

Economic Trends and Outlook in a Rising Interest Rate Environment

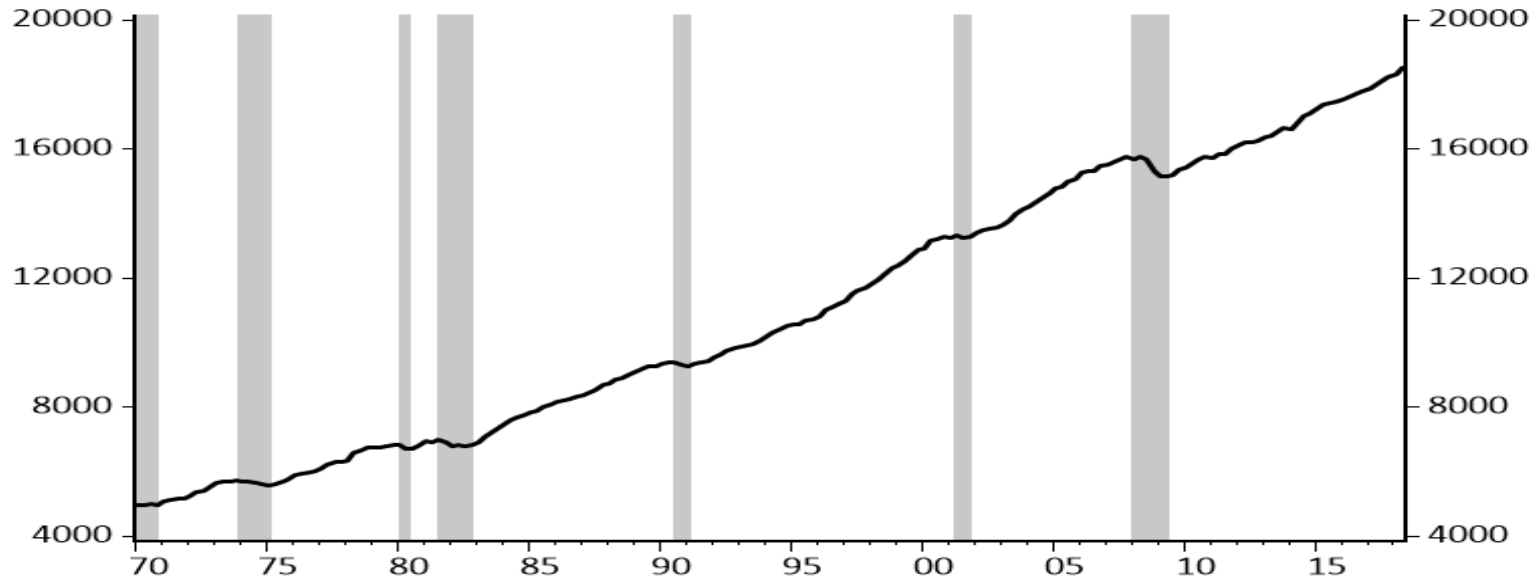
Lawrence Yun, PhD

Chief Economist, National Association of REALTORS®

REALTORS® Conference & Expo • Boston, MA • November 2, 2018

Very Long Economic Expansion

Real Gross Domestic Product
SAAR, Bil.Chn.2012\$



Source: Bureau of Economic Analysis

10/11/18

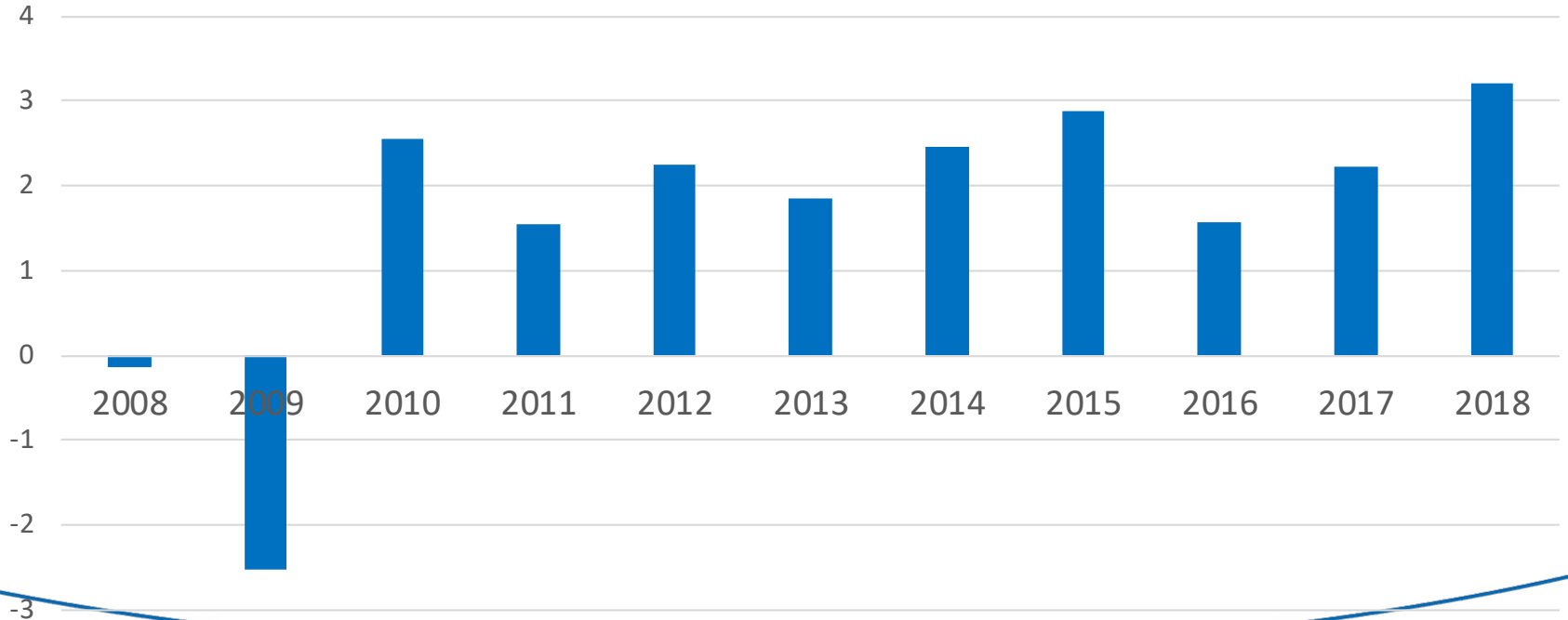


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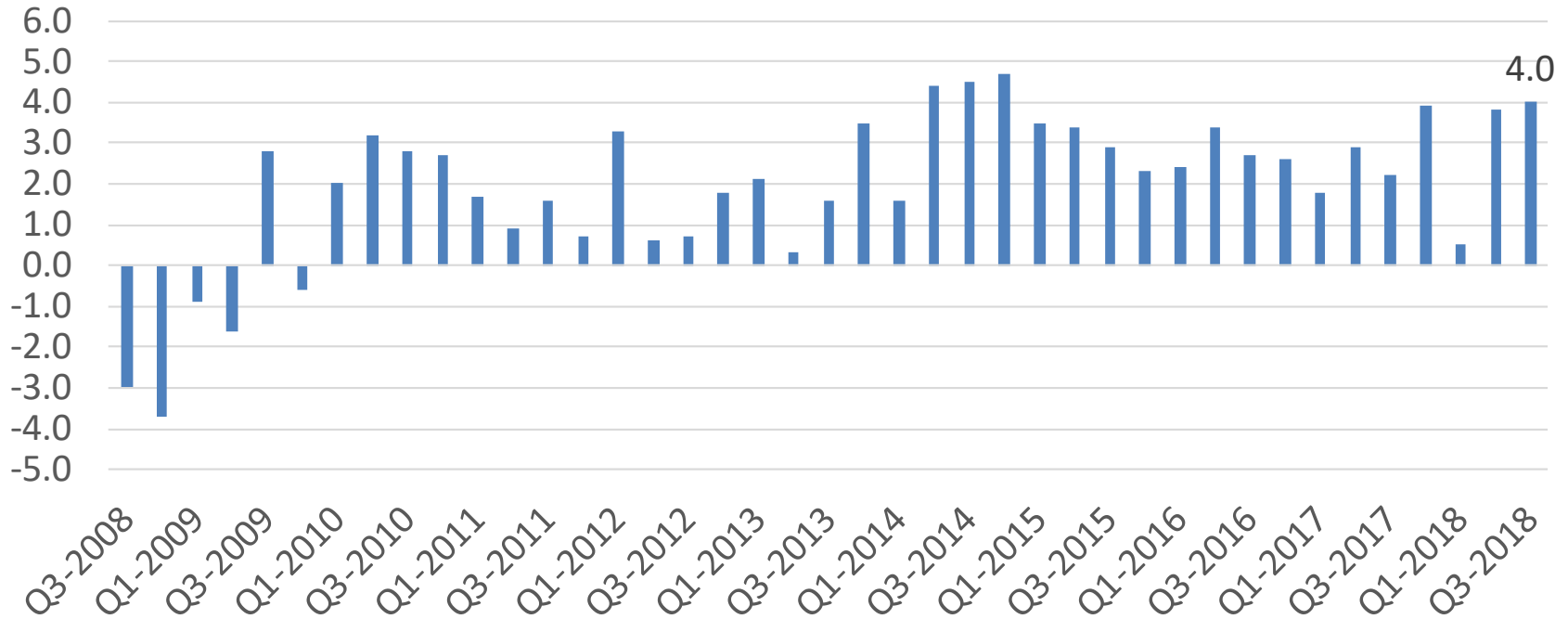
Annual GDP Growth Rate of 3.2% in 2018? (Q1 at 2.2%; Q2 at 4.2%; Q3 at 3.5%)



GDP Components Growth Rates

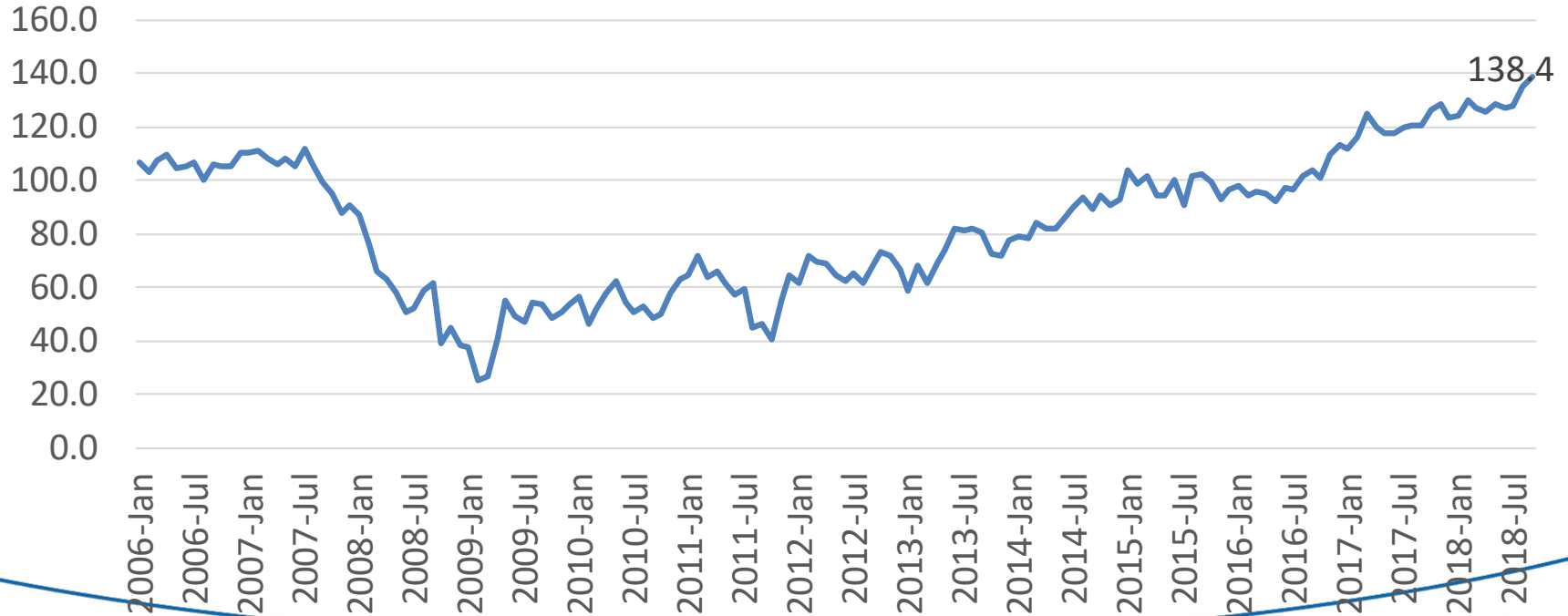
	2018 Q2	2018 Q3	Upcoming Quarters
Consumer Spending	3.8%	4.0%	+2%
Business Spending	8.7%	0.8%	+3%
Government Spending	2.5%	3.3%	0%
Net Exports	Slight Gain	Slight Loss	Slight Loss
Commercial Real Estate Investment	+14.5%	-7.9%	+3%
Residential Real Estate Investment	-1.4%	-4.0%	+4%
GDP	+4.2%	+3%	+2.2%

Consumer Spending Growing Strongly: 4%

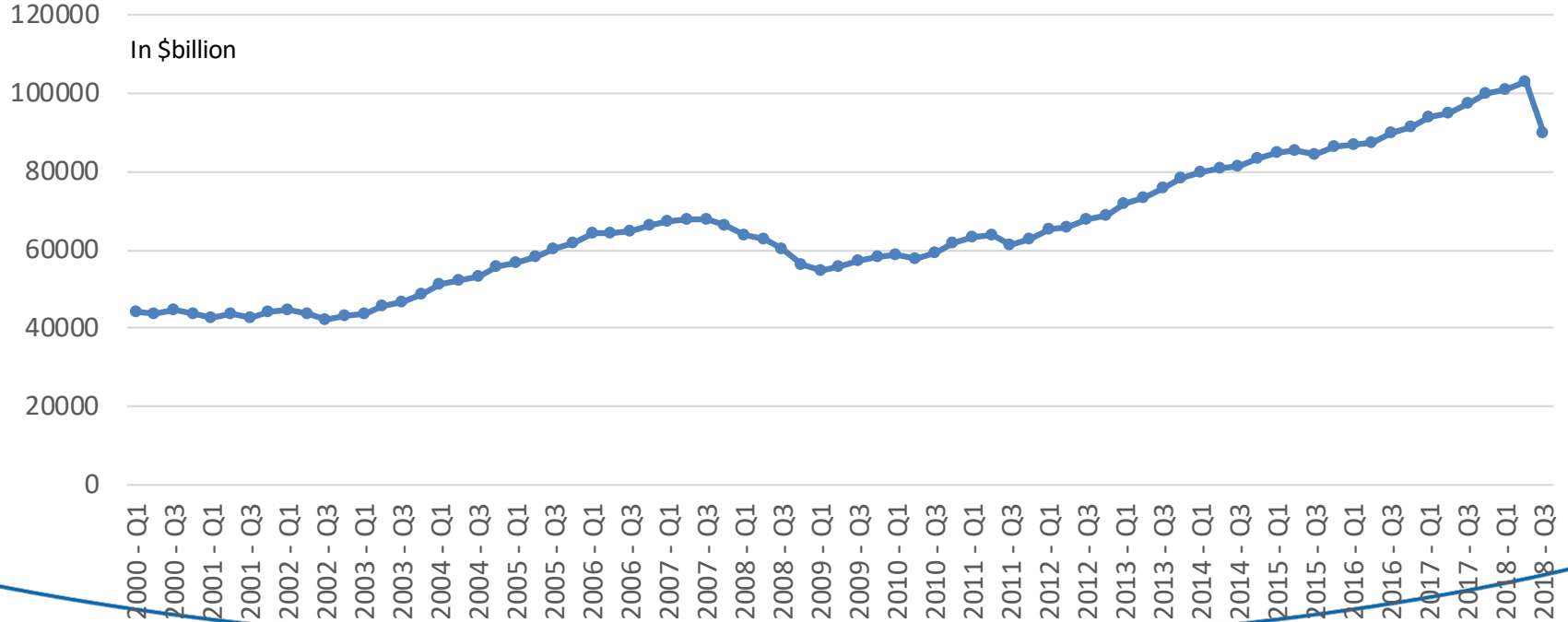


Animal Spirit Revival of Consumers

Consumer Confidence Index (1985=100)

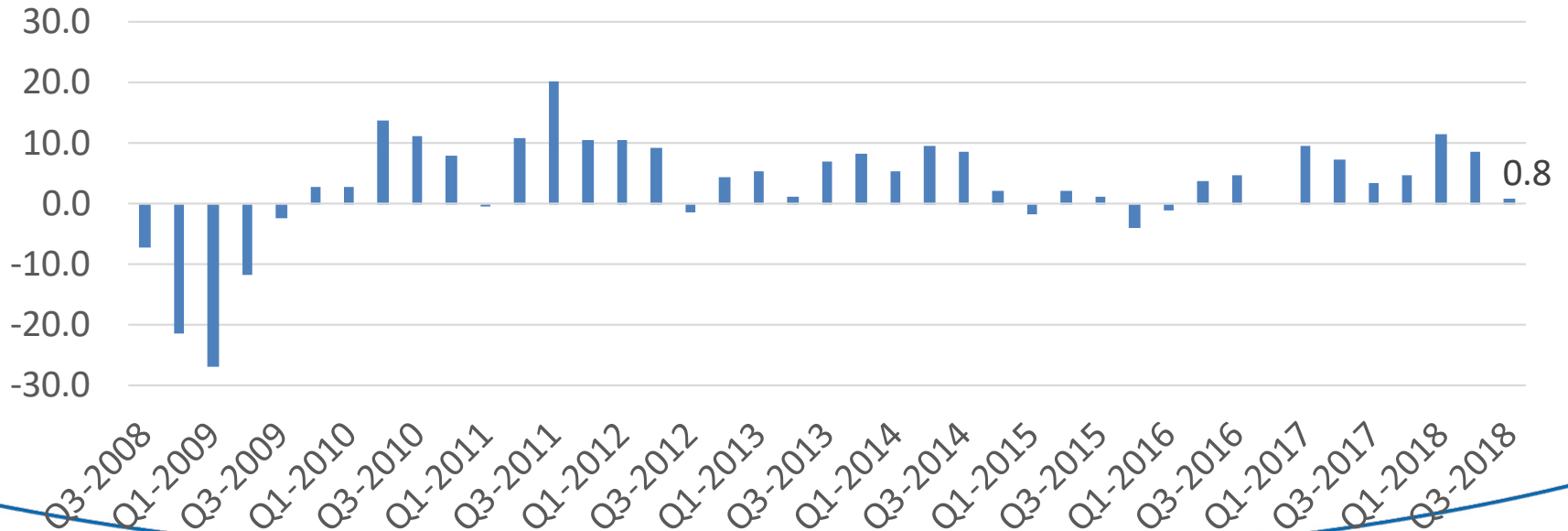


Near Record High Wealth

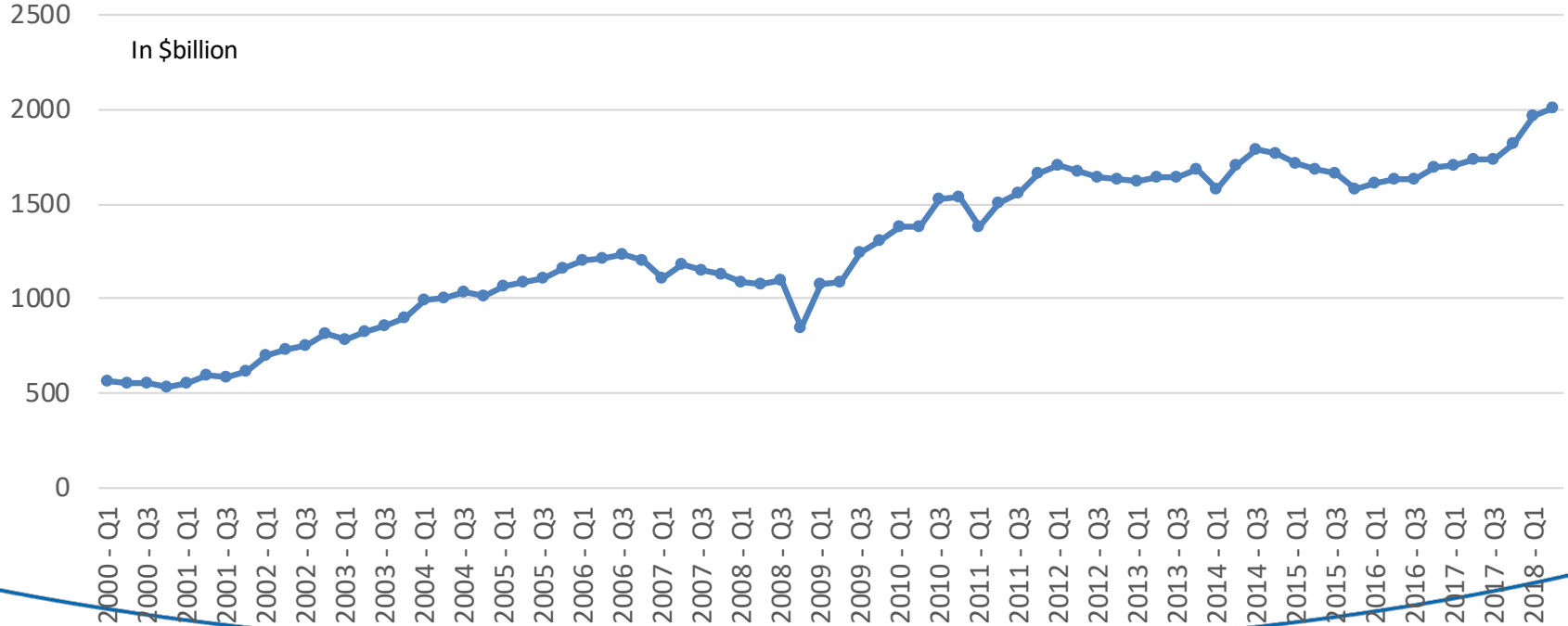


Business Spending Growth Tapers Off: 0.8%

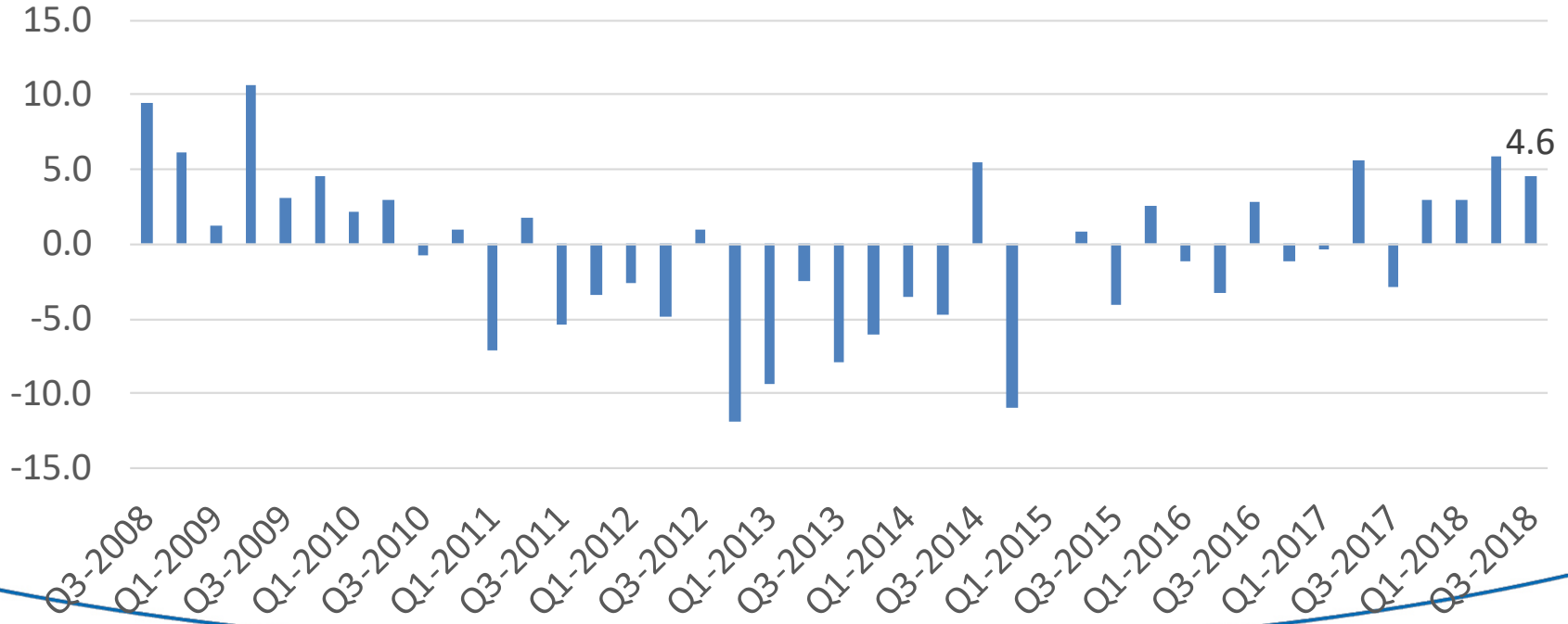
Non-Residential Investment Gr



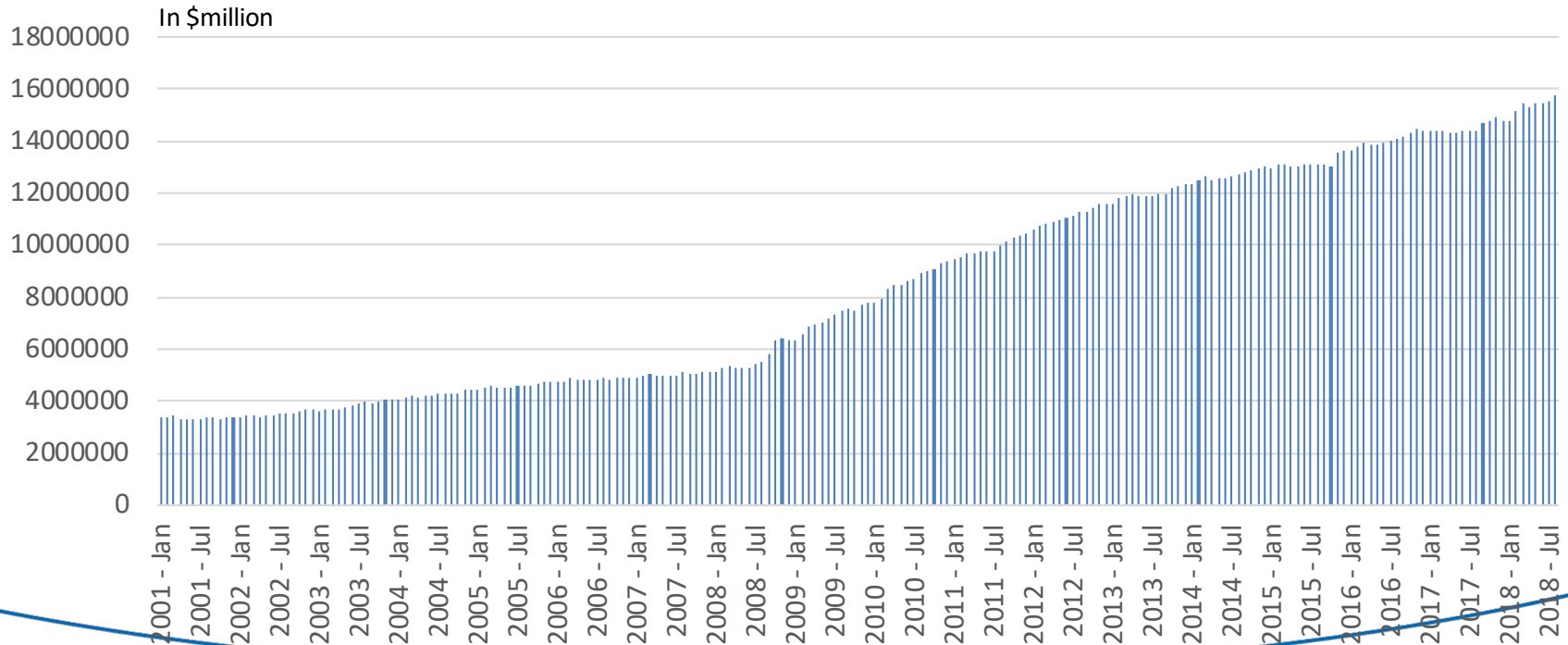
After-Tax Corporate Profits



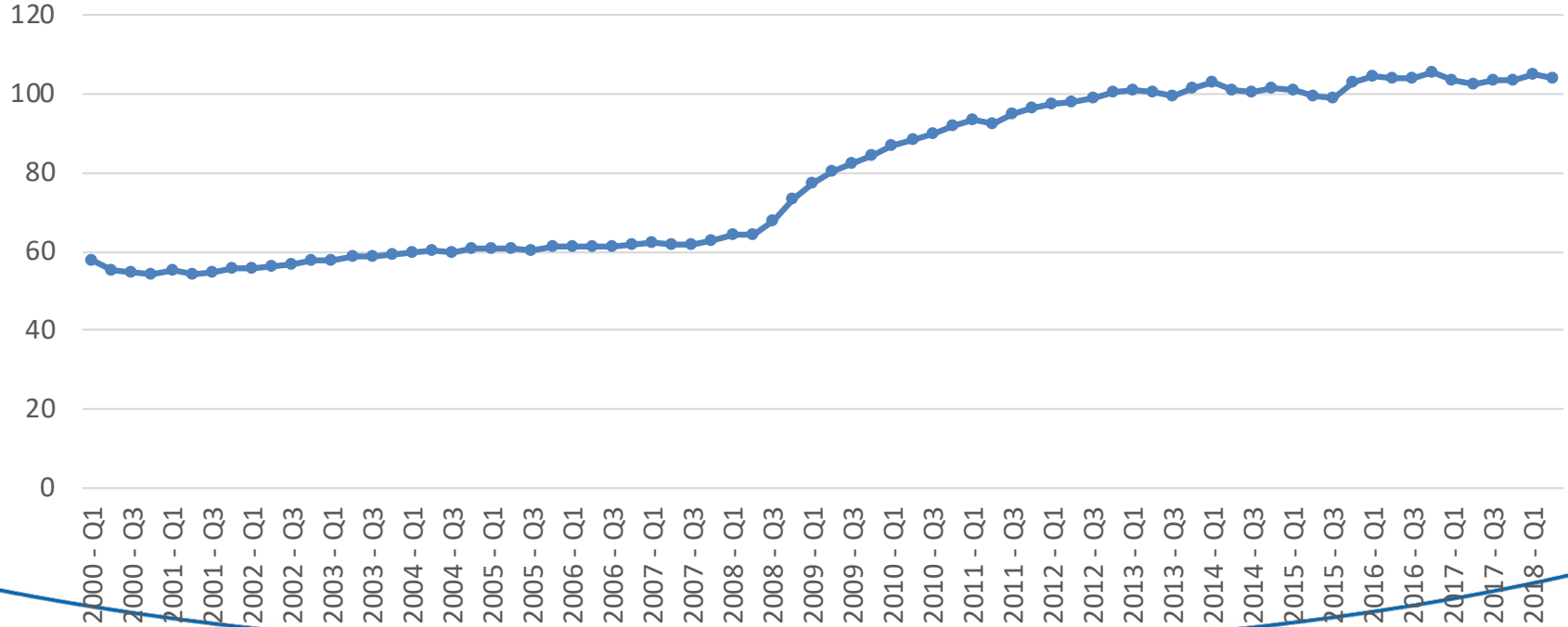
National Defense Spending Has Been Contributing to Growth: 4.6%



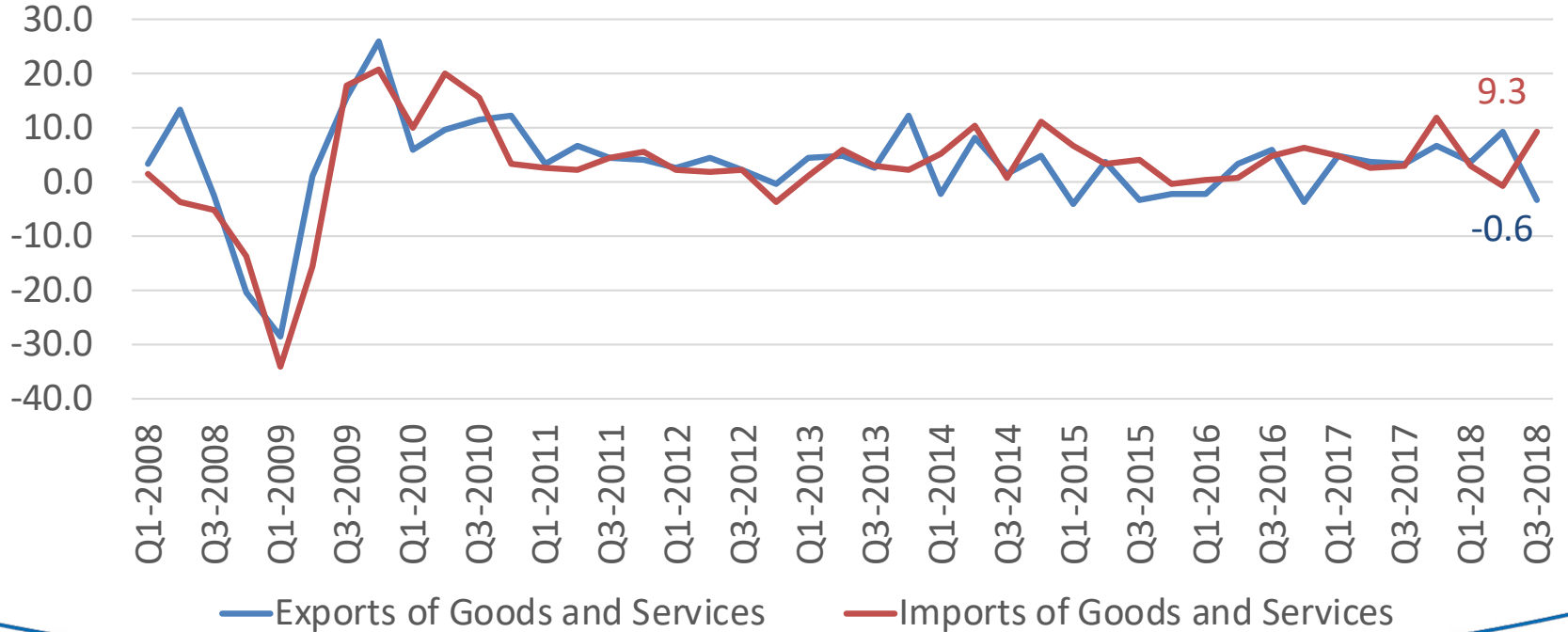
National Debt Held by Public



National Debt to GDP (%)



Imports Growth Outpace Exports



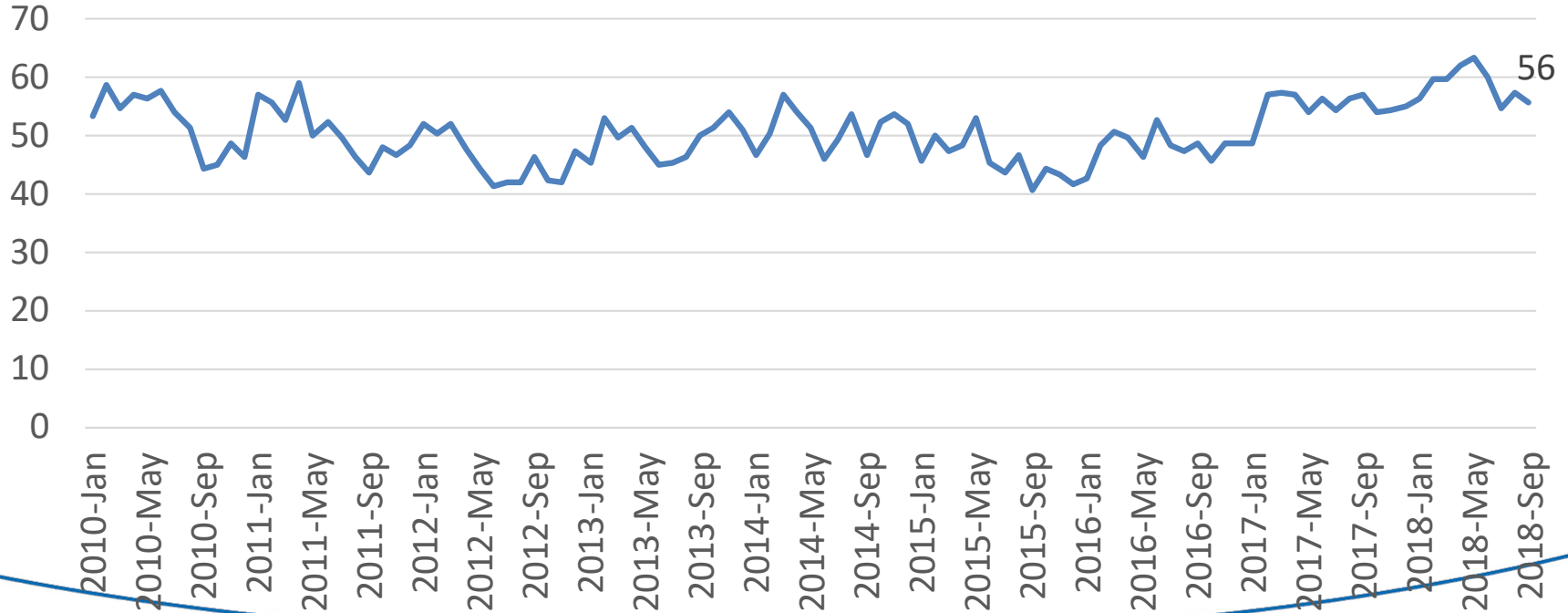
Oil Price – Bouncing Off Lows and Stabilizing

(West Texas Intermediate)



Backlog of Orders: Breaking Higher

(50+: Economy is Expanding)



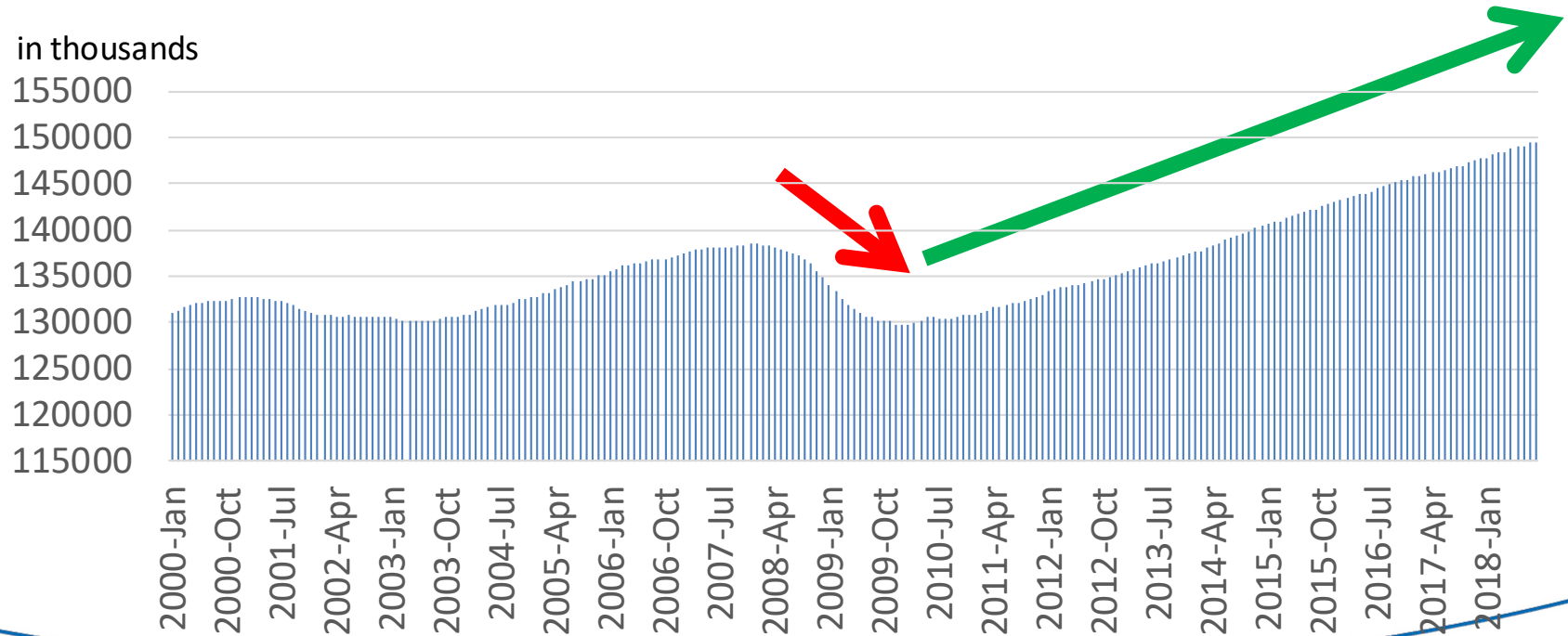
Low Unemployment Rate

(Sept 2018 figure is lowest since 1969)



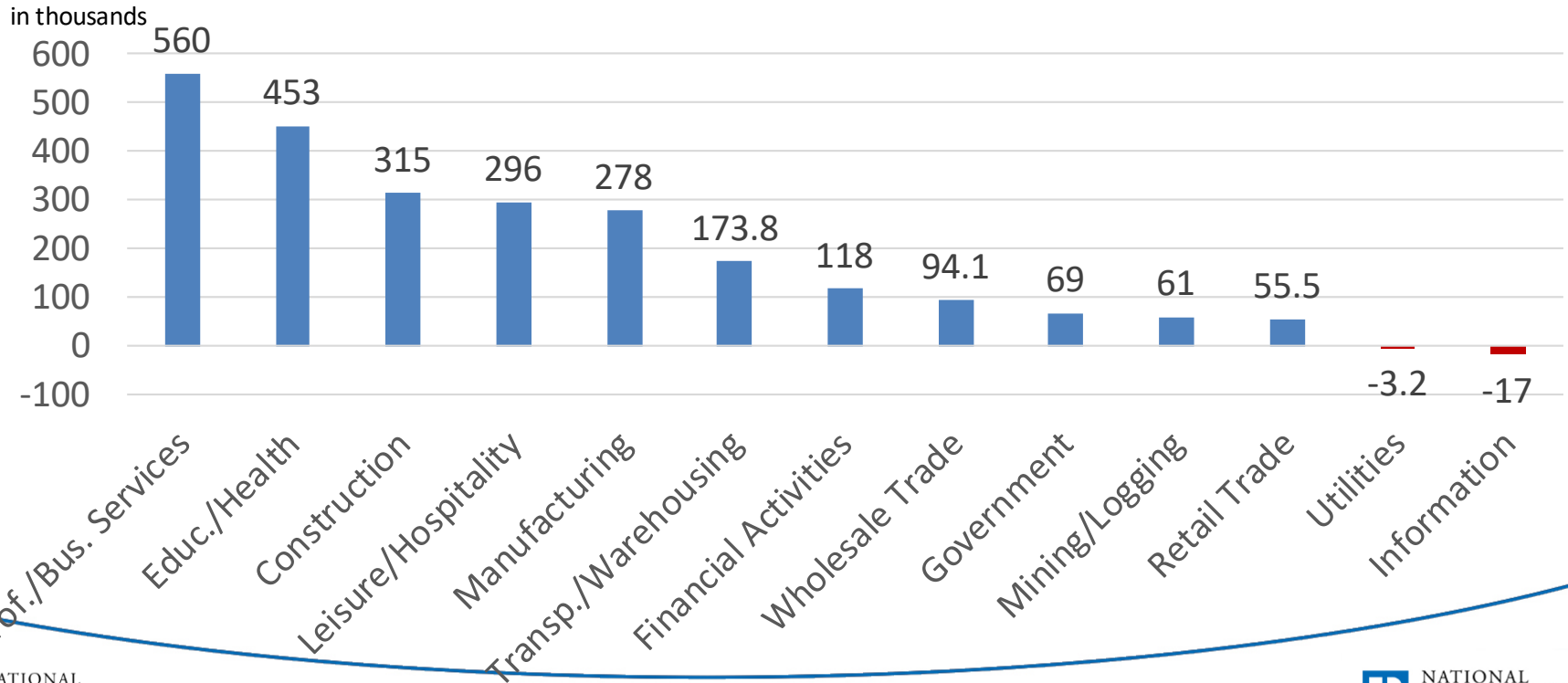
Job Gains for 103 straight months

(19.8 million gained from Feb 2010)



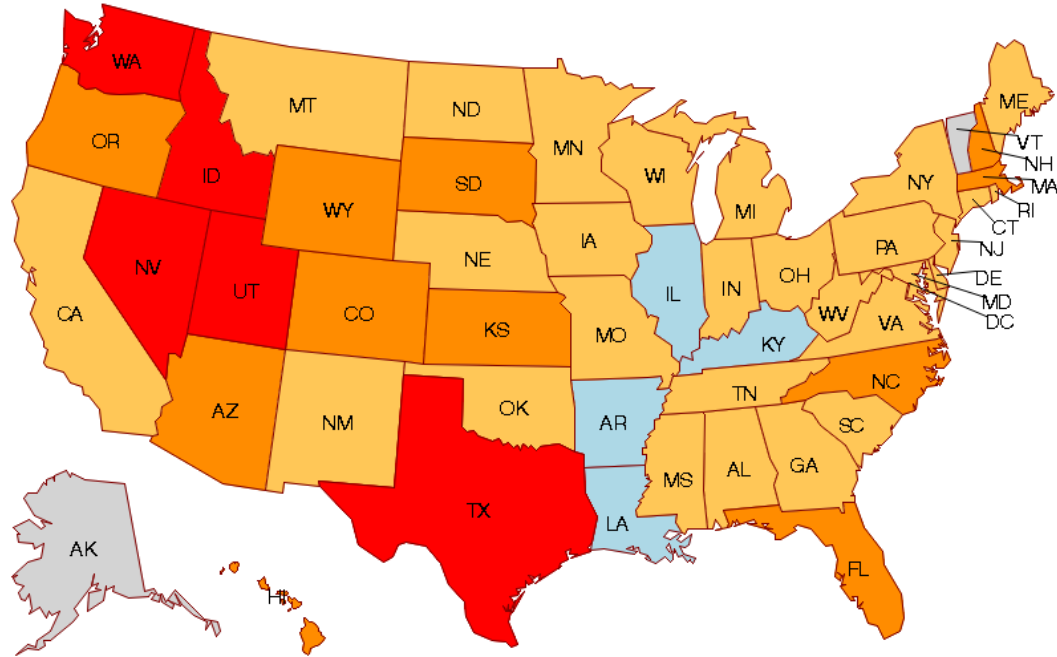
Net Jobs Generated by Industry

(Oct 2017-Sept 2018, in thousands)

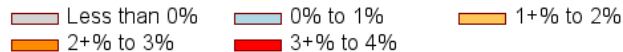


Recent Employment Growth

(year over year % growth from August 2017 to August 2018)

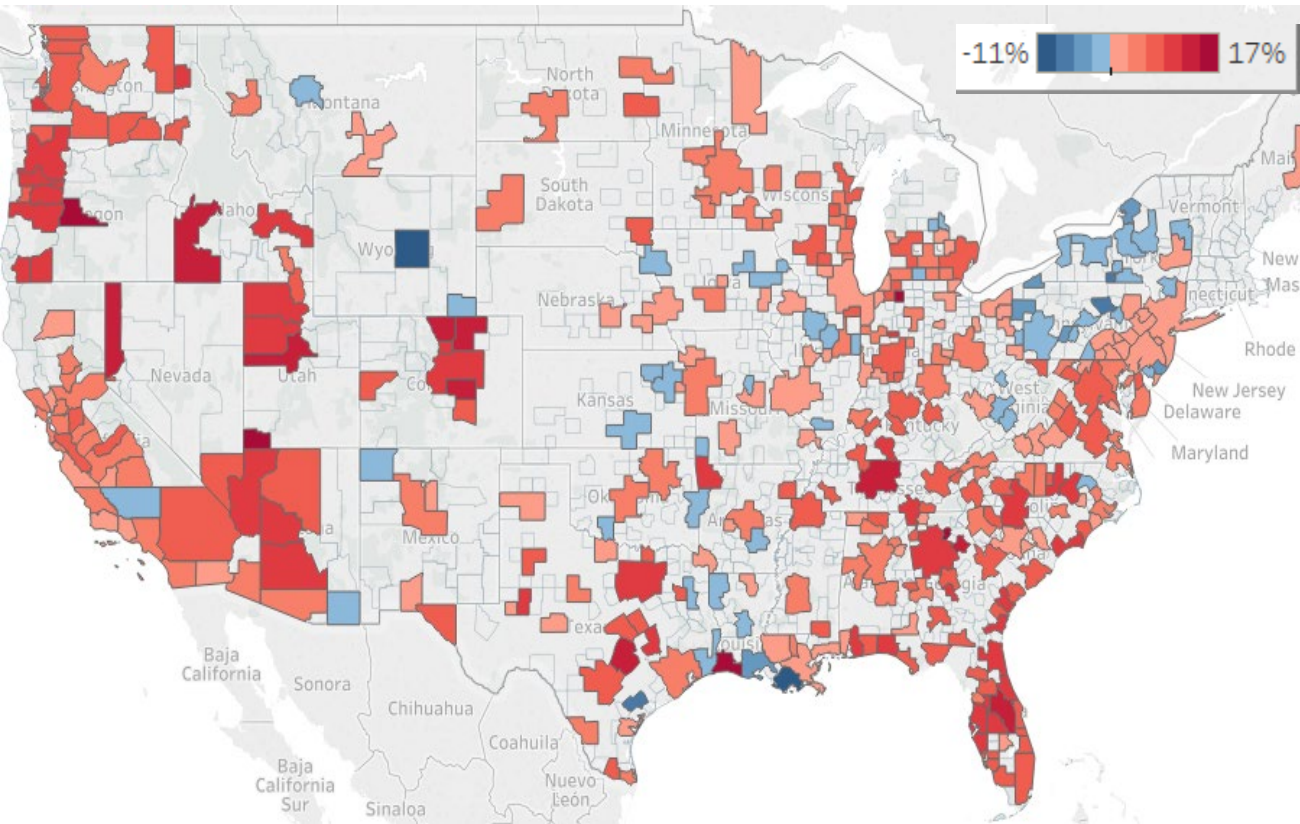


Change in Employment in August 2018 from One Year Ago



Many Metros Have Over 3% Job Growth

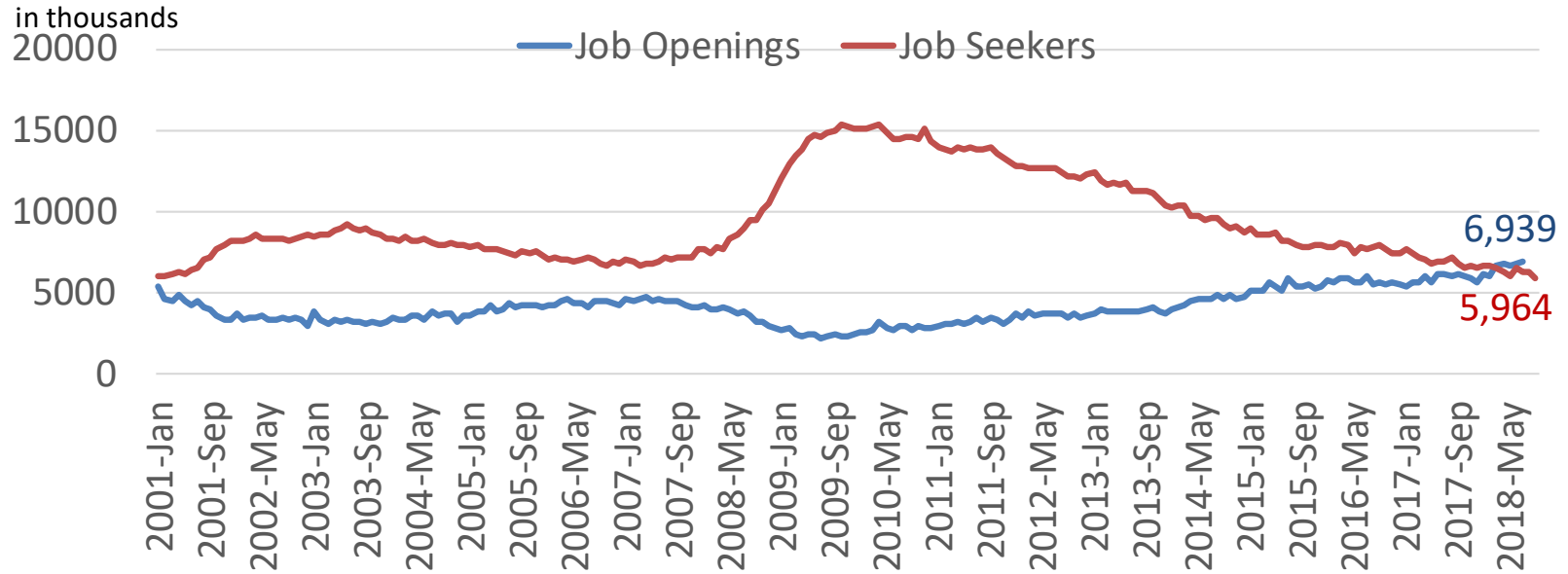
2015 Q2–2018 Q2



	Chg ('000)	Pct Chg
Dallas-Fort Worth-Arlington,...	342.7	10%
Los Angeles-Long Beach-Ana..	304.8	5%
Atlanta-Sandy Springs-Rosw..	303.5	11%
Los Angeles-Long Bch-Glend..	253.3	5%
Dallas-Plano-Irving TX MetDiv	252.7	11%
Miami-Fort Lauderdale-West ..	223.6	8%
Phoenix-Mesa-Scottsdale, AZ	216.6	11%
Washington-Arlington-Alexa..	180.5	6%
Boston-Cambridge-Nashua ..	179.7	7%
Washngtn-Arlngtn-Alexandr..	162.7	7%
New York-Newark-Jersey Cit..	154.4	2%
NY-Jersey Cty-White Plains ..	151.8	2%
Denver-Aurora-Lakewood, CO	150.2	10%
Houston-The Woodlands-Sug..	144.0	5%
Seattle-Tacoma-Bellevue, WA	143.9	8%
Orlando-Kissimmee-Sanford, ..	138.7	12%
Detroit-Warren-Dearborn, MI	129.2	7%
Riverside-San Bernardino-On..	124.1	7%
Charlotte-Concord-Gastonia, ..	121.6	10%
Austin-Round Rock, TX	120.6	12%
Tampa-St. Petersburg-Clear..	119.1	9%
Boston-Cambridge-Newton ..	117.9	8%
Nashville-Davidson-Murfrees..	116.8	13%

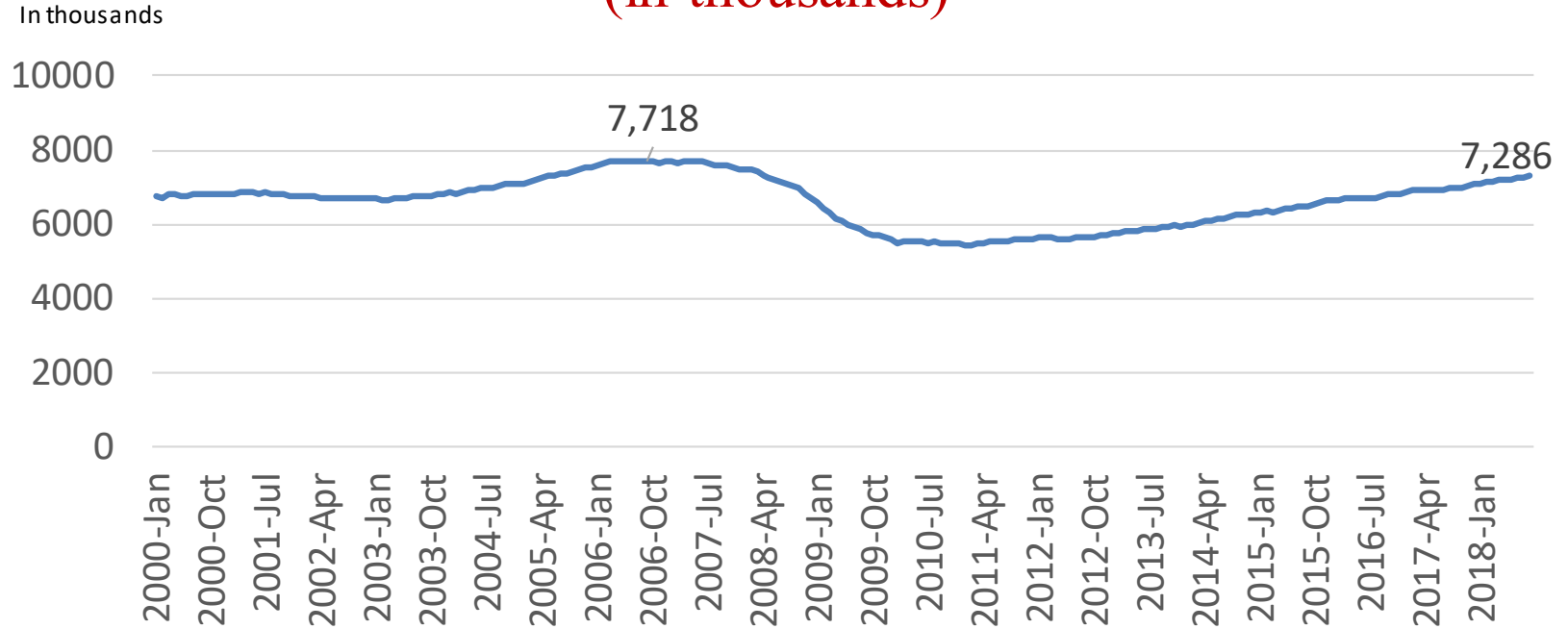
More Job Openings Than Job Seekers

(in thousands)



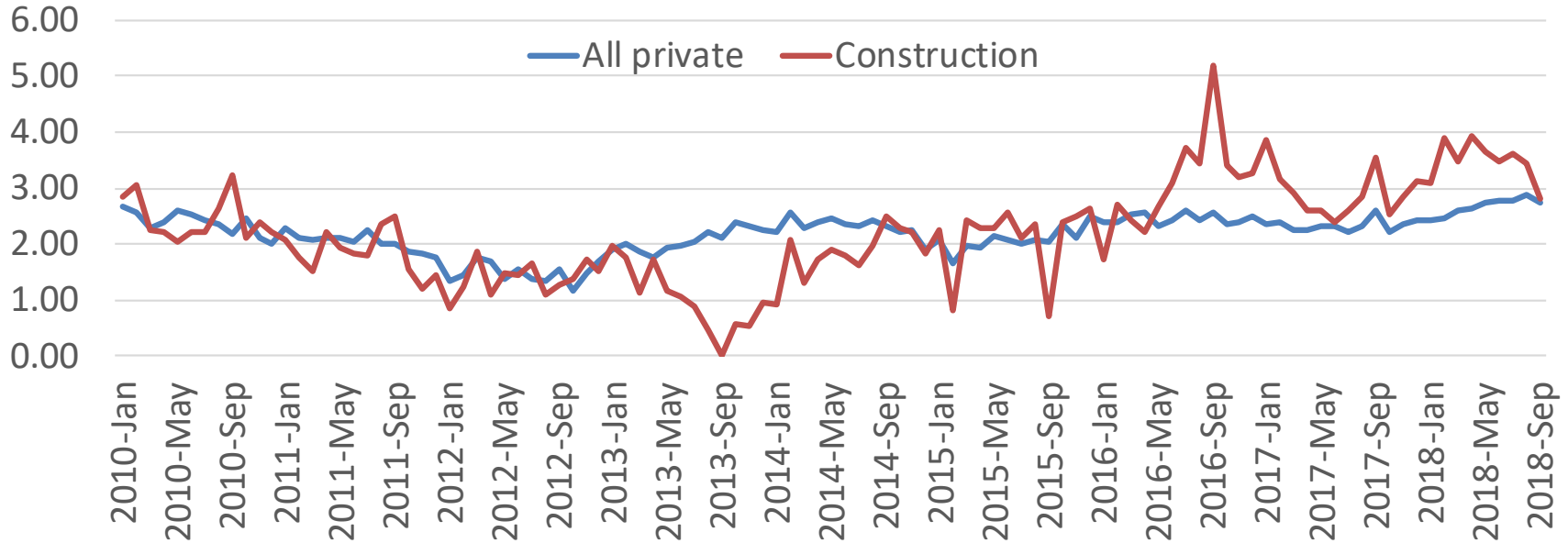
Construction Workers Still Below Peak

(in thousands)



Construction Job Wage Increase

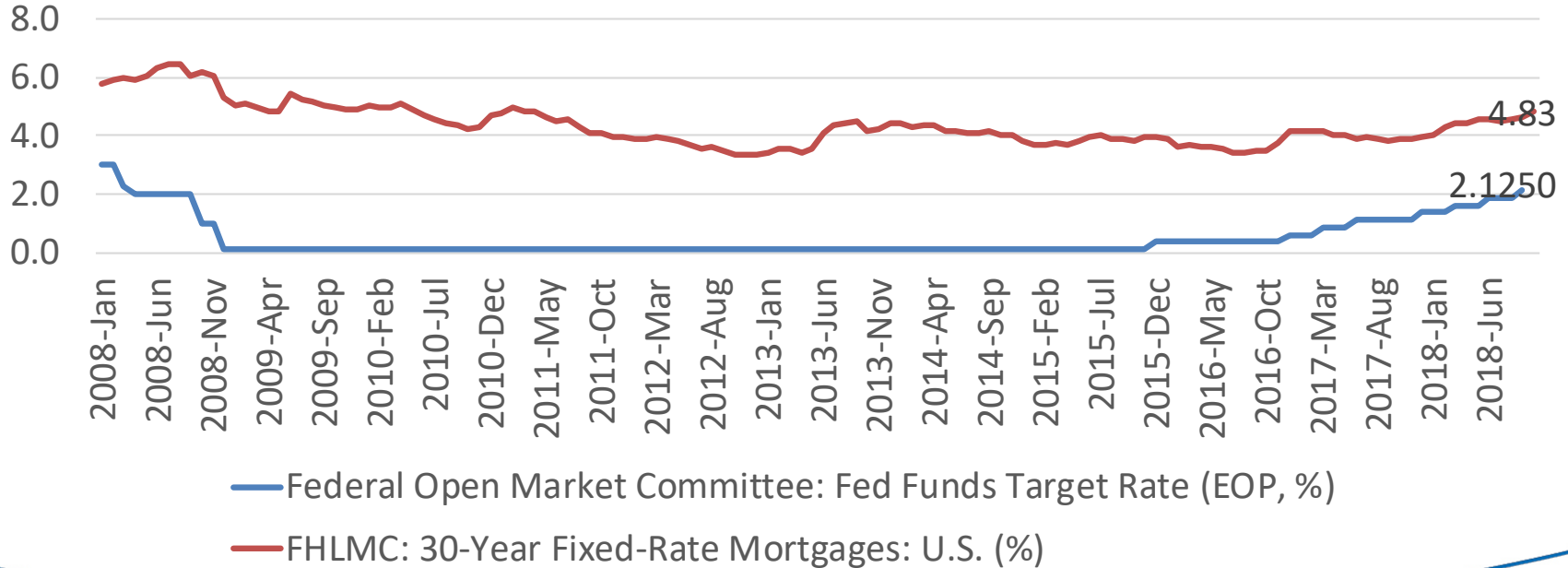
(year over year % growth)



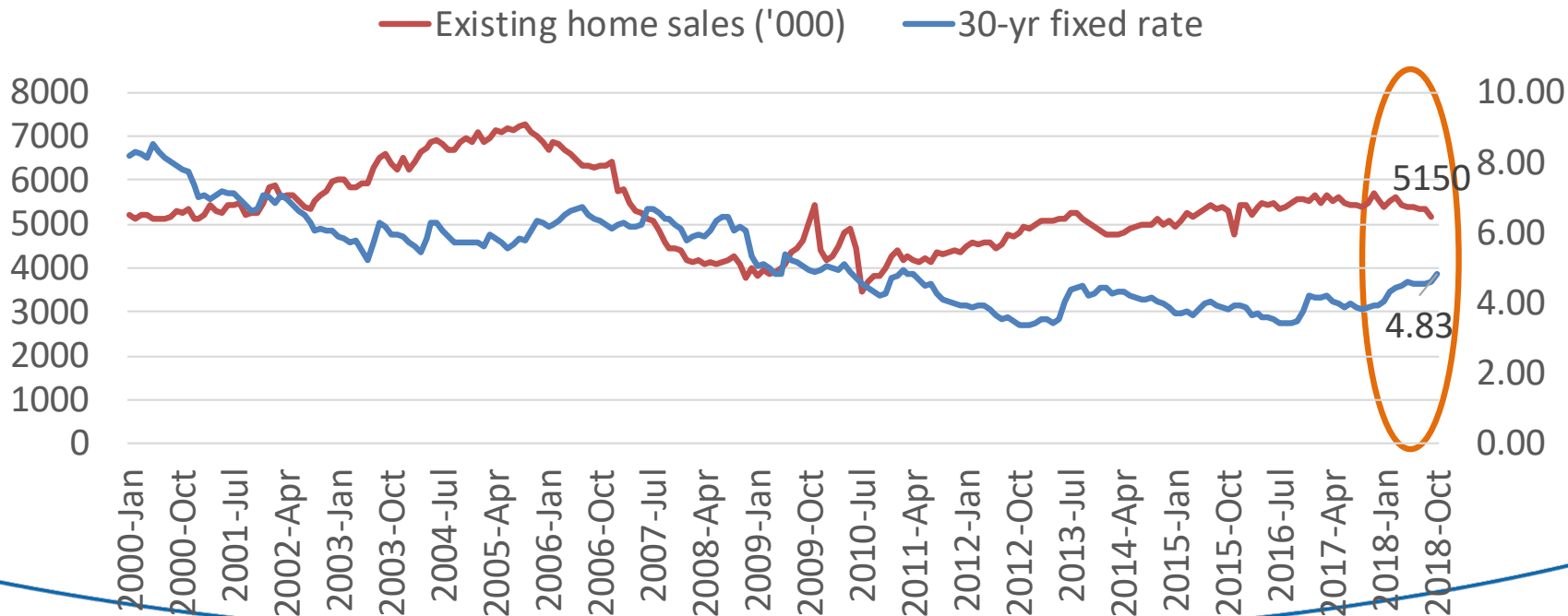
Production and non-supervisory nonfarm employees

Interest Rates On the Rise

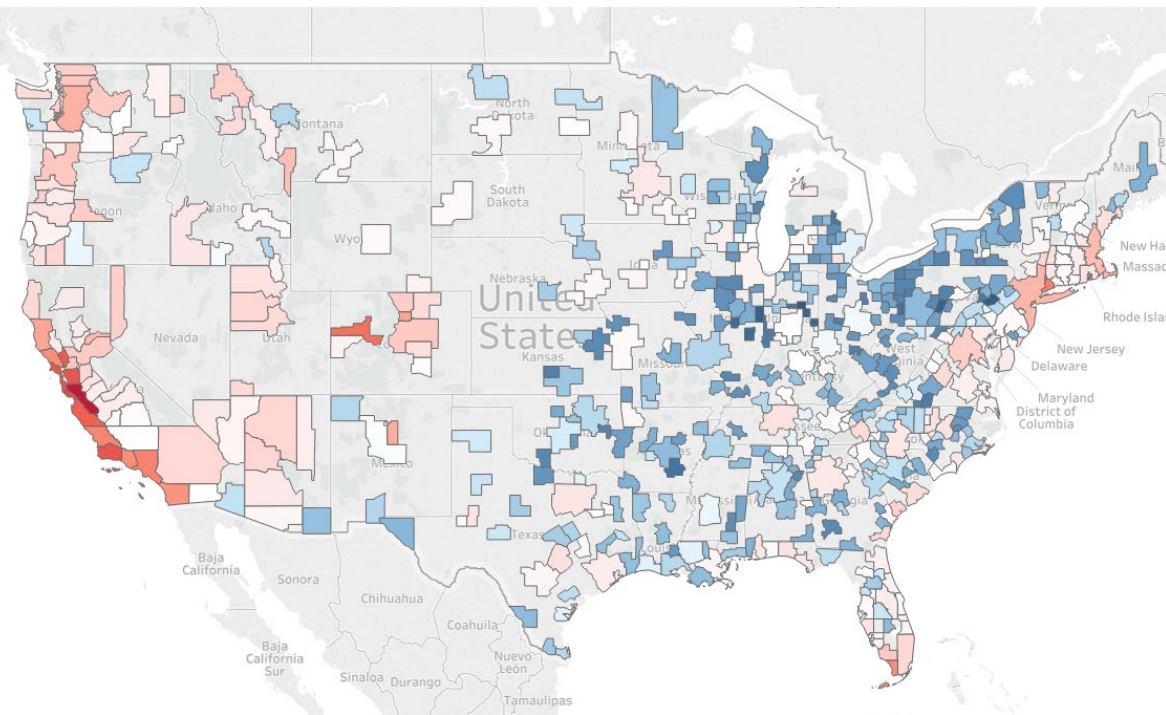
FOMC Target and 30-Year Mortgage Rate (as of Oct 2018)



Slower Home Sales: Mix of Rising Interest Rates and Rising Prices



Home Prices Still Rising in the West



Median Listing Price on Realtor.com

Metro Area	Price		Y/Y Change	
	September 2018	September 2017	September 2018	September 2017
San Jose-Sunnyvale-Sant...	\$1,145,300	\$1,095,800	4.5%	21.8%
Santa Cruz-Watsonville, ..	\$930,000	\$906,300	2.6%	3.7%
Santa Maria-Santa Barba..	\$899,500	\$949,500	-5.3%	-15.8%
San Francisco-Oakland-H..	\$899,050	\$868,050	3.6%	8.2%
Napa, CA	\$875,425	\$876,288	-0.1%	0.1%
Kahului-Wailuku-Lahaina..	\$867,050	\$792,050	9.5%	5.7%
Salinas, CA	\$860,025	\$904,550	-4.9%	3.7%
Glenwood Springs, CO	\$803,300	\$798,300	0.6%	8.7%
Bridgeport-Stamford-No..	\$749,050	\$742,500	0.9%	12.5%
Los Angeles-Long Beach-..	\$736,494	\$700,000	5.2%	4.1%
San Luis Obispo-Paso Ro..	\$724,800	\$699,050	3.7%	2.8%
Urban Honolulu, HI	\$697,050	\$695,050	0.3%	5.5%
Santa Rosa, CA	\$695,050	\$750,050	-7.3%	6.2%
Oxnard-Thousand Oaks-V..	\$691,300	\$710,025	-2.6%	1.6%
Key West, FL	\$687,050	\$650,000	5.7%	13.0%
San Diego-Carlsbad, CA	\$669,950	\$661,219	1.3%	5.6%



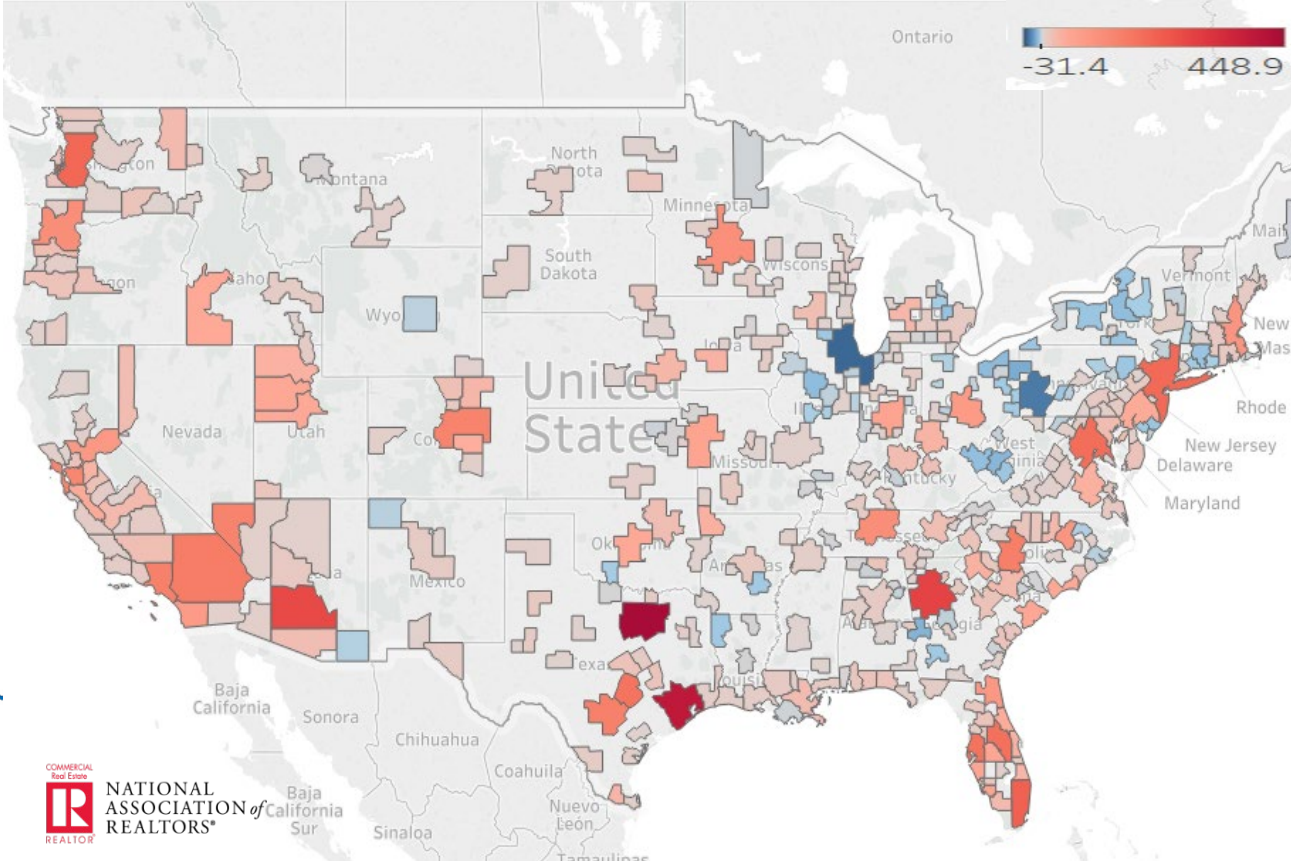
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Metros With Largest Population Increase, 2014-2017

Population Change, 2014-2017 ('000)

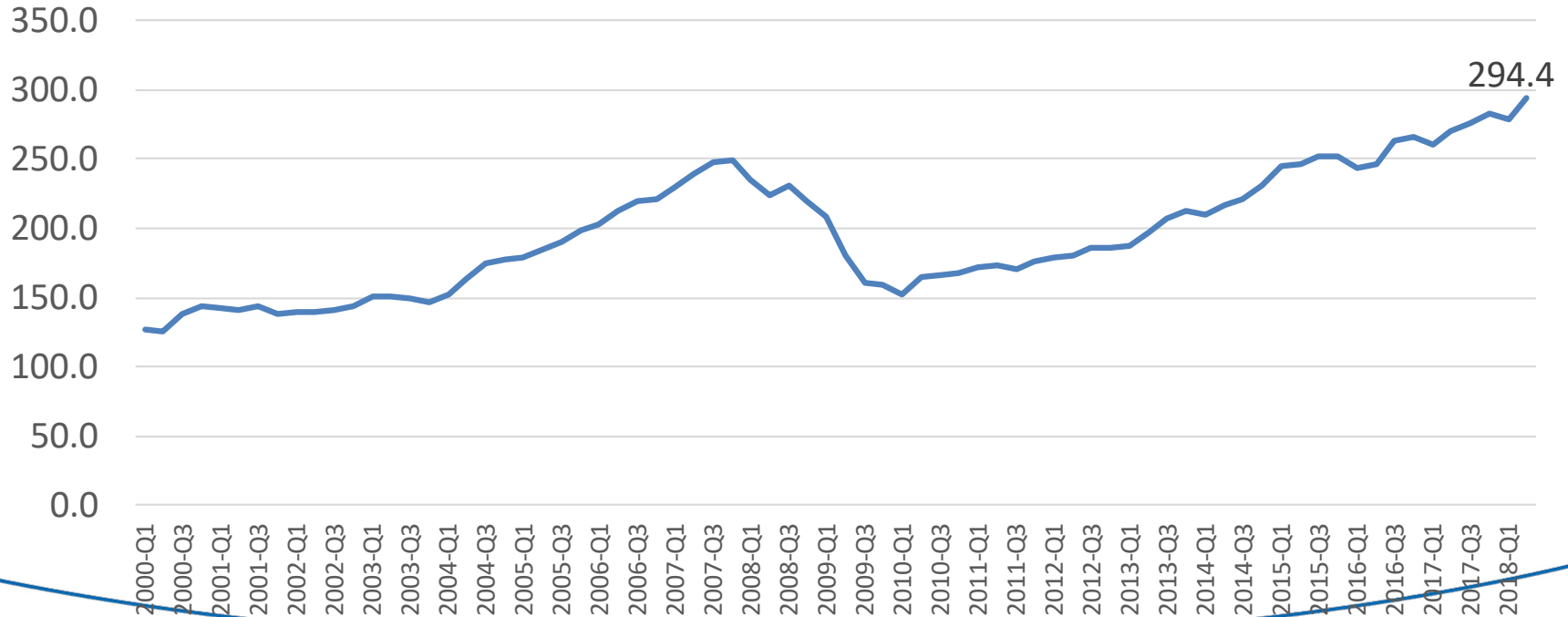


	Chg ('000)	Pct Chg
Dallas-Fort Worth-Arling..	448.9	6.5%
Houston-The Woodlands-..	395.6	6.1%
Dallas-Plano-Irving TX M..	308.8	6.7%
Atlanta-Sandy Springs-R..	279.6	5.0%
Phoenix-Mesa-Scottsdale..	266.6	6.0%
Miami-Fort Lauderdale-..	215.2	3.6%
Seattle-Tacoma-Bellevue..	199.9	5.4%
New York-Newark-Jersey..	195.5	1.0%
Washington-Arlington-Al..	187.1	3.1%
Orlando-Kissimmee-Sanf..	181.9	7.8%
Tampa-St. Petersburg-Ci..	174.6	6.0%
NY-Jersey Cty-White Plai..	174.2	1.2%
Austin-Round Rock, TX	173.6	8.9%
Riverside-San Bernardin..	154.9	3.5%
Seattle-Bellevue-Everett..	151.9	5.4%
Washngtn-Arlngtn-Alexa..	150.2	3.2%
Charlotte-Concord-Gasto..	149.2	6.3%
San Antonio-New Braunf..	145.6	6.3%
Los Angeles-Long Beach-..	144.5	1.1%
Las Vegas-Henderson-Pa..	139.1	6.7%
Denver-Aurora-Lakewoo..	138.4	5.0%
San Francisco-Oakland-H..	131.4	2.9%
Portland-Vancouver-Hills..	110.7	4.7%

Commercial Real Estate Trends

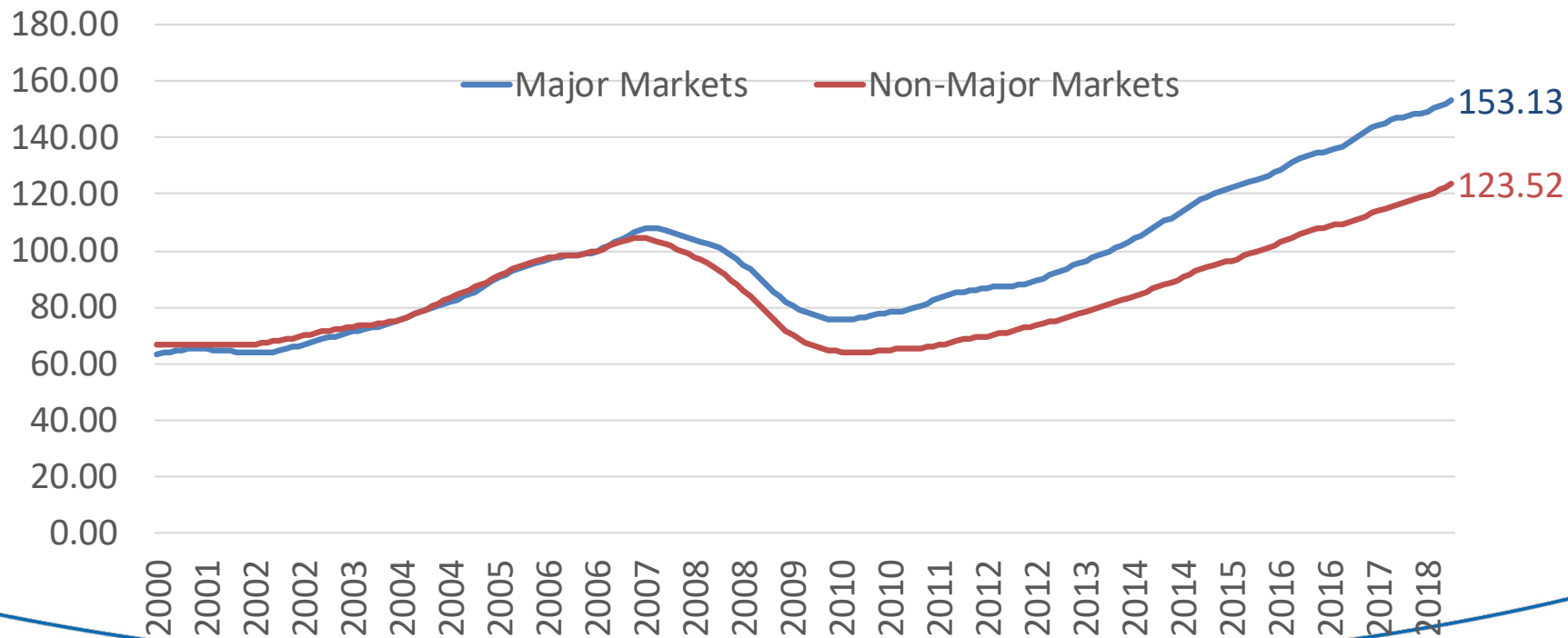
Commercial Property Prices

(93% gain in 8 years)

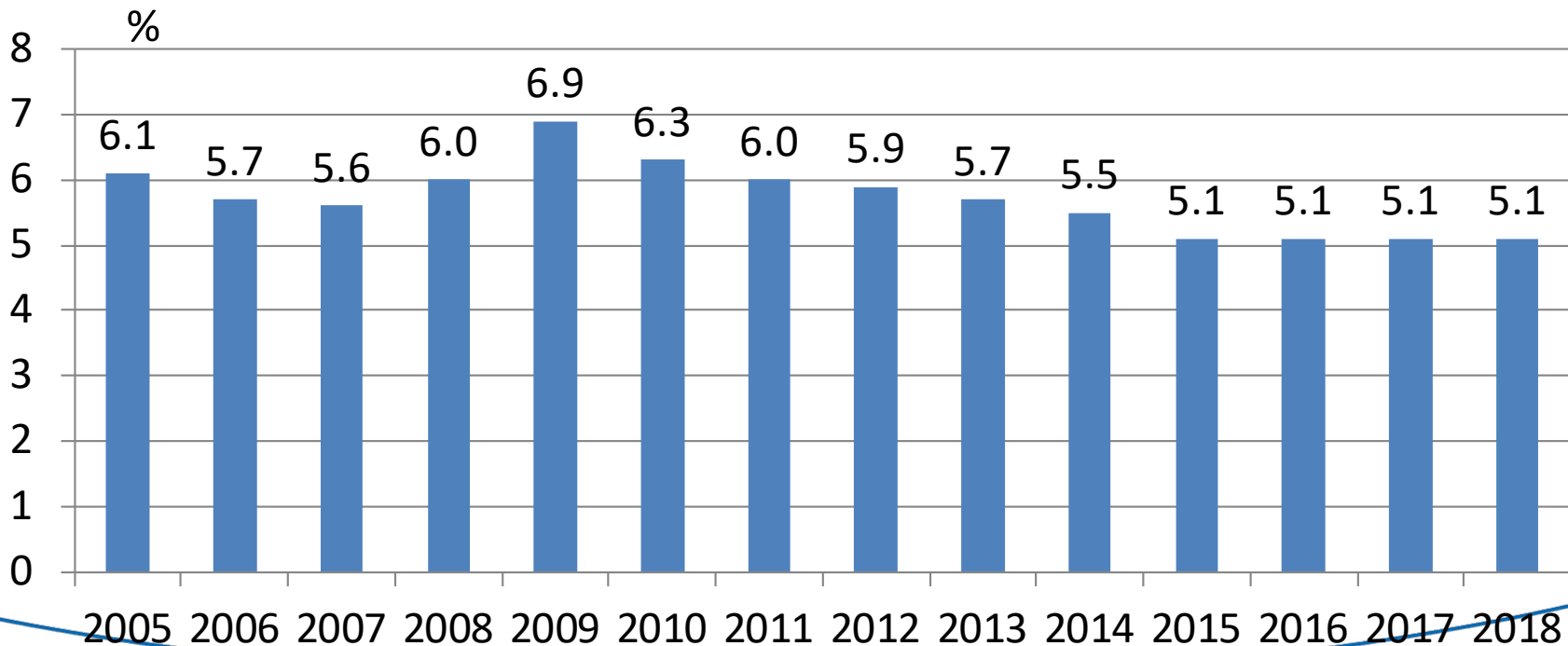


Source: Federal Reserve Board Commercial Real Estate Price Index

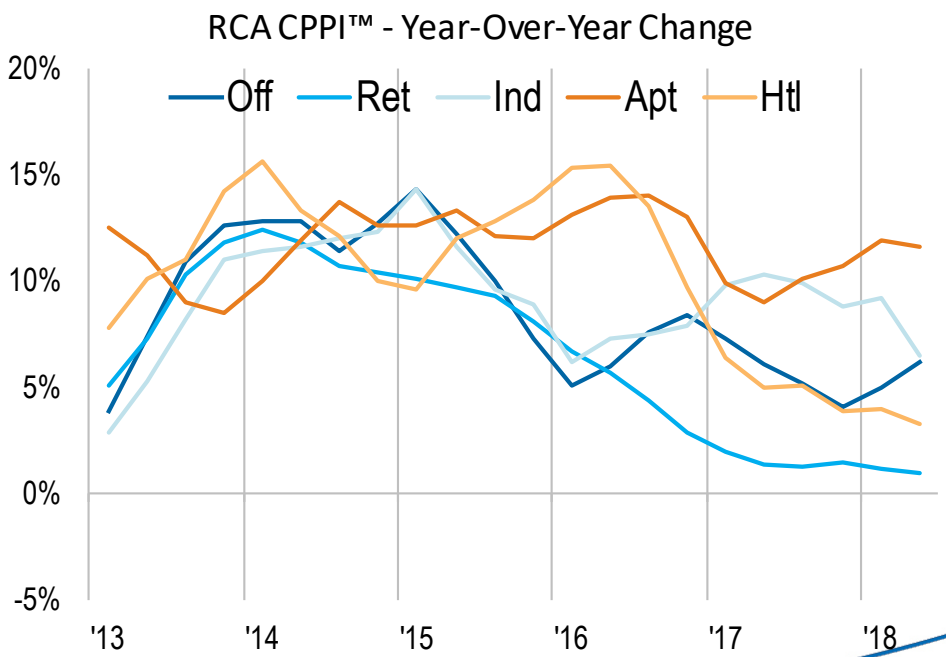
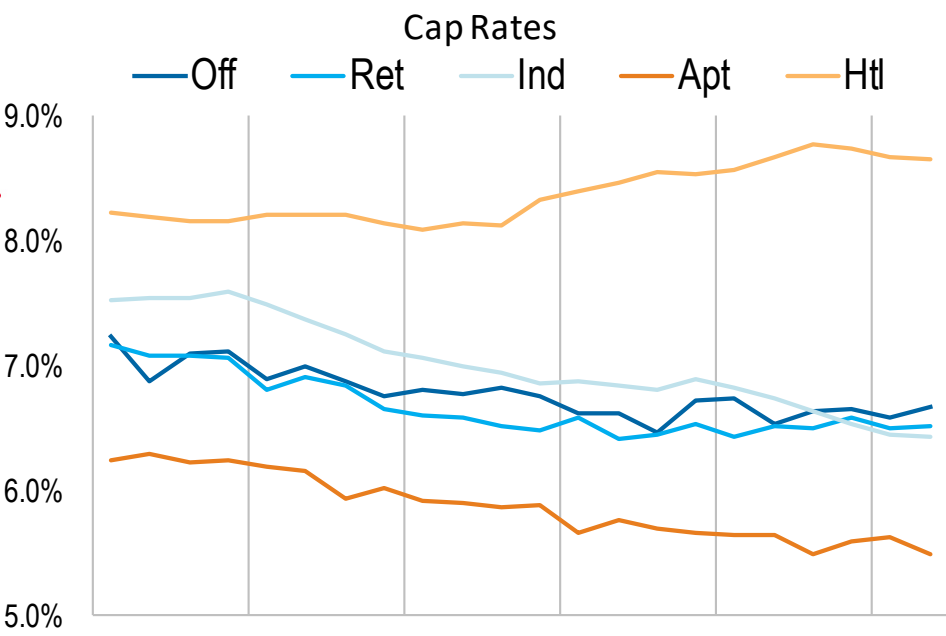
Prices Rose More Strongly in Major Markets* than in Non-Major Markets



NCREIF Cap Rates – Likely Already Hit Cyclical Low



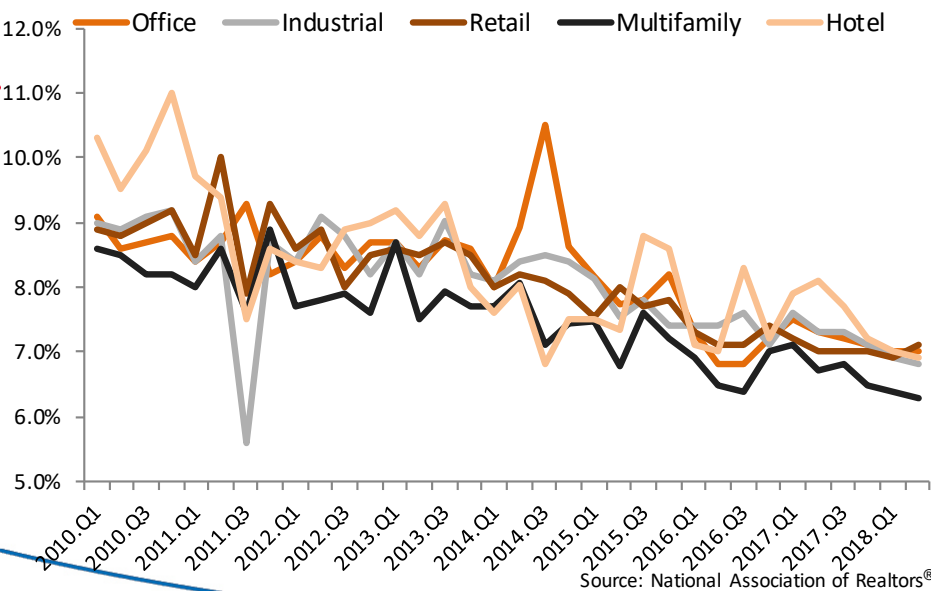
Prices Moving Sideways among Transactions above \$2.5 million



Source: Real Capital Analytics

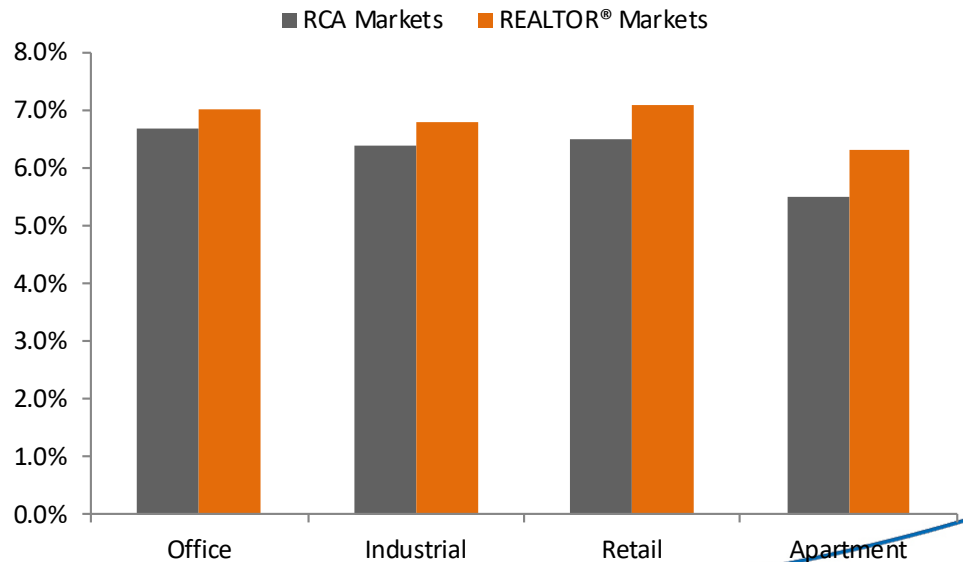
REALTORS® Cap Rates Experiencing Upward Pressure

REALTORS® Commercial Capitalization Rates



Source: National Association of Realtors®

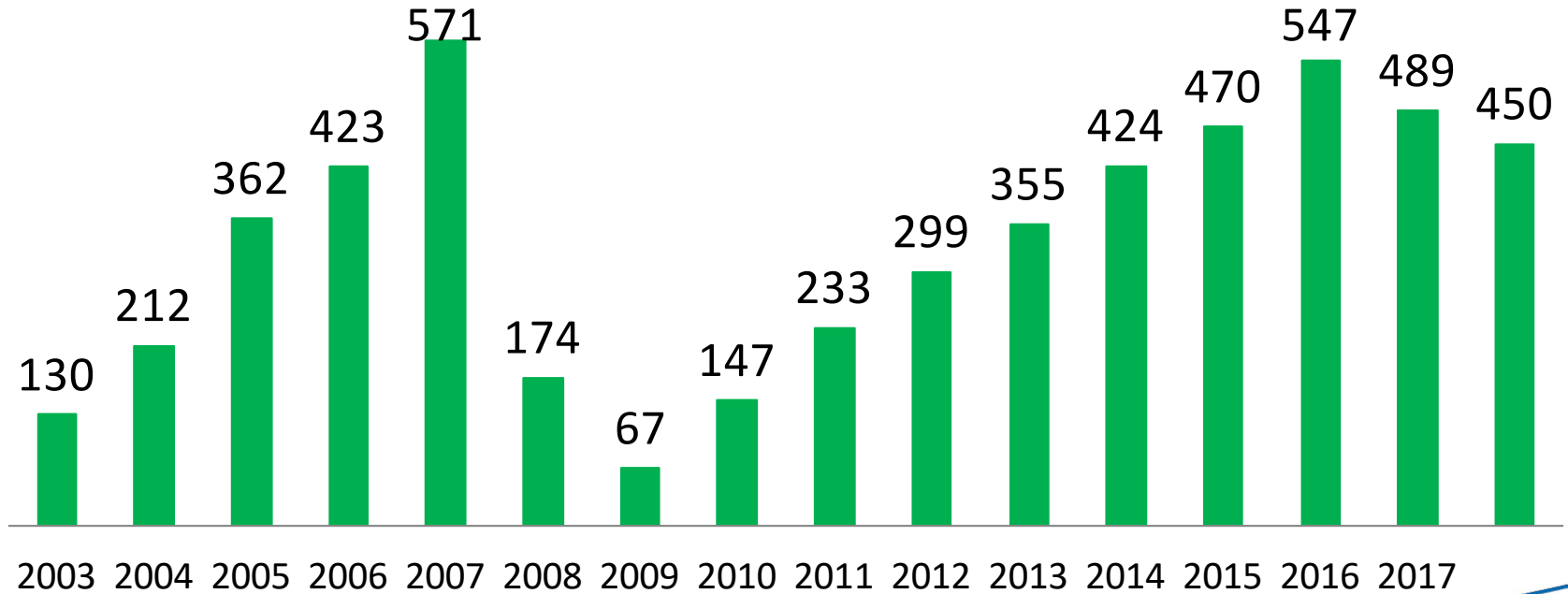
Cap Rates - 2018.Q2



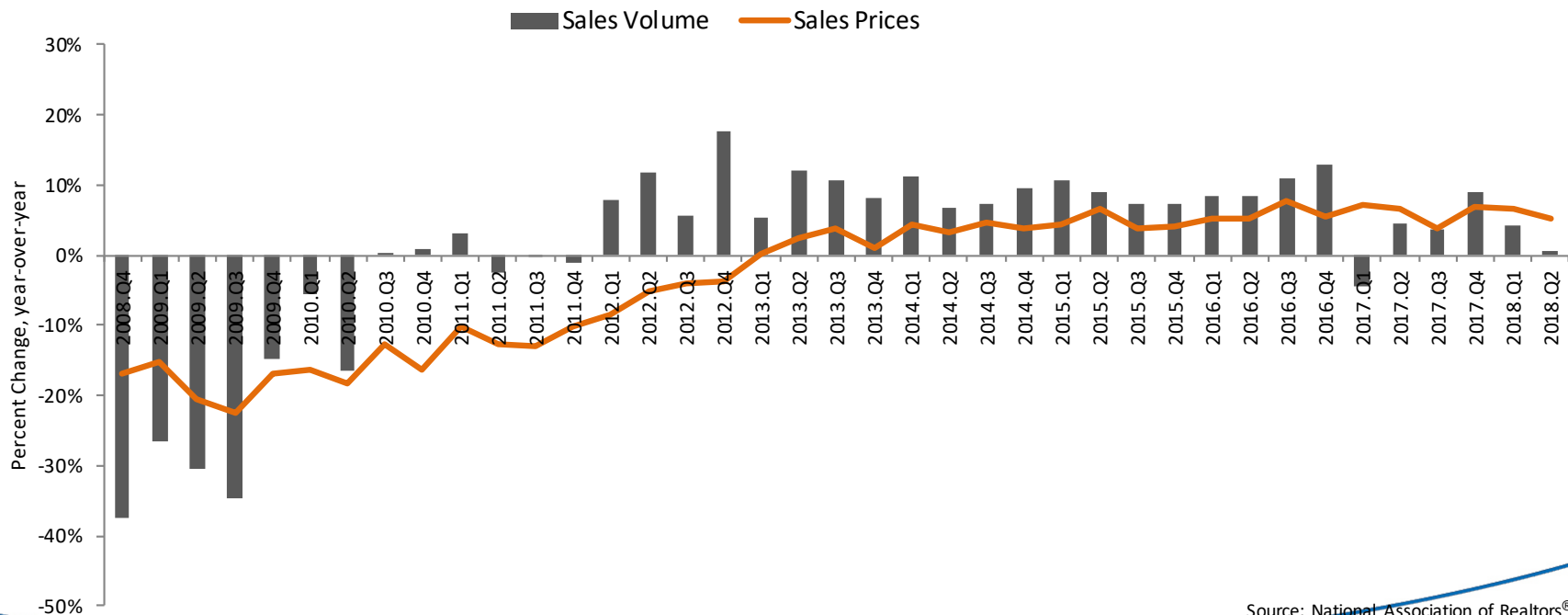
Sources: National Association of REALTORS®, Real Capital Analytics

Commercial Investment Sales of Large Properties

(Properties valued at \$2.5 million and over)

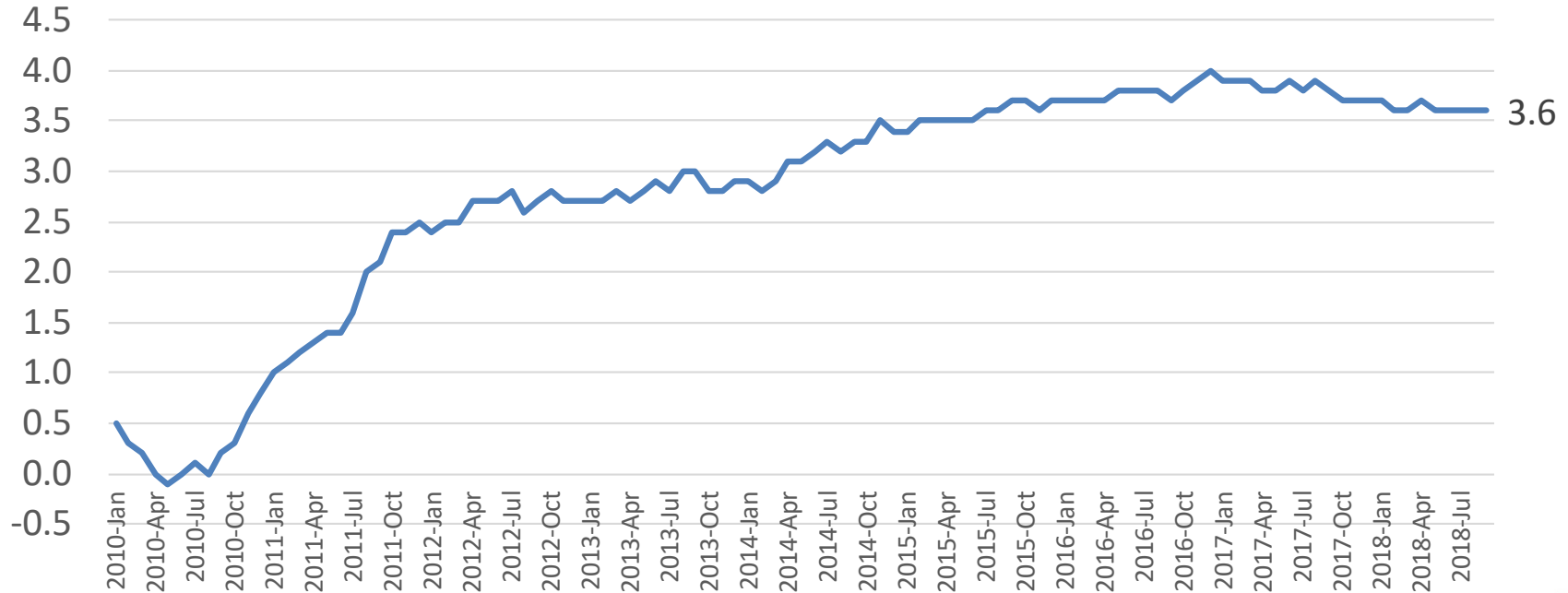


REALTORS® Reported Rising but Slowing Investment Momentum in 2018



Source: National Association of Realtors®

Rent Growth – Broadly Tapering



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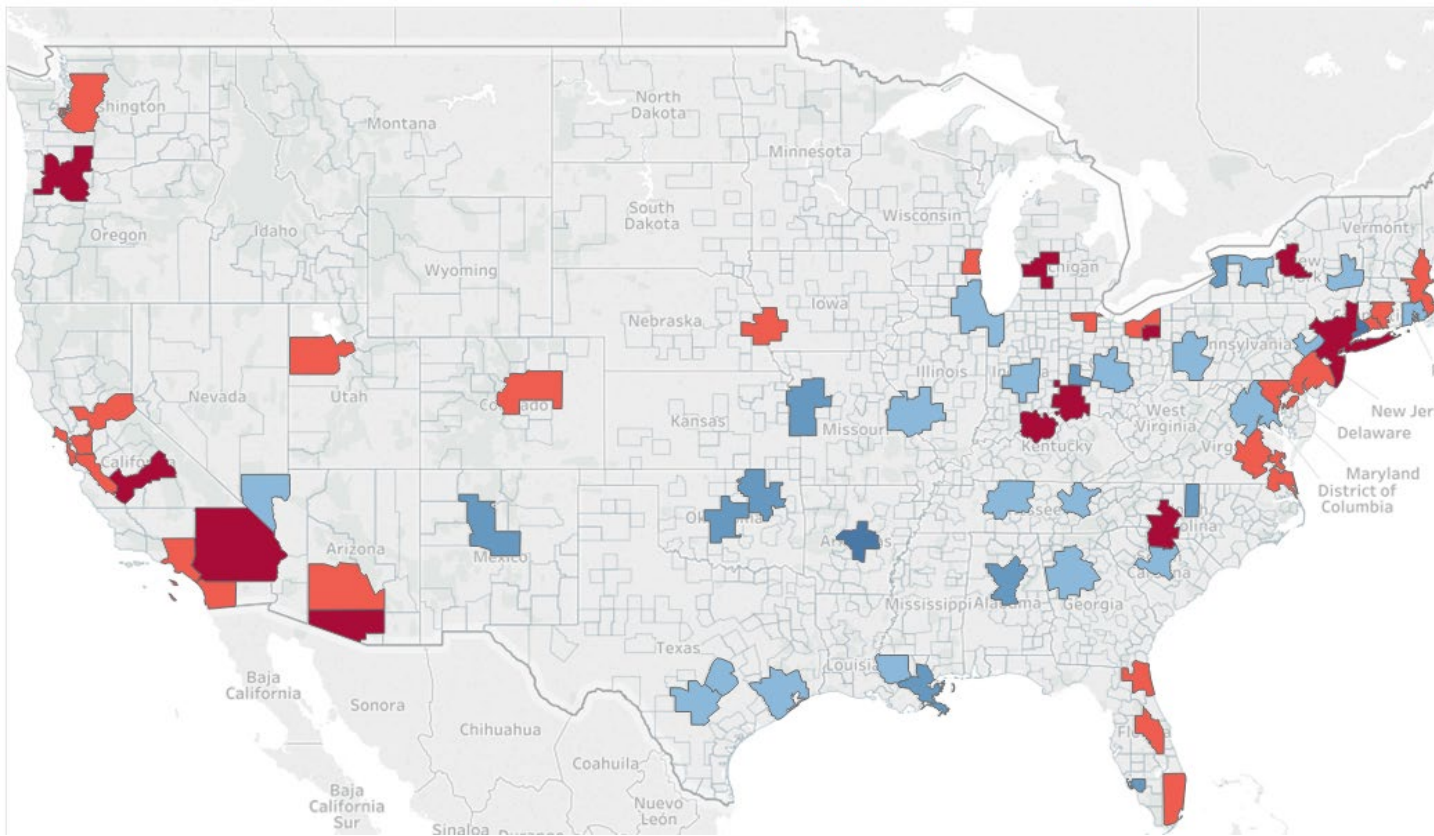


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Rental Vacancy Rates in 75 Largest Metros, 2018 Q1

(red areas: below 7%)

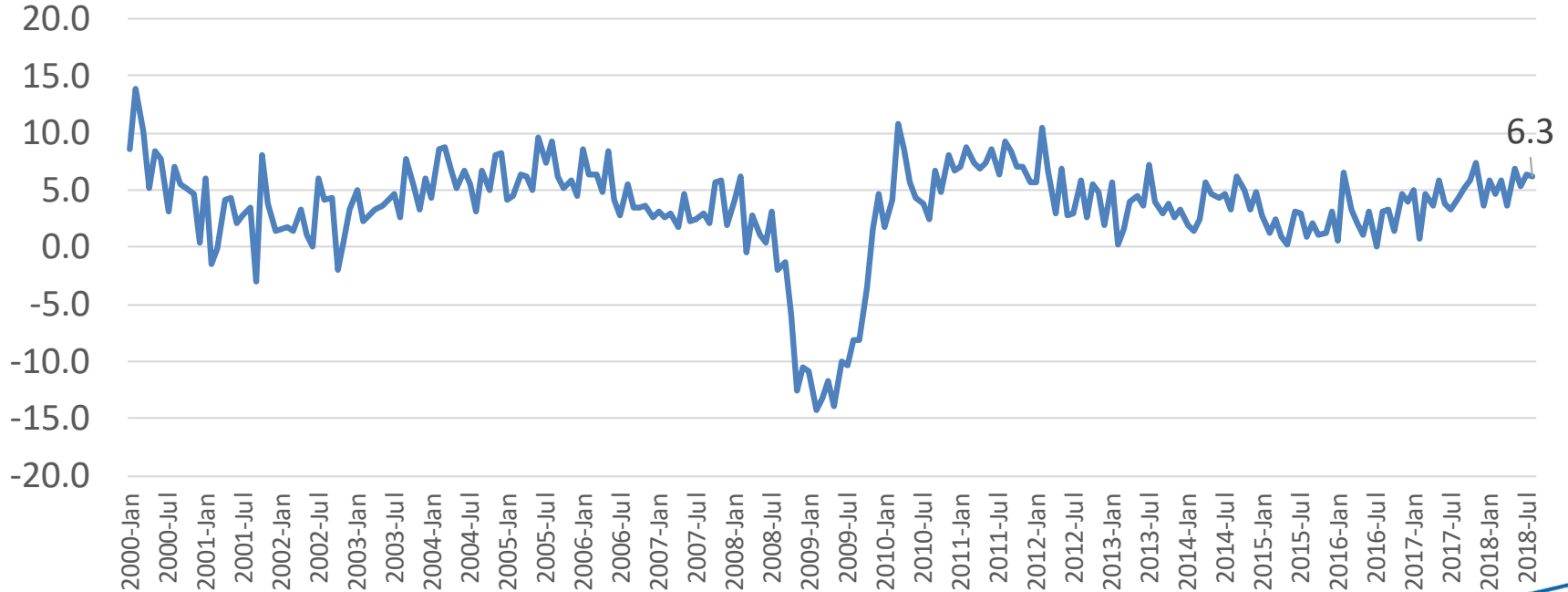
Rental Vacancy Rates for 75 Largest Metros 2018 Q1



Fresno, CA	1.60
Akron, OH	2.30
Syracuse, NY	2.40
Cincinnati, OH-KY-IN	3.40
Minneapolis-St	3.50
Portland-Vancouver-Hills..	3.60
Grand Rapids-Wyoming, ..	3.90
Tucson, AZ	3.90
Charlotte-Concord-Gasto..	4.00
Louisville/Jefferson Coun..	4.00
New York-Newark-Jersey..	4.00
Riverside-San Bernardin..	4.00
Los Angeles-Long Beach-..	4.20
San Francisco-Oakland-H..	4.30
Worcester, MA	4.40
Phoenix-Mesa-Scottsdale..	4.60
Seattle-Tacoma-Bellevue..	4.60
Denver-Aurora-Lakewoo..	4.80
Omaha-Council Bluffs, NE..	4.80
San Diego-Carlsbad, CA	4.80
Cleveland-Elyria, OH	4.90
Hartford-West Hartford-..	5.00
Boston-Cambridge-Newt..	5.20

Retail Sales—Growing Strongly

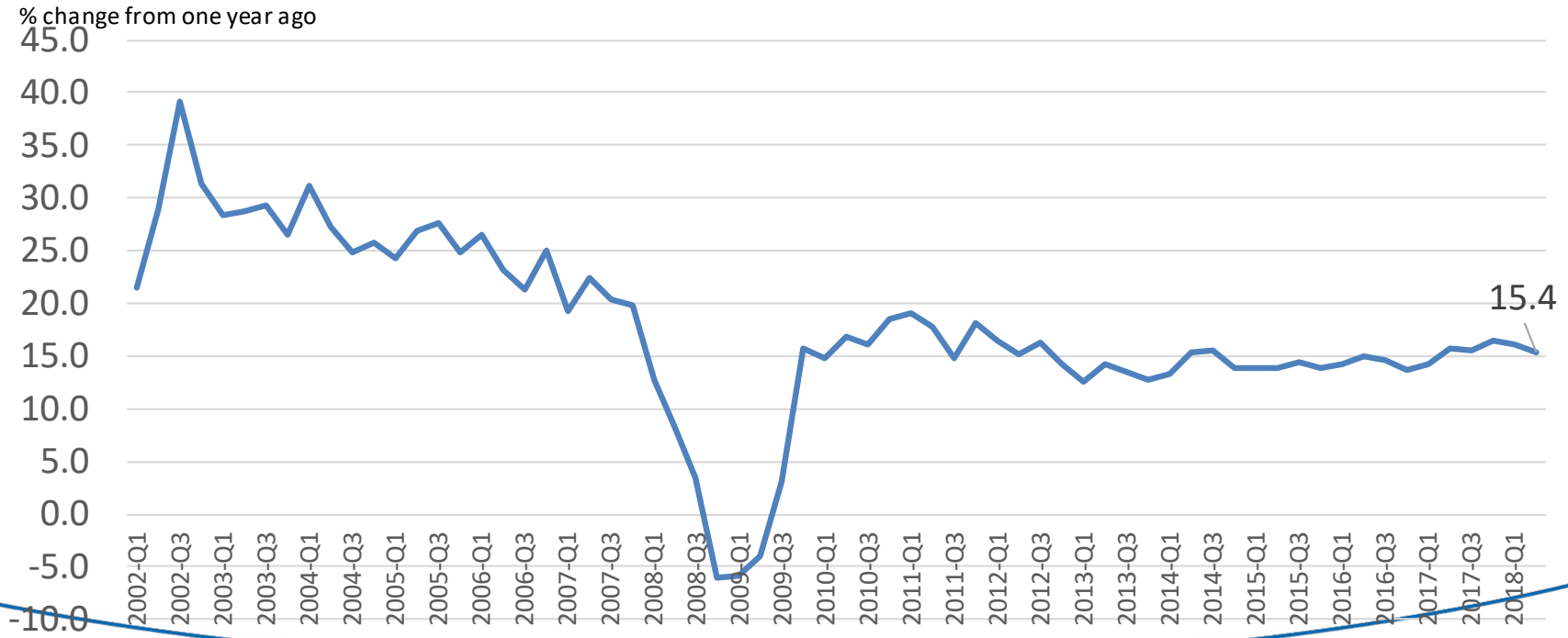
(year over year % change)



Source: U.S. Census Bureau; retail sales, not seasonally adjusted

E-commerce Retail Sales

(growing more than 2 times as fast as traditional retail sales)



Long-run Fundamentals Still Solid

OFFICE



- Office demand strong, due to rising employment (15.5MSF in Q2)
- Mobile workforce; increased telecommuting
- Flexible space layouts
- Moderate supply (11.1MSF in Q2) leads to 13% vacancy & 1.3% rent growth

RETAIL



- Department stores lose ground
- Malls close/redevelop; soft absorption
- Small/discount grocery stores heat up: Aldi
- Amazon moves into grocery space with Whole Foods
- Completions remain low (7.0MSF in Q2)
- Rents experience solid growth (5.1% Q2)

INDUSTRIAL



- Increased trade & rising e-commerce place industrial sector on hot streak
- “Last mile” distribution + Intermodal logistics
- Panama Canal; East coast ports
- Net absorption remains strong (58.8MSF in Q2)
- Net rent growth reaches record (\$7.1PSF in Q2)

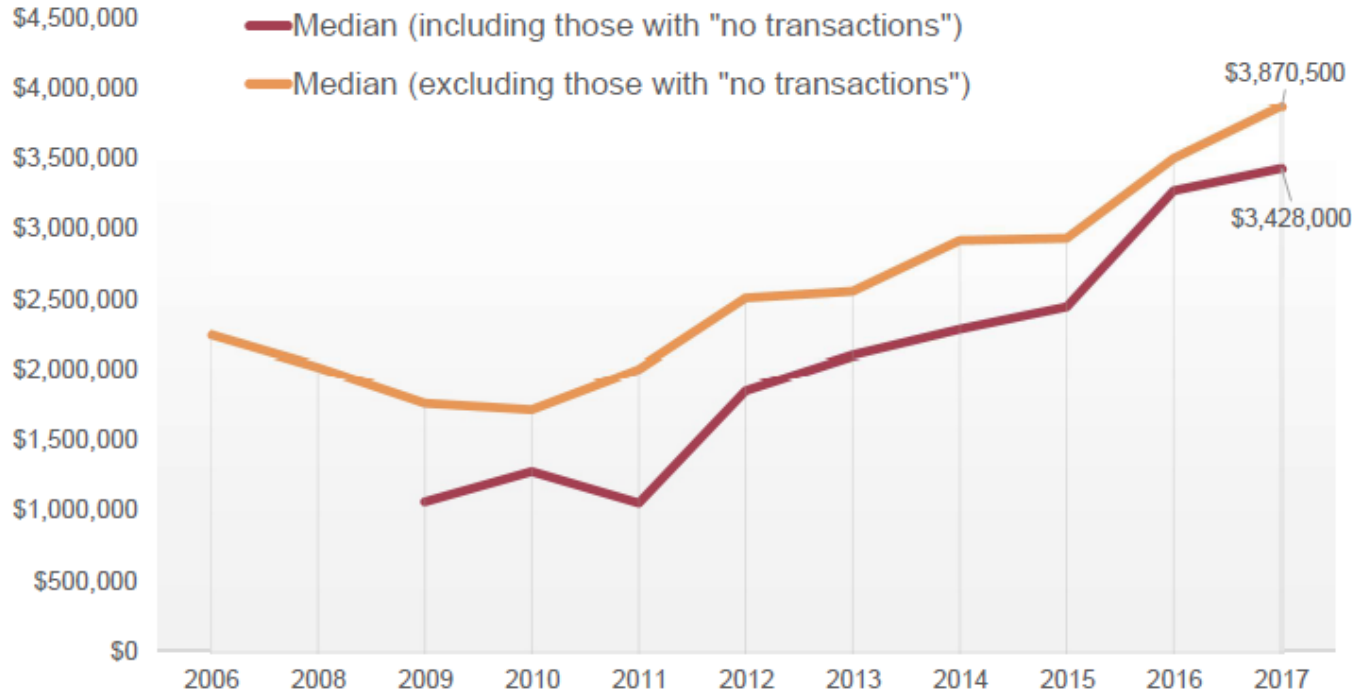
APARTMENT



- Mixed-use urban development; live/work/play
- Class A supply; small floorplans; amenities
- Demand remains robust; 12-mo net absorption: 249,000 units
- 12-mo Completions: 276,000 units
- Vacancy moves up to 4.7%; moderates rent growth (2.0% YoY in Q2.18)

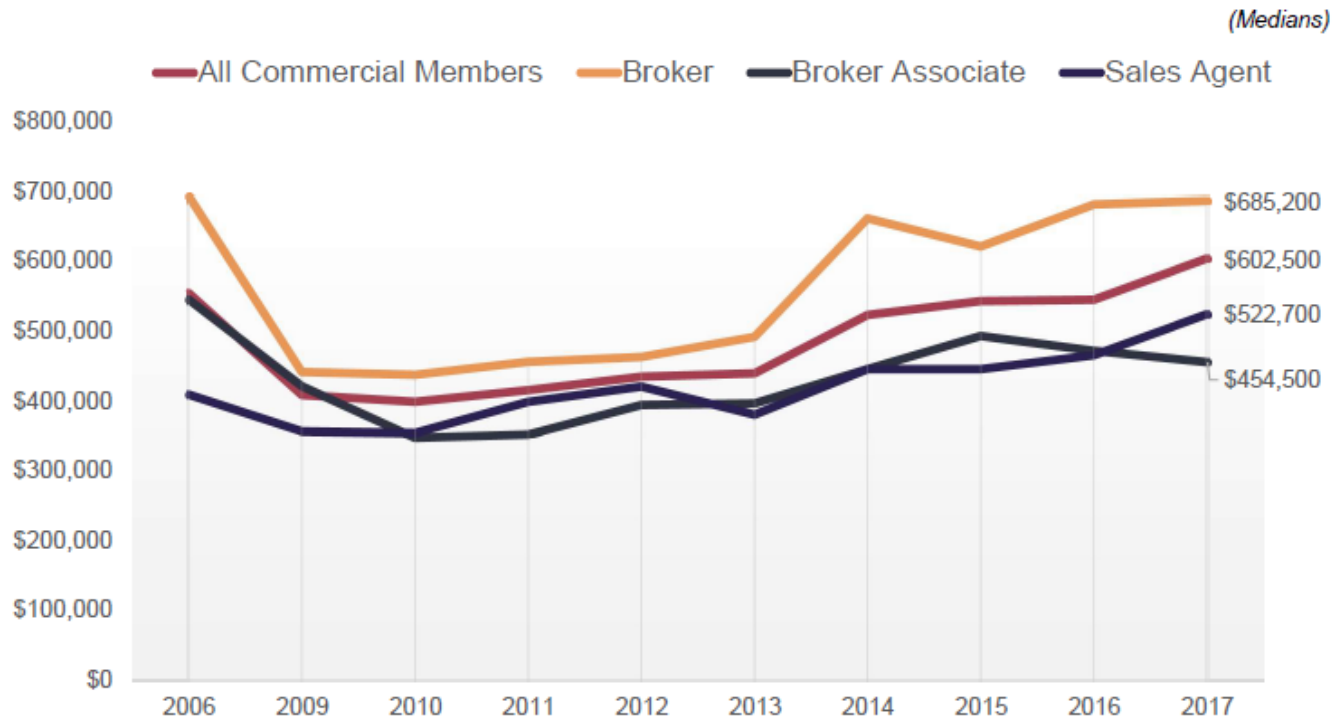
2018 Commercial Member Profile Highlights

Sales Transactions Volume Trending Upwards: \$3.87 Million in 2017 *(Medians)*



The sales transactions volume has been on a steady upward trend since 2010-2011 and reached a peak in 2017 with a median of \$3,870,500 among members who had a transaction.

Median Dollar Value of Sales Trending Upwards: \$602,500 in 2017



The median dollar value of sales has also been trending upward since 2013 to peak in 2017 at a median of \$602,500 for all members, and \$685,200 for brokers.

Pacific Region: Highest Median Sales at \$926,500

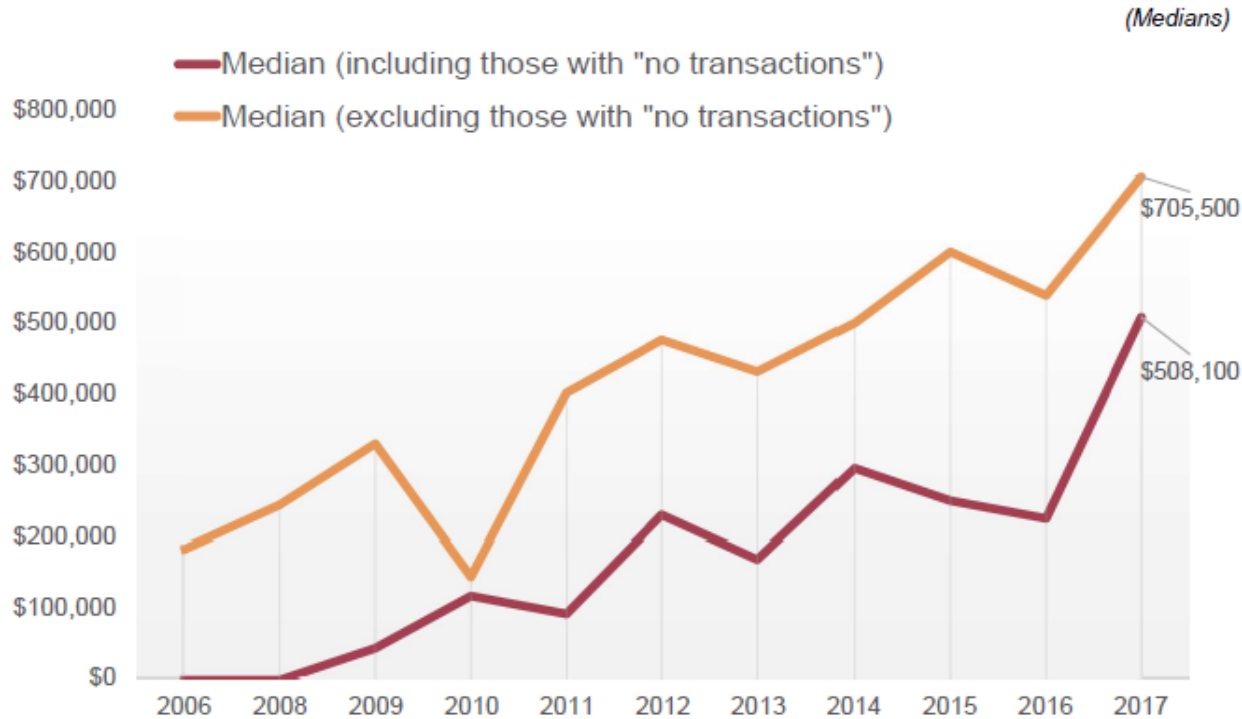


(Percentage Distribution)

EAST SOUTH CENTRAL had the lowest dollar value of sales at **\$392,900**.

	All Commercial Members	Region								
		New England	Mid-Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Less than \$100,000	7%	10%	9%	4%	5%	12%	13%	5%	3%	5%
\$100,000 to \$249,999	12	16	11	19	22	9	17	13	12	6
\$250,000 to \$499,999	26	29	33	30	19	24	35	28	32	10
\$500,000 to \$999,999	24	23	20	31	29	22	15	15	25	34
\$1,000,000 to \$1,999,999	14	10	10	10	12	13	13	23	14	18
\$2,000,000 to \$4,999,999	12	6	14	6	12	12	4	11	9	18
\$5,000,000 or more	5	6	3	1	2	7	2	5	5	8
Median	\$602,500	\$456,900	\$477,300	\$475,000	\$569,000	\$613,600	\$392,900	\$633,300	\$560,000	\$926,500

Lease Transactions Volume Trending Upwards: \$705,500 in 2017



The lease transactions volume has gone up overall in the last decade, with year to year fluctuations. In 2017, the gross lease transaction volume for members who had a transaction was \$705,500, an increase over 2016 at \$538,500.

TIME SERIES 4

Note: For multi-year lease terms, respondents included the total multi-year lease value. E.g., 3 year lease that is \$500,000 per year, should be recorded as \$1,500,000.

But Median Lease Value Slightly Dipped: \$215,400 in 2017

The dollar value of lease transactions took a slight dip to a median of \$215,400 in 2017, down from \$220,000 in 2016.

(Percentage Distribution)

	Licensed As			
	All Commercial Members	Broker	Broker Associate	Sales Agent
Less than \$100,000	31%	28%	33%	35%
\$100,000 to \$249,999	25	24	25	24
\$250,000 to \$499,999	20	21	19	19
\$500,000 to \$999,999	12	13	10	12
\$1,000,000 to \$1,999,999	6	7	6	4
\$2,000,000 to \$4,999,999	5	4	6	4
\$5,000,000 or more	2	2	1	3
Median	\$215,400	\$237,500	\$202,000	\$193,800

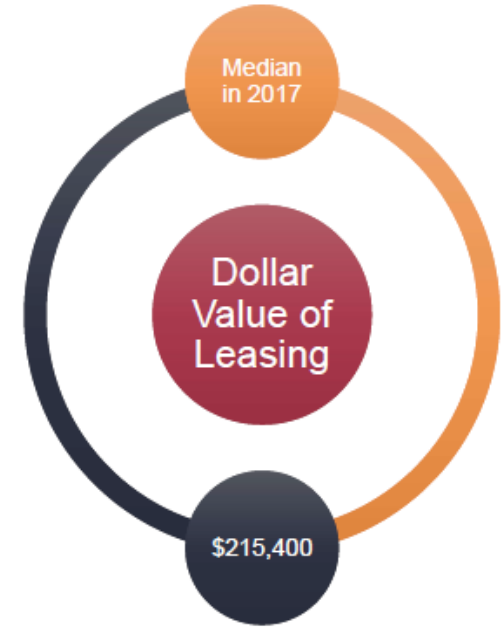
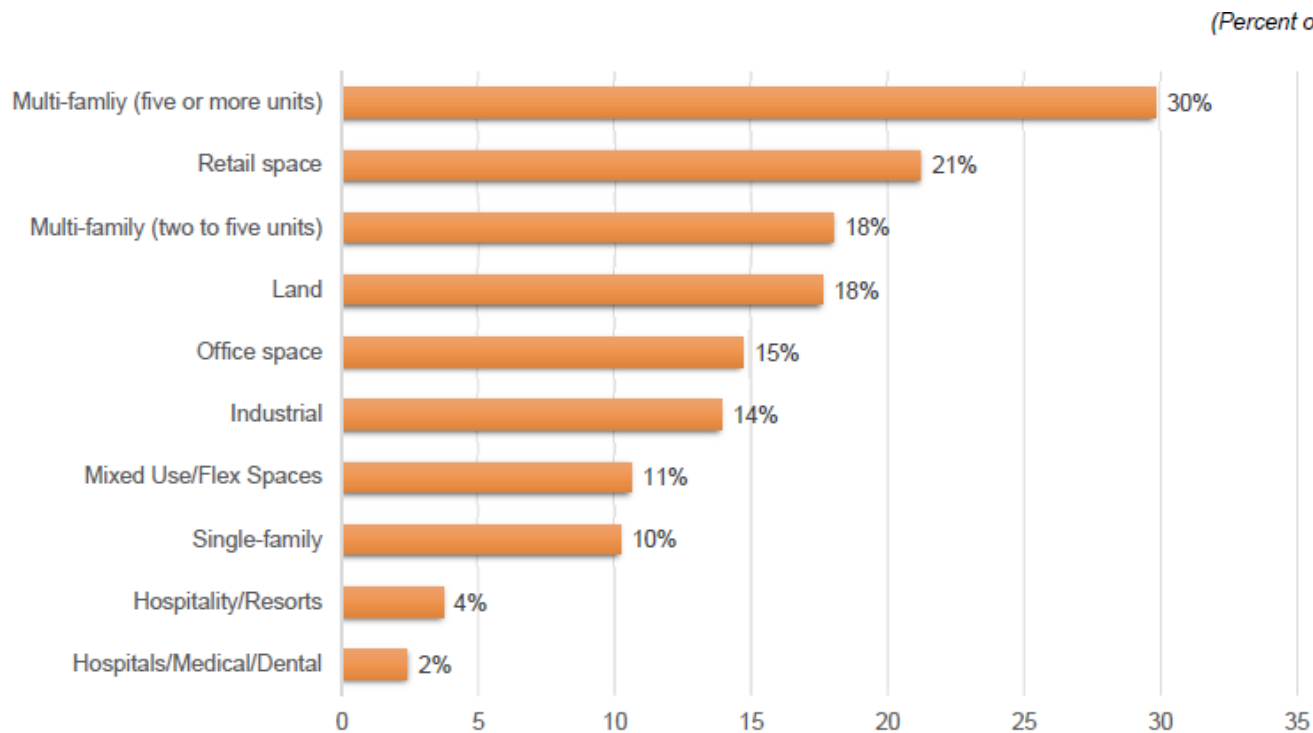


EXHIBIT 3-19

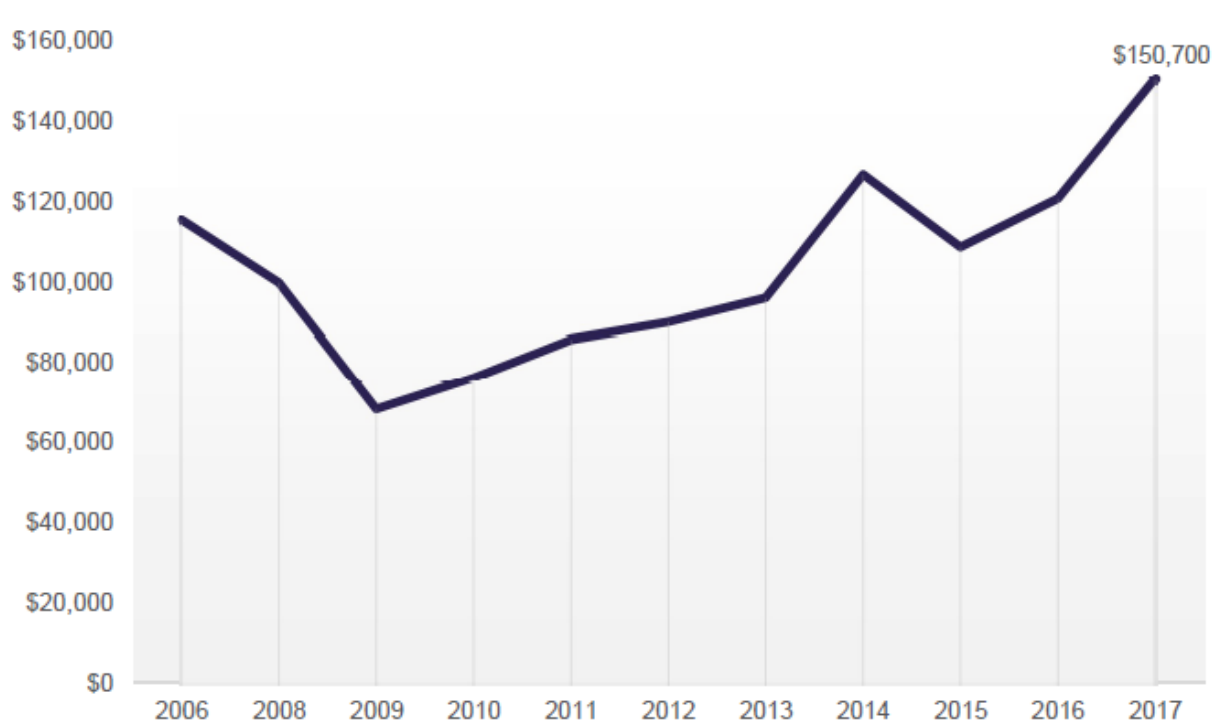
Multi-family: Nearly 50 Percent of Commercial Investment Transactions in 2017



Top investor properties in 2017 included multi-family (five+ and two to five units), retail, and land.

EXHIBIT 3-22

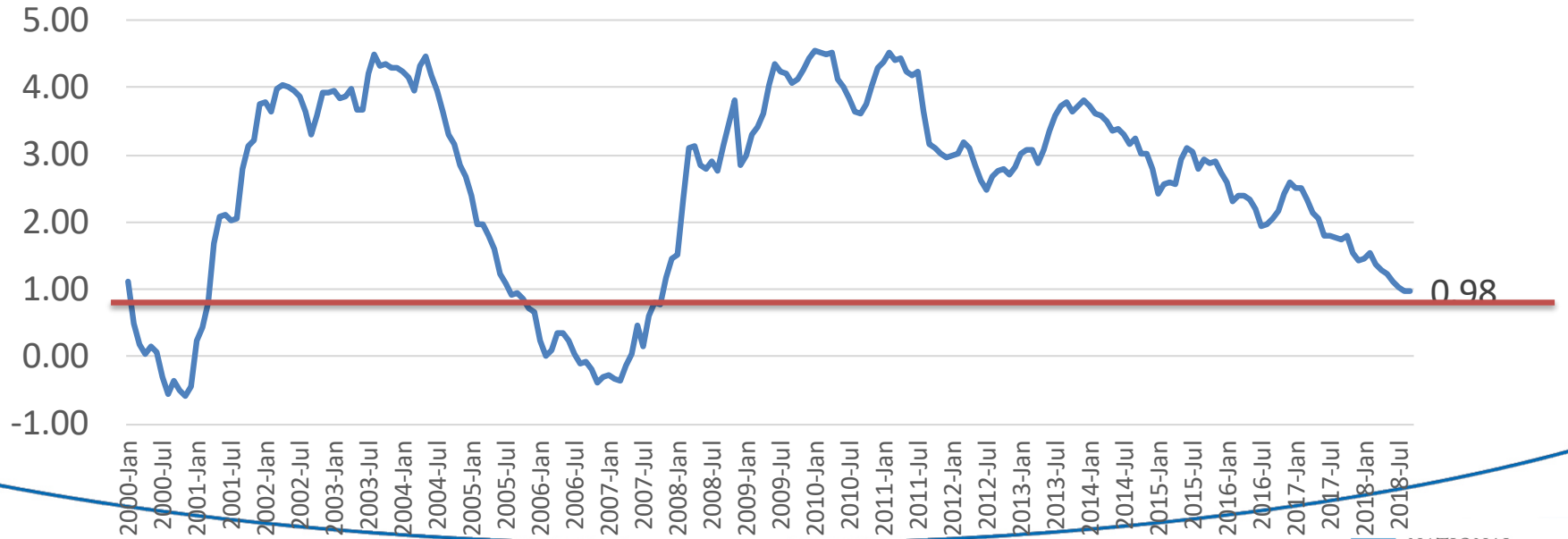
Median Gross Personal Income Trending Upwards: \$150,700 in 2017



The median annual gross personal income for NAR's commercial members reached an all-time high in 2017 at \$150,700. The median income from all real estate activities was at its lowest point in 2009 since data collection began. It has generally trended upwards ever since, except for a slight dip in 2015.

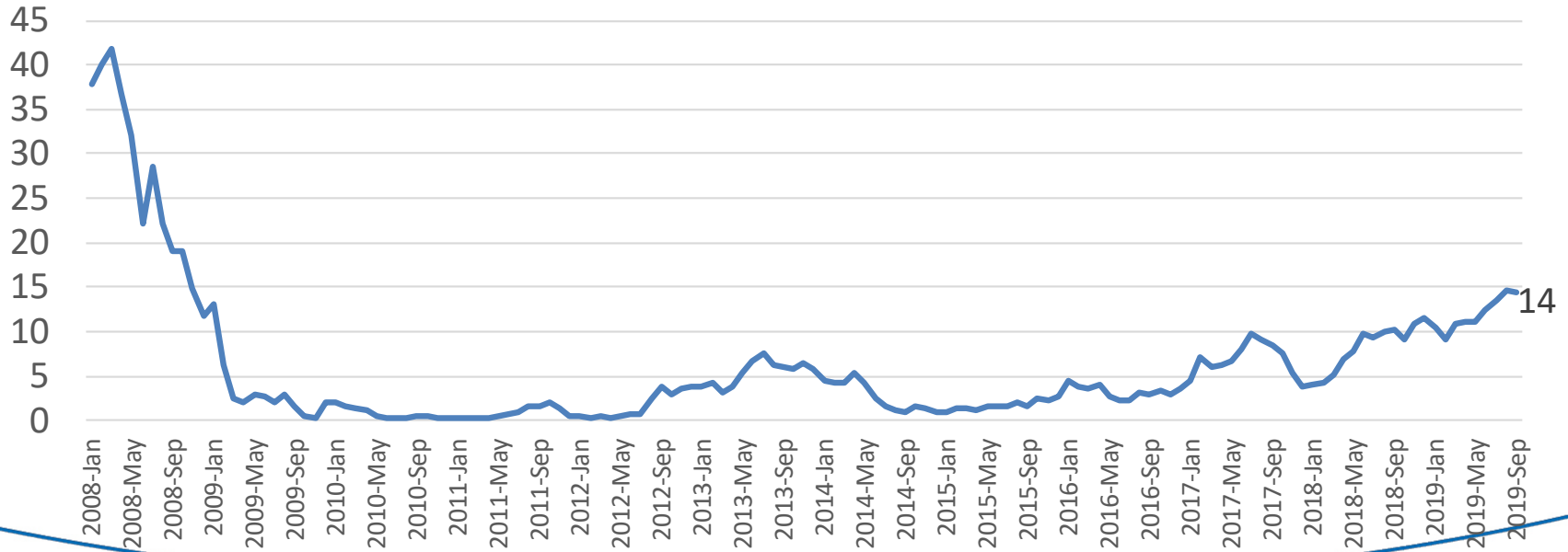
Macroeconomic Forecast for 2018-2019

Narrowing Yield Spread Between 3-Month and 30-Year Treasuries



Low Probability of a Recession

(NY Fed: based on interest rate spread)



Old Economic Forecast

(as of May 2018)

U.S. ECONOMIC OUTLOOK — May 2018

	2016	2017	2018	2019
<i>Annual Growth Rate, %</i>				
Real GDP	1.5	2.3	2.7	2.8
Nonfarm Payroll Employment	1.8	1.4	1.6	1.6
Consumer Prices Level	1.3	2.1	2.9	2.8
Consumer Confidence	100	120	127	129
<i>Percent</i>				
Unemployment	4.9	4.4	4.0	4.0
Fed Funds Rate	0.4	1.0	1.8	2.4
3-Month T-bill Rate	0.3	1.0	1.9	2.5
Prime Rate	3.5	4.1	5.0	5.6
10-Year Gov't Bond	1.8	2.3	3.1	3.5
30-Year Gov't Bond	2.6	2.9	3.3	3.8

New Economic Forecast

U.S. ECONOMIC OUTLOOK — October 2018

	2016	2017	2018	2019
<i>Annual Growth Rate, %</i>				
Real GDP	1.5	2.3	3.0	2.6
Nonfarm Payroll Employment	1.8	1.4	1.6	1.4
Consumer Prices	1.3	2.1	2.9	2.7
<i>Level</i>				
Consumer Confidence	100	120	130	128
<i>Percent</i>				
Unemployment	4.9	4.4	3.9	3.9
Fed Funds Rate	0.4	1.0	1.8	2.6
3-Month T-bill Rate	0.3	1.0	2.0	2.7
Prime Rate	3.5	4.1	4.9	5.6
10-Year Gov't Bond	1.8	2.3	3.0	3.5
30-Year Gov't Bond	2.6	2.9	3.2	3.7

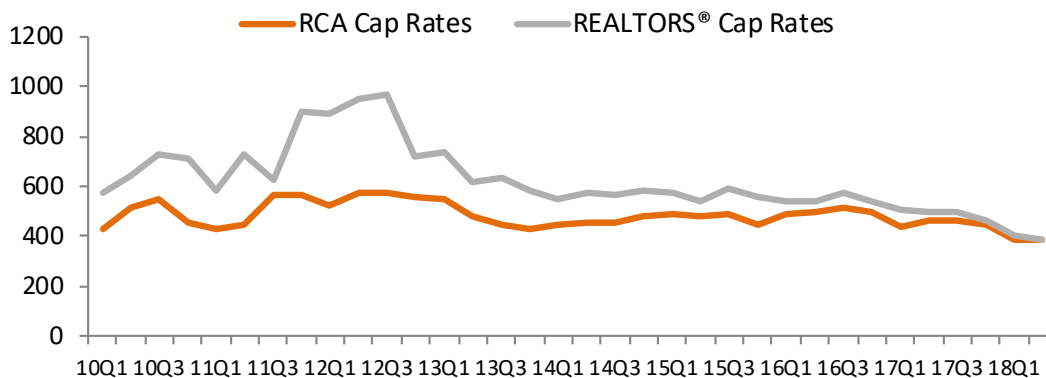
Commercial Real Estate Forecast

Commercial Real Estate Vacancy Forecast (%)

	2017.Q2	2017.Q3	2017.Q4	2018.Q1	2018.Q2	2018.Q3	2018.Q4	2019.Q1	2019.Q2	2019.Q3	2019.Q4	2020.Q1	2017	2018	2019
Office	12.7	12.7	12.0	12.7	12.4	13.2	13.2	13.1	13.0	12.8	12.8	12.7	12.8	12.9	12.9
Industrial	9.1	8.9	7.8	7.4	7.7	7.5	7.4	7.2	6.9	6.7	6.5	6.7	8.8	7.5	6.8
Retail	10.4	12.1	11.4	12.0	12.0	12.0	12.1	12.1	11.9	12.1	12.3	11.7	11.8	12.0	12.1
Multifamily	5.8	5.3	5.0	5.5	6.1	6.3	6.4	6.3	6.4	6.5	6.6	5.4	5.5	6.1	6.4

Source: National Association of REALTORS®

CRE Spreads: Cap Rates to 10-Yr. T-Notes (bps)



Sources: National Association of REALTORS® Real Capital Analytics

Thank You