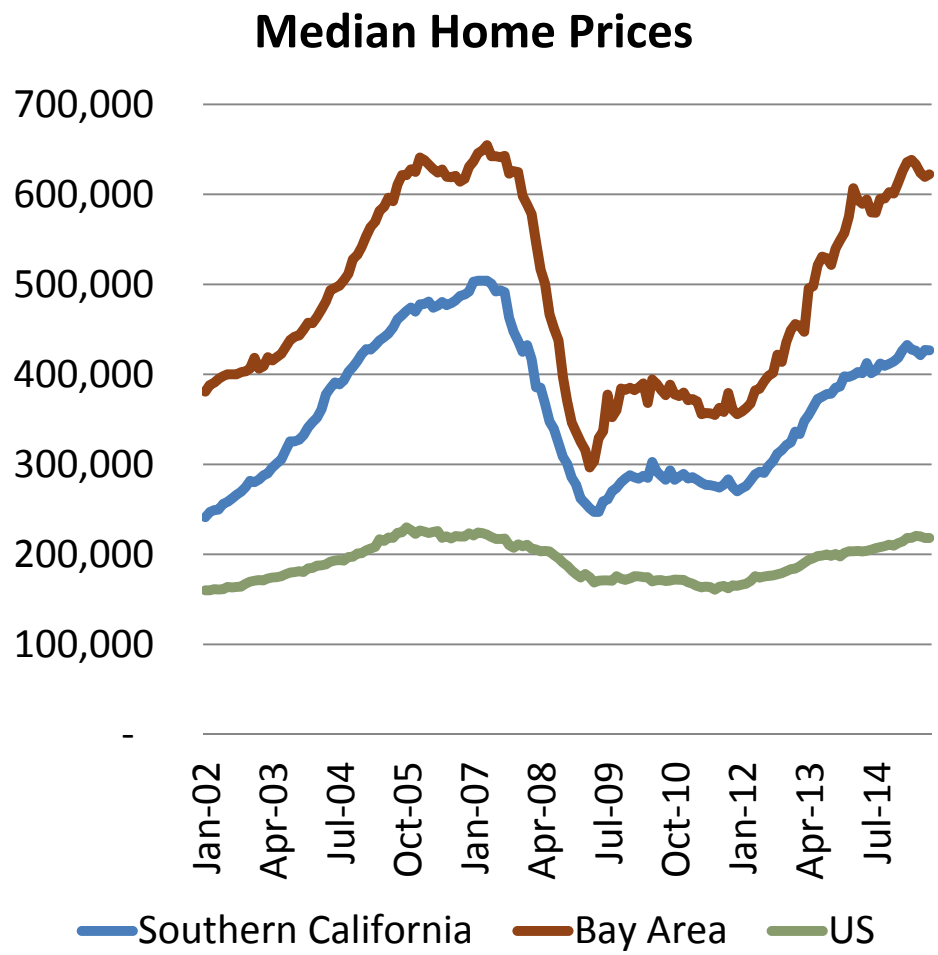


$ / Kg

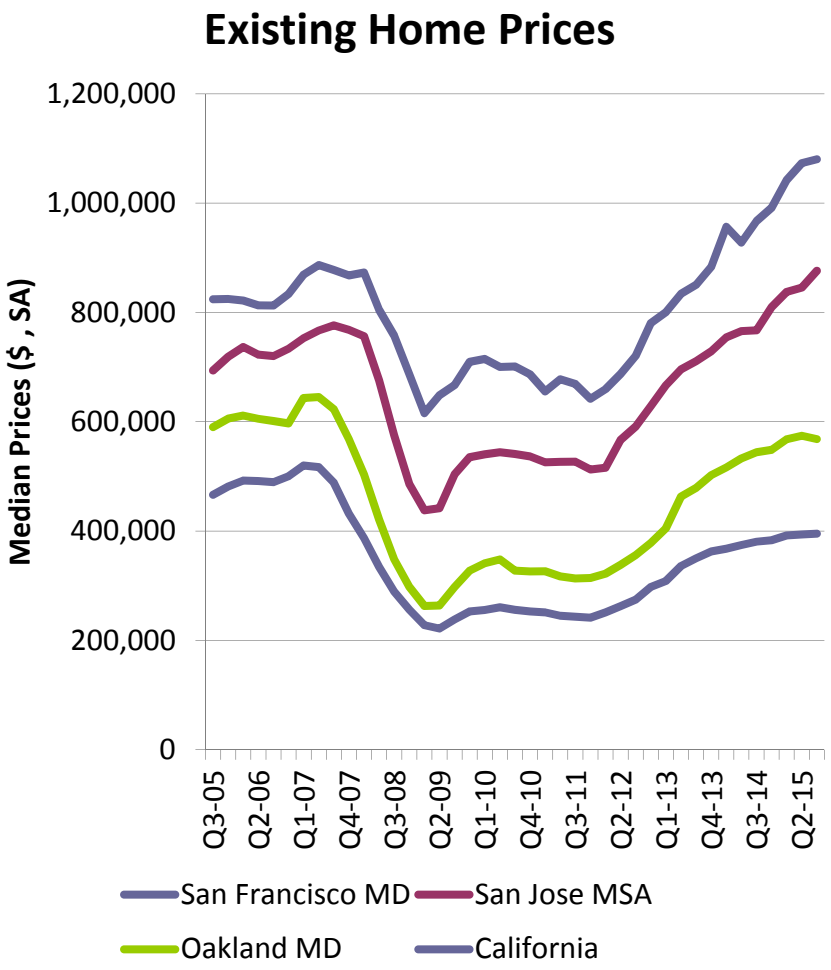
Alfalfa	Rice	Nuts
$0.27	$0.79	$7.07

Homes and Workers





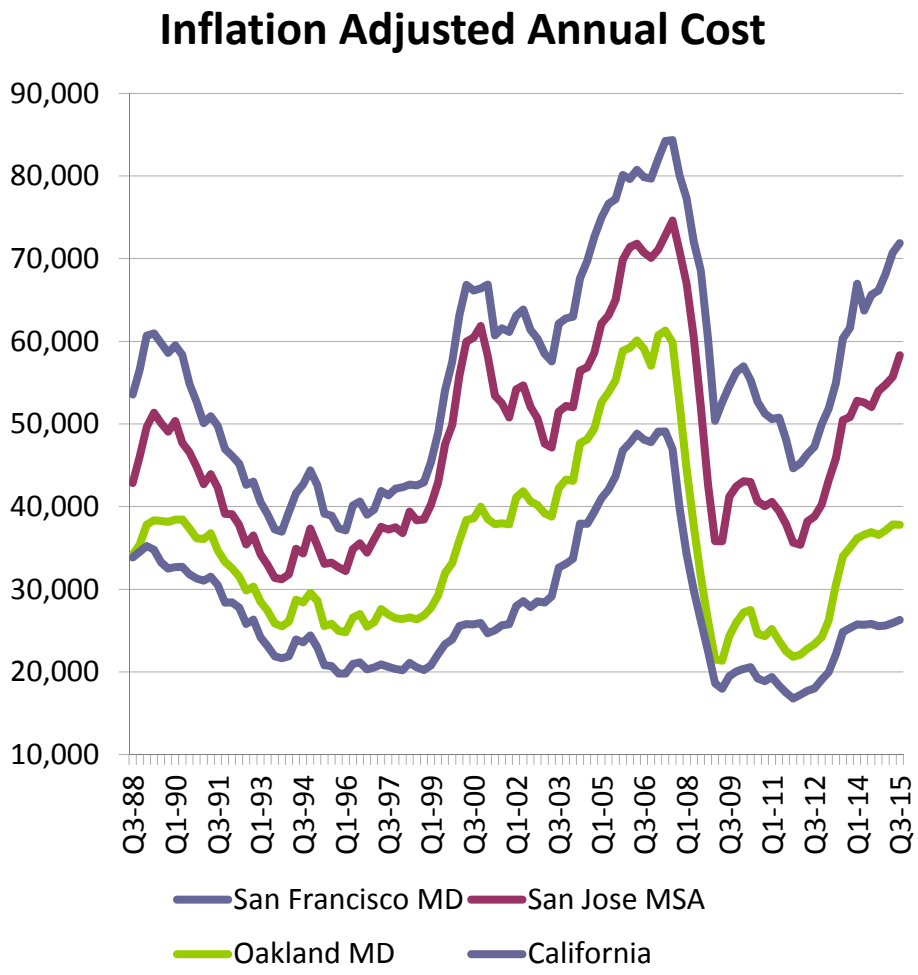
Residential Real Estate

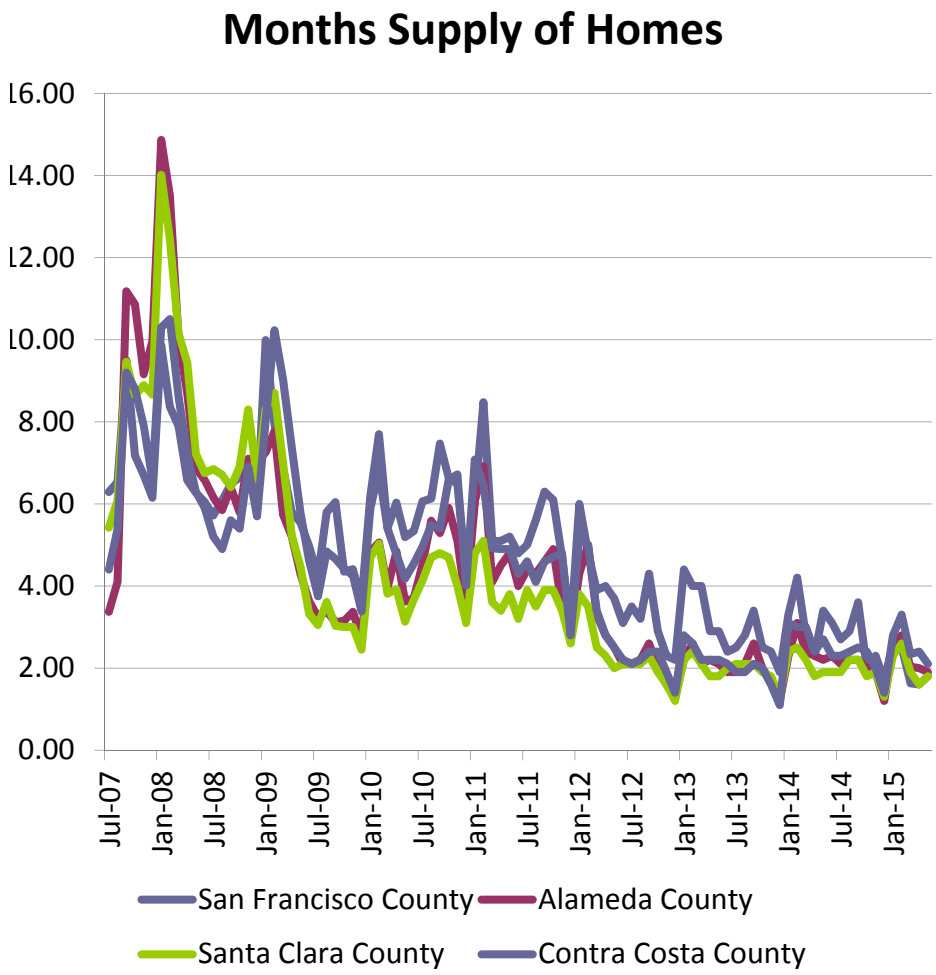


Regional Home Prices

Metropolitan Area	Q3-15	Y-o-Y Growth
Napa	567,568	15.2
San Jose	876,273	14.2
San Francisco (MD)	1,080,301	11.7
Inland Empire	289,971	8.3
Santa Rosa	499,727	6.4
Los Angeles (MD)	506,989	5.7
San Diego	506,817	5.2
Vallejo	320,815	5.0
Oakland (MD)	568,189	4.4
California	395,262	3.9

Residential Real Estate

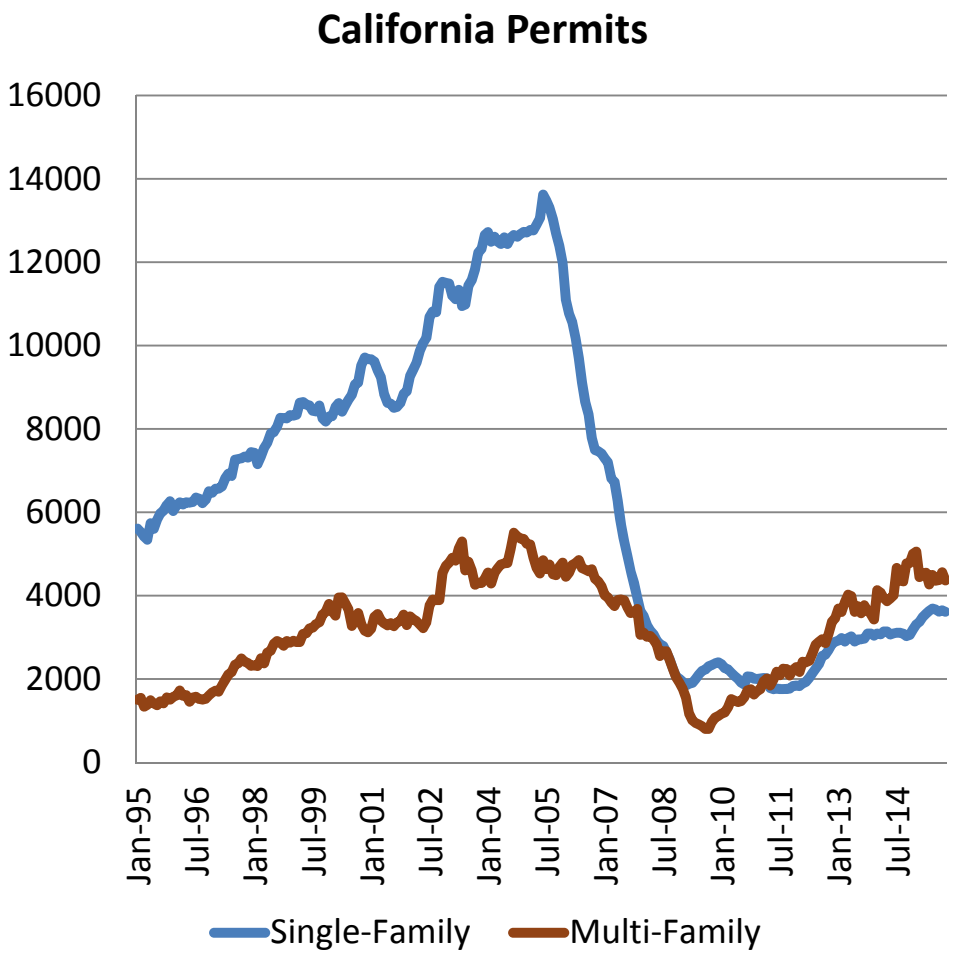




Bubble? No…

% Over Crowded		% Vacant	
Hawaii	8.6%	Utah	5.1%
California	**8.2%**	Minnesota	5.2%
Alaska	6.5%	**California**	**5.3%**
New York	5.0%	Vermont	5.4%
Texas	4.8%	Colorado	5.5%
Arizona	4.5%	Massachusetts	5.6%
Nevada	4.2%	New Hampshire	5.6%
New Mexico	3.6%	Wisconsin	5.8%
District of Columbia	3.3%	Oregon	6.0%
Utah	3.3%	Washington	6.4%
Oregon	3.3%	Idaho	6.4%
Washington	3.1%	Delaware	6.9%
Florida	3.0%	Maine	7.0%

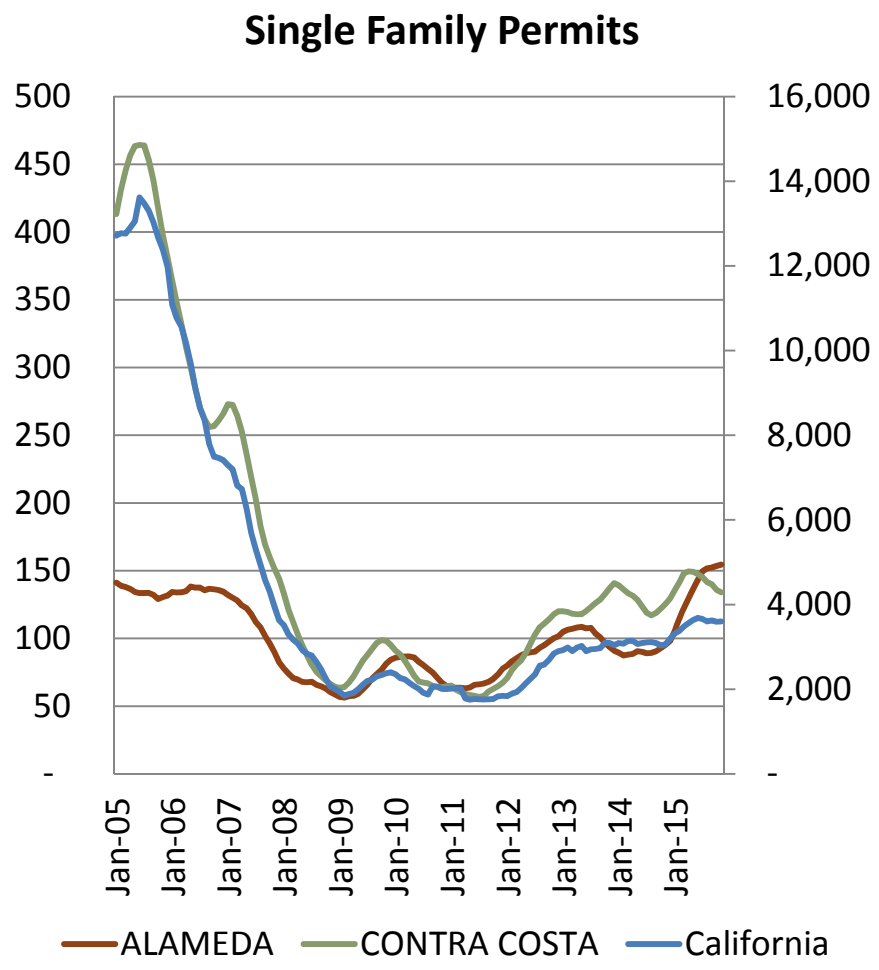
Pace of Construction

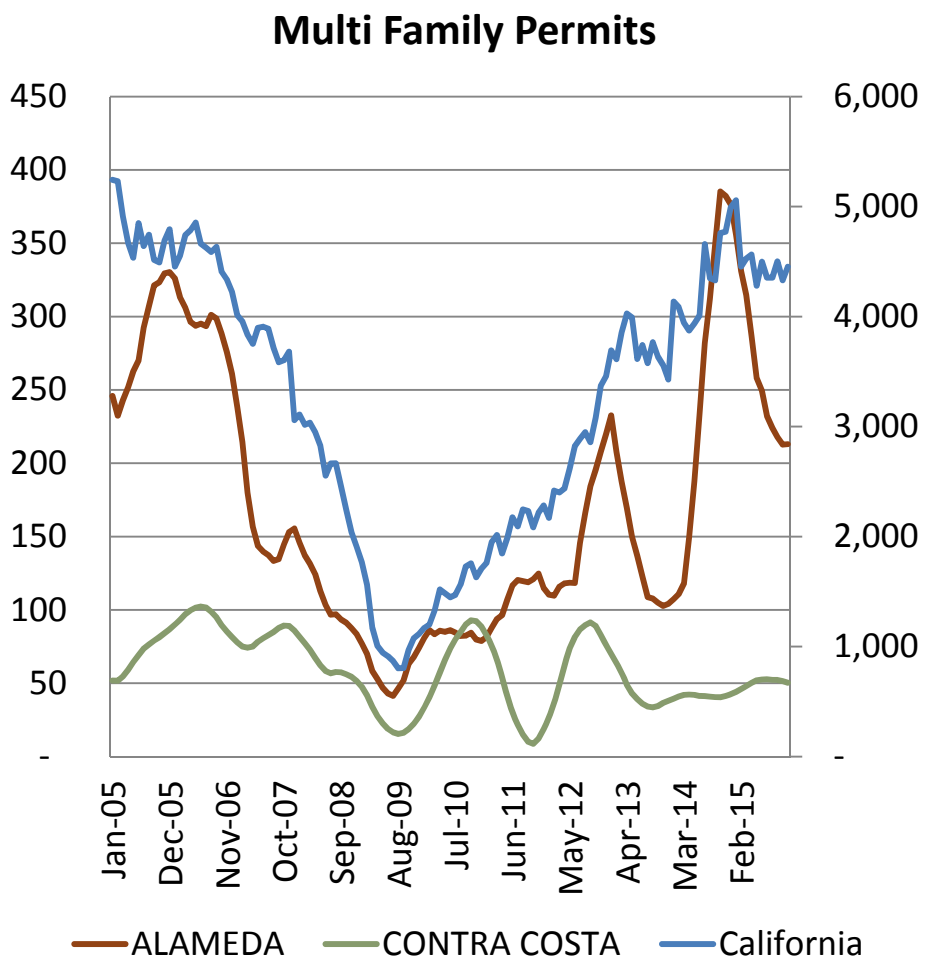


New Pop / Permits

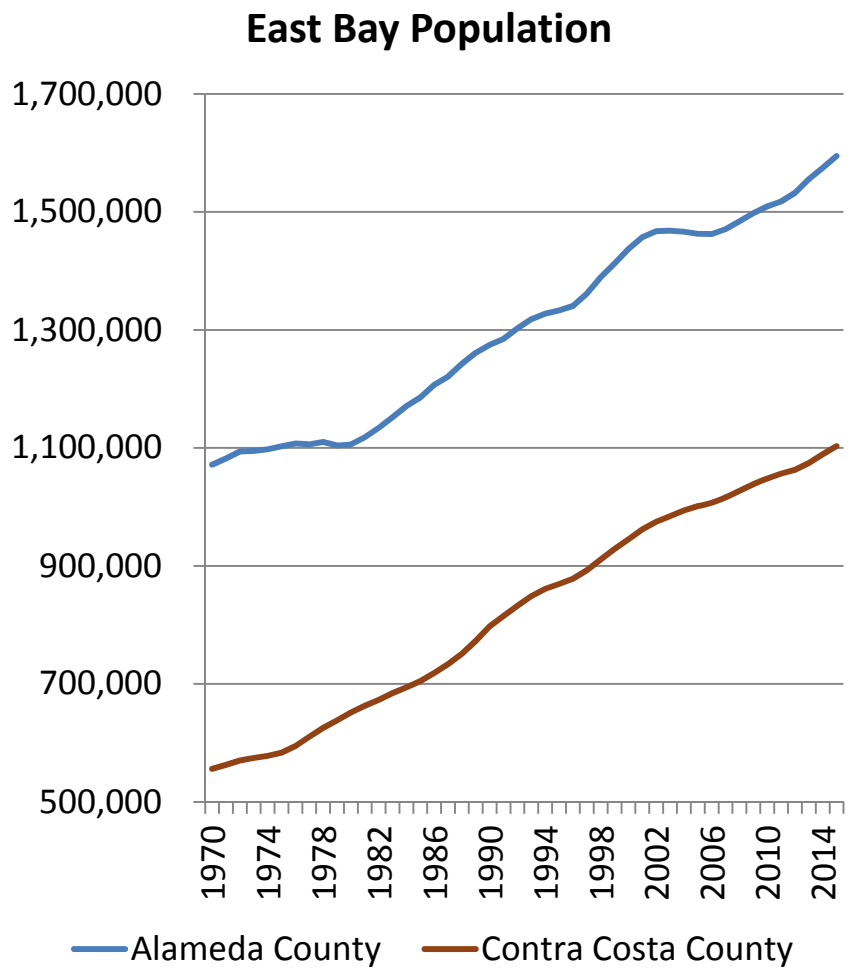
California	4.1	Tulare	4.0
Ventura	6.8	Los Angeles	4.0
Contra Costa	6.6	Fresno	4.0
Sonoma	6.1	San Mateo	3.4
Alameda	5.9	Kern	3.0
Santa Barbara	5.3	Santa Clara	3.0
San Bernardino	5.0	Orange	2.8
Solano	4.6	Placer	2.1
Riverside	4.5	San Francisco	2.1
San Diego	4.2	Sacramento	0.7

Residential Permits



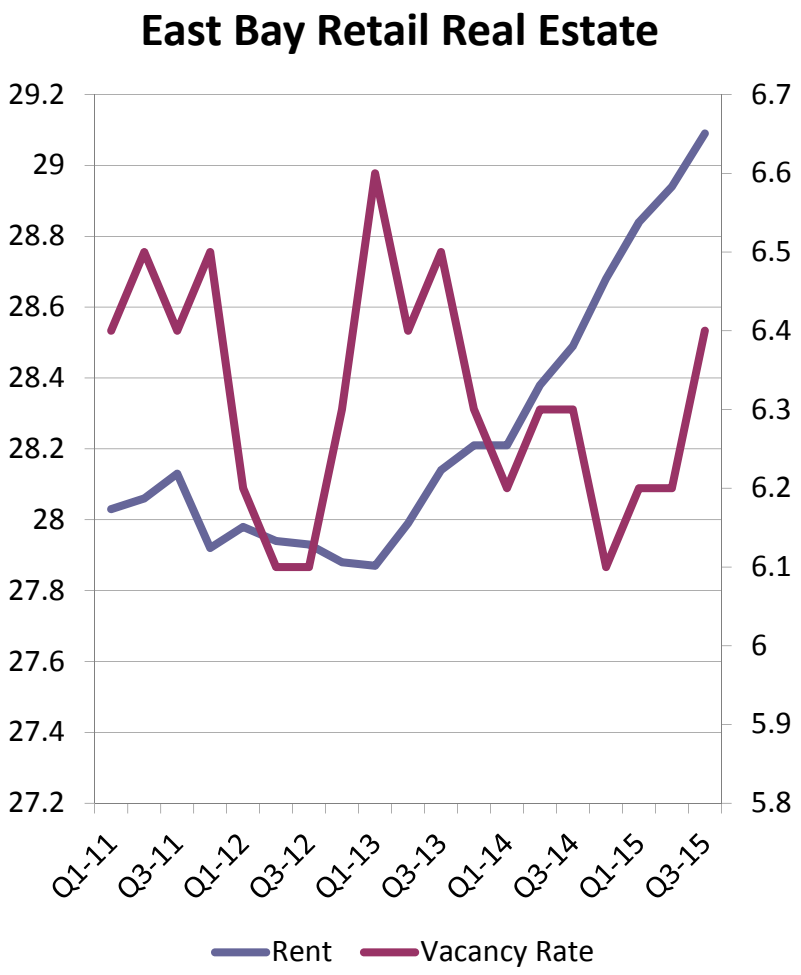


Population



	2015	Gr	Ch	Housing
Contra Costa	1,102,871	1.3	14,337	5,735
Brentwood	56,493	3.0	1,695	678
Orinda	18,612	2.8	521	208
Lafayette	25,154	1.9	478	191
Oakley	38,789	1.7	659	264
Pittsburg	67,628	1.7	1,150	460
Antioch	108,298	1.5	1,624	650
San Ramon	78,561	1.5	1,178	471
Martinez	37,384	1.3	486	194
Danville	43,691	1.1	481	192
Balance	168,323	1.0	1,683	673
Concord	126,069	0.9	1,135	454
Richmond	107,346	0.9	966	386
San Pablo	29,730	0.8	238	95
Walnut Creek	66,868	0.8	535	214
Clayton	11,288	0.7	79	32
El Cerrito	24,288	0.7	170	68
Hercules	24,775	0.7	173	69
Pinole	18,946	0.7	133	53
Pleasant Hill	34,162	0.7	239	96
Moraga	16,466	0.6	99	40

Commercial Real Estate



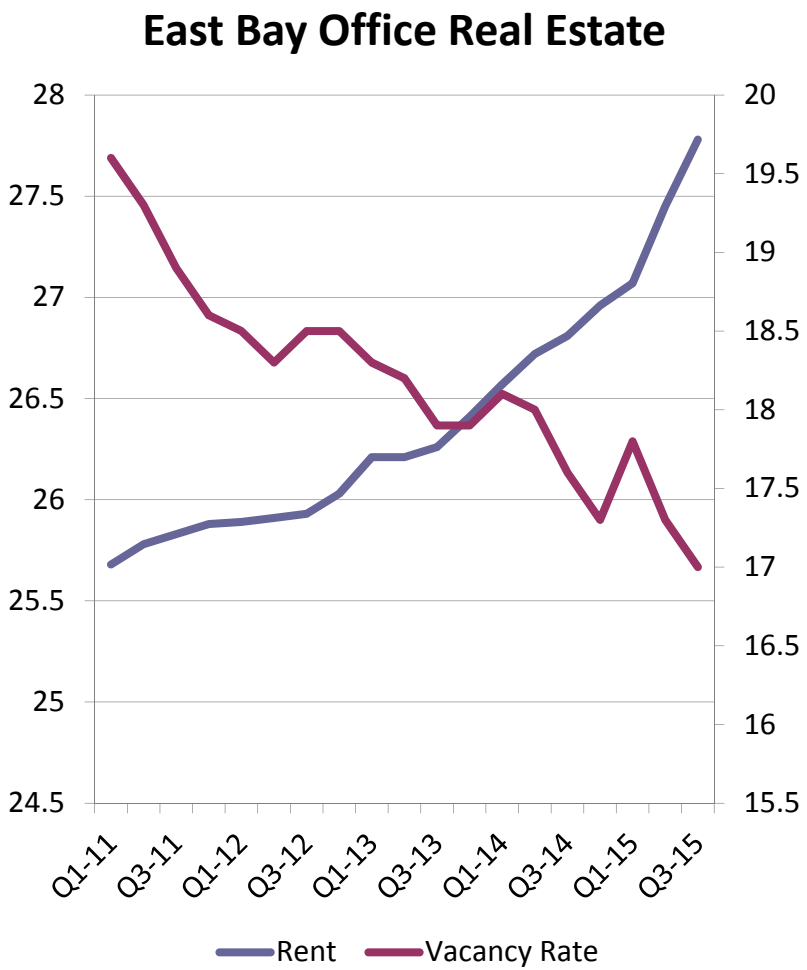
Regional Retail Rent ($/Sq Ft)

Region	Q3-15	Y-o-Y Growth
San Jose	33	4.7
San Francisco (MD)	36	4.3
Los Angeles (MD)	31	3.3
Orange County (MD)	32	2.2
San Diego	30	2.2
Oakland (MD)	29	2.1

Regional Retail Vacancy Rate (%)

Region	Q3-15	Y-o-Y Growth
Orange County (MD)	5.0	-0.2
Los Angeles (MD)	6.0	-0.1
San Diego	6.2	-0.1
San Francisco (MD)	3.3	0.0
San Jose	4.4	0.0
Oakland (MD)	6.4	0.1

Commercial Real Estate



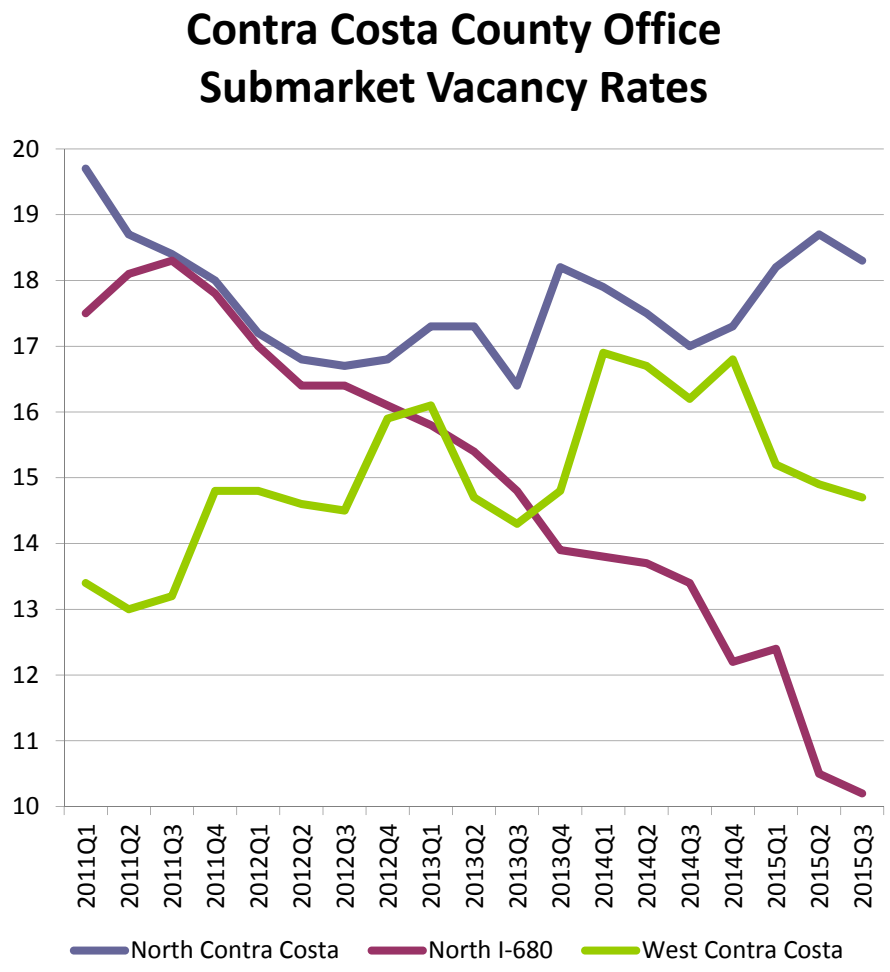
Regional Office Rent ($/Sq Ft)

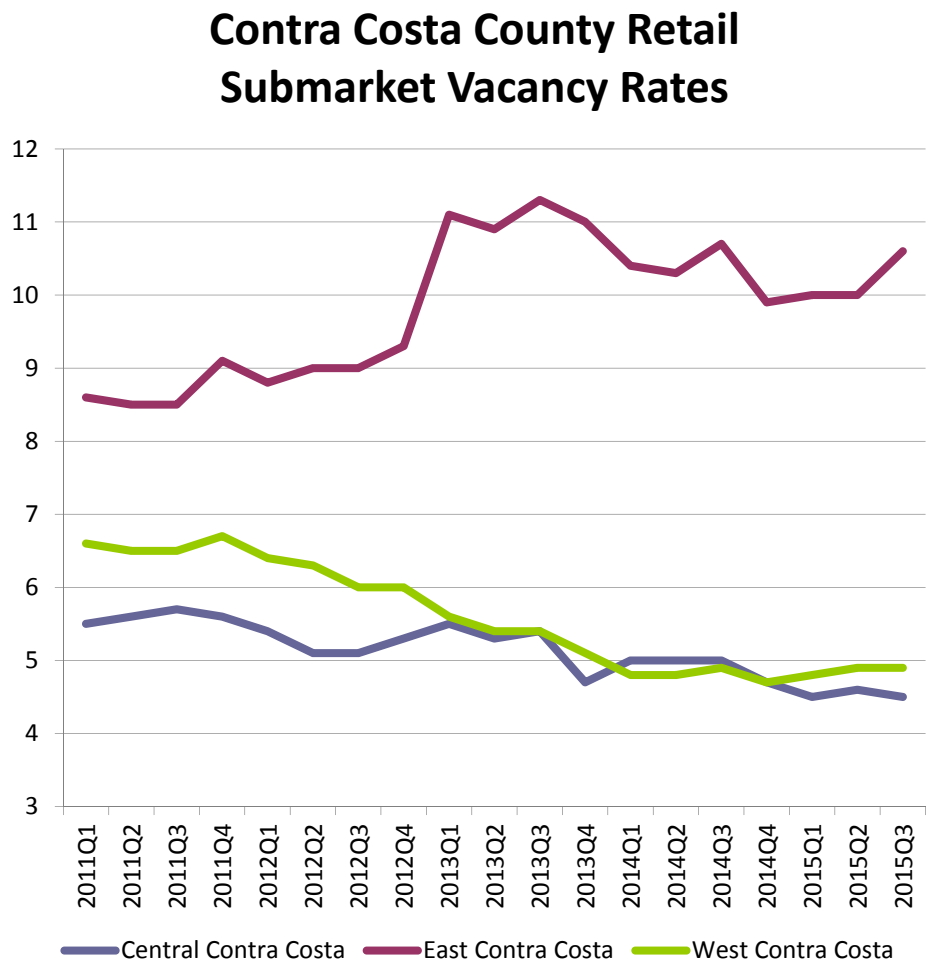
Region	Q3-15	Y-o-Y Growth
San Francisco (MD)	48.83	6.3
San Jose	35.76	5.9
Orange County (MD)	30.07	5.7
Los Angeles (MD)	35.12	3.8
Oakland (MD)	27.78	3.6
San Diego	30.61	3.6

Regional Office Vacancy Rate (%)

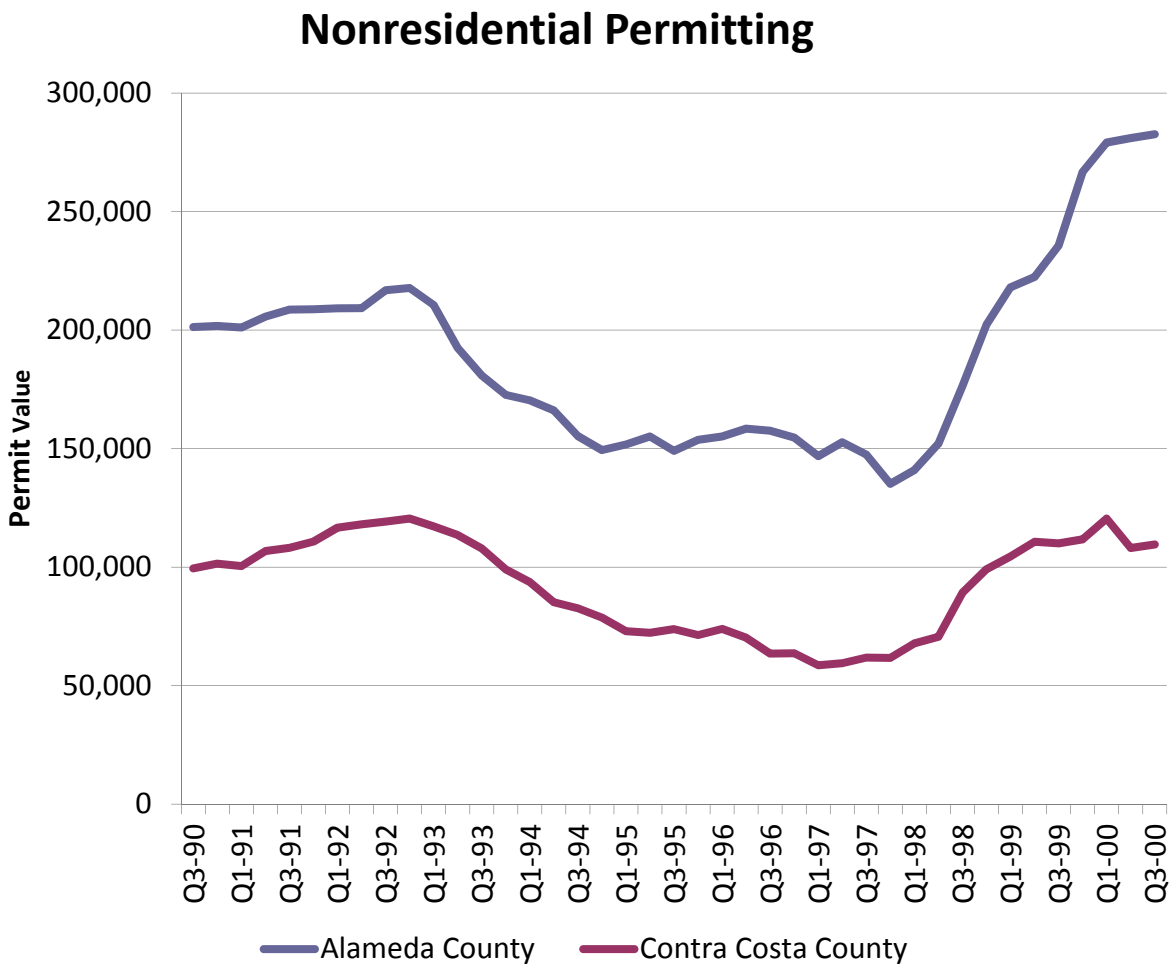
Region	Q3-15	Y-o-Y Growth
San Francisco (MD)	10.7	-1.5
San Diego	15.2	-0.9
San Jose	16.9	-0.8
Oakland (MD)	17.0	-0.6
Orange County (MD)	16.6	-0.1
Los Angeles (MD)	14.9	0.0

Commercial Real Estate





Construction

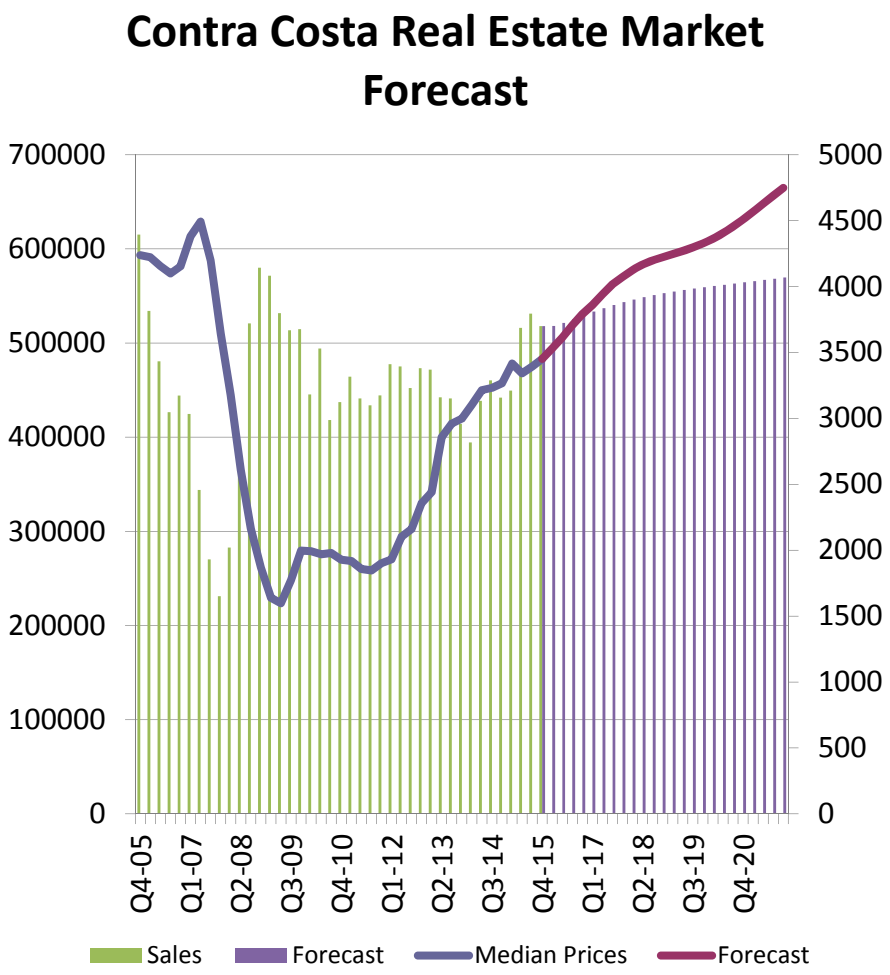


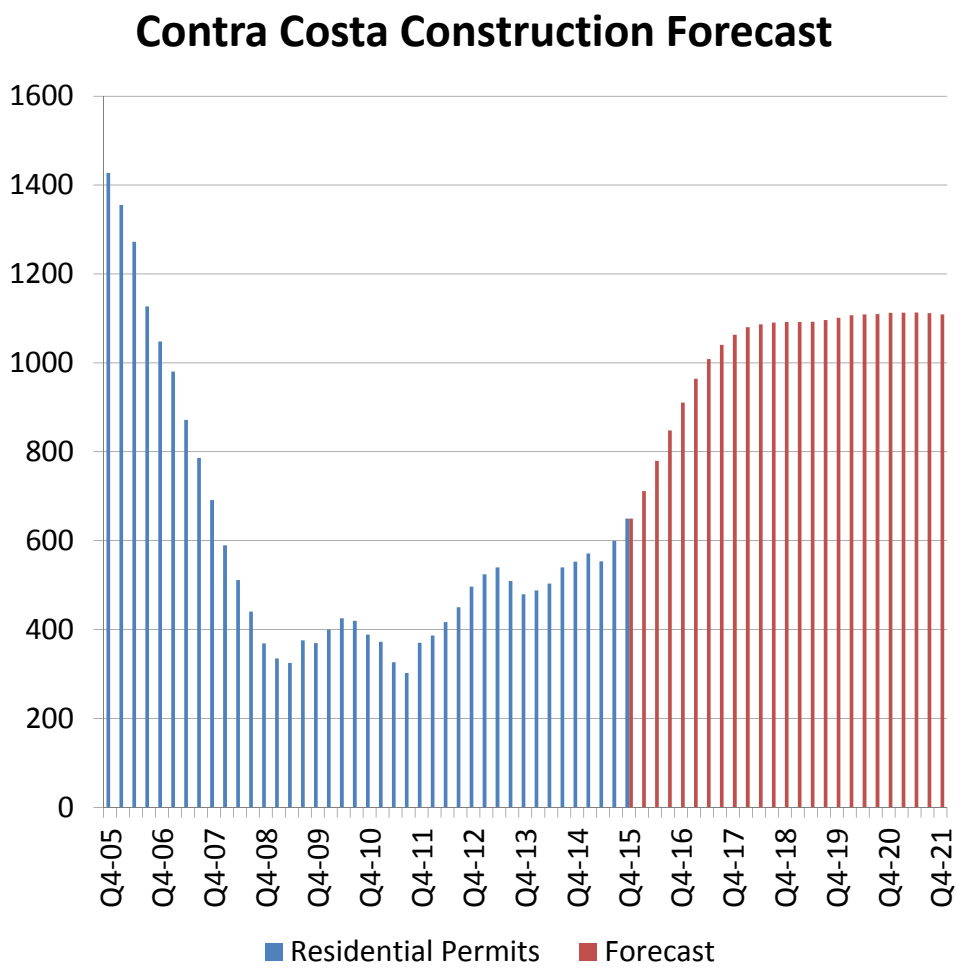
Forecast

East Bay 3-Year Forecast

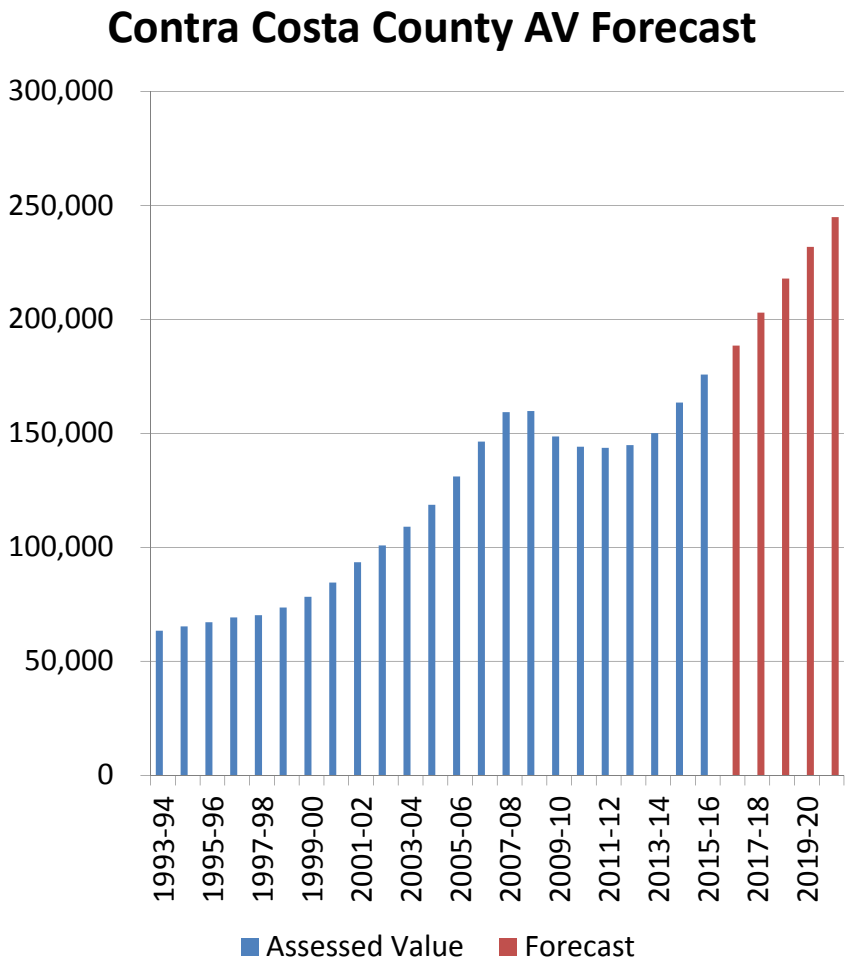
Indicator	2015	2016	2017	2018
Total Population	2,716,220	2,748,845	2,780,712	2811097
Pop. Growth (%)	1.18	1.20	1.16	1.09
Unemployment Rate	4.7	4.5	4.4	4.3
Unemp. Rate Change (%)	-20.7	-6.0	-1.7	-1.4
Total Nonfarm Employment	1,087.1	1,109.2	1,131.6	1,155.6
Employment Growth (%)	2.1	2.0	2.0	2.1
Median Home Price	570,365	607,174	661,626	699,839
Home Price Growth (%)	6.5	6.5	9.0	5.8
Home Sales	26,991	28,937	30,171	30,933
Home Sales Growth (%)	11.6	7.2	4.3	2.5
Nonresidential Permit Values ($ Millions)	1,575.5	1,614.0	1,685.2	1,767.5
Nonres. Permit Growth (%)	14.2	2.4	4.4	4.9
Single-Family Building Permits (000s)	3.2	4.0	5.0	5.5
Multi-Family Building Permits (000s)	4.2	4.6	4.8	4.7
Taxable Sales ($ Millions)	45,908	48,603	50,678	53,075
Tax. Sales Growth (%)	5.8	5.9	4.3	4.7

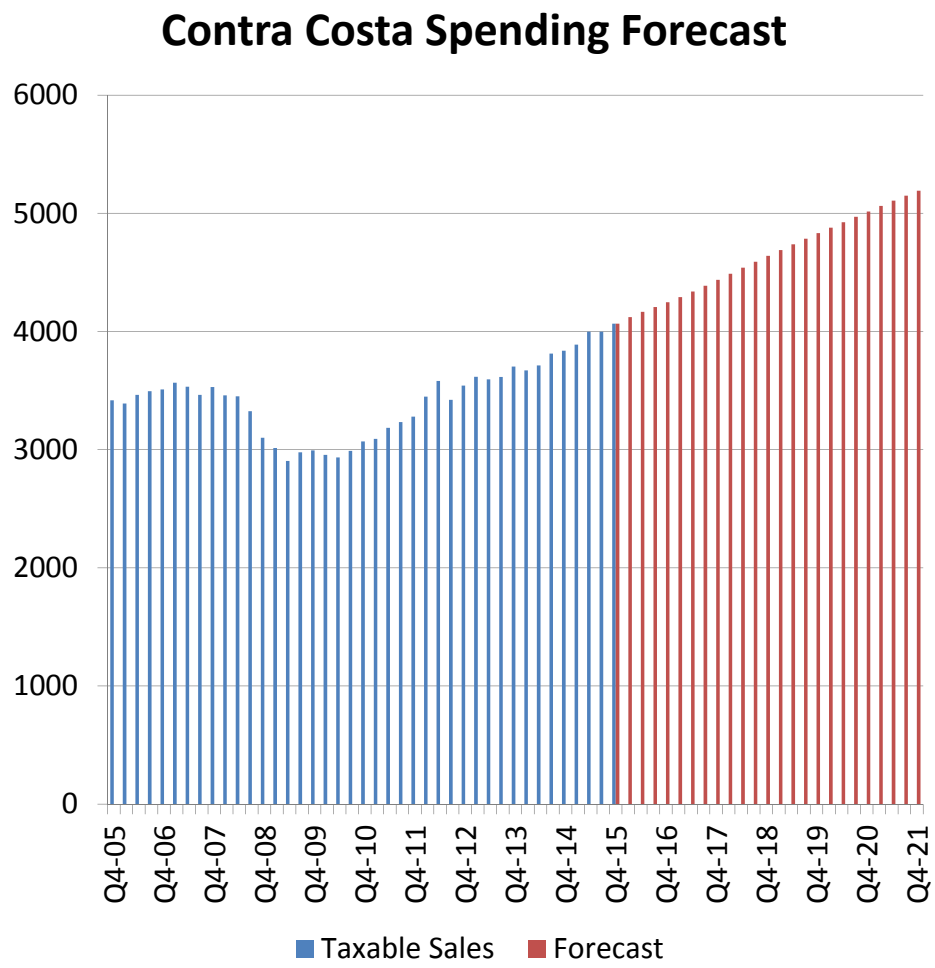
Forecast


Contra Costa Real Estate Market Forecast
700000
600000
500000
400000
300000
200000
100000
0
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
Q4-05
Q1-07
Q2-08
Q3-09
Q4-10
Q1-12
Q2-13
Q3-14
Q4-15
Q1-17
Q2-18
Q3-19
Q4-20
Sales
Forecast
Median Prices
Forecast


Contra Costa Construction Forecast
1600
1400
1200
1000
800
600
400
200
0
Q4-05
Q4-06
Q4-07
Q4-08
Q4-09
Q4-10
Q4-11
Q4-12
Q4-13
Q4-14
Q4-15
Q4-16
Q4-17
Q4-18
Q4-19
Q4-20
Q4-21
Residential Permits
Forecast

Forecast


Contra Costa County AV Forecast
300,000
250,000
200,000
150,000
100,000
50,000
0
1993-94
1995-96
1997-98
1999-00
2001-02
2003-04
2005-06
2007-08
2009-10
2011-12
2013-14
2015-16
2017-18
2019-20
Assessed Value
Forecast


Contra Costa Spending Forecast
6000
5000
4000
3000
2000
1000
0
Q4-05
Q4-06
Q4-07
Q4-08
Q4-09
Q4-10
Q4-11
Q4-12
Q4-13
Q4-14
Q4-15
Q4-16
Q4-17
Q4-18
Q4-19
Q4-20
Q4-21
Taxable Sales
Forecast

In Summary

What not to worry about.

- The US Dollar
- Student Debt
- Asset Bubbles
- Drought
- Consumer Spending
- Labor Markets
- California Business
- Taxes
- California Tax Levels
- Politics

What to worry about.

- China
- Educational Choices
- Bad financial regulation
- Water Policy
- Savings Rates
- Growing Inequality
- California Housing
- Lack of public investment
- California Tax Structure
- A lack of engagement

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