

Southern California Appraisal Institute

Market Trends Seminar

February 1, 2018





- #1 residential data provider
- Largest US geographic footprint including
 - 890 CBSAs | 2,483 Counties
- Metrostudy survey markets
 - Top 25 construction CBSAs
 - 27,000 active subdivisions
 - 36,000 future subdivisions
 - 3.2 million individual parcels
 - 76% of US new home construction
 - Exclusive consumer demographics insights
 - 25 regional offices
 - 500 surveyors

NATIONAL & LOCAL EXPERIENCE & EXPERTISE

Topics For Today



1. Mobility On Demand
2. Where Are We In the Cycle?
3. Tax Reform and California Affordability
4. Industry Trends
5. Interest Rates
6. Southern California Housing Market Trends
7. Southern California Pricing Trends

Mobility On Demand





The Age of Driverless Vehicles

- Pay as you go mobility.
- Car use and ownership is being unbundled.
- Six billion ride hailing trips annually rising to 30 billion by 2030.
- Per capita trips (all vehicles) is 2.2 trips per day.
- The technology has arrived!



The Development Premise of Driverless Vehicles

THE DEVELOPERS PREMISE:

Our project (PICK LAND USE) doesn't need much parking? Everyone will arrive by driverless cars.

Residential

Apartment

Retail

Office

Commercial

Industrial

WHAT IS THE REALITY?



Personal Vehicle Ownership



Characteristics	Disadvantages
Convenience	Low Utilization (5% per year)
Availability	Loss of use during servicing, no peak period premium
Accommodations	User selected
User Costs	Owner bears all costs, some sharing, owner pays parking and financing.
Driver	Can't multi-task (much)
Maintenance	Owner Funded
Operator Costs	All, owner is the operator

Total cost is substantial, asset is steadily depreciating, cost per year is not fully correlated to use.



Commercial Taxi Operations



Characteristics	Disadvantages
Usually convenient	Users must compete on the street
Usually readily available	Primitive internet hailing technology
Accommodations are known in advance	Driver Maintenance (often lacking)
User Costs	Moderate, some sharing, not lowest cost
Driver	Often subpar
Maintenance	Company funded
Operator Costs	Significant, inefficient use of car and drivers.

Lots of suboptimal vehicles and drivers, high cost per mile but you only pay when using.



Uber, Lyft and Didi Services



Characteristics	Disadvantages
Convenience	Use as needed
Availability	Good hailing technology
Accommodations	Driver Maintained (Usually decent)
User Costs	Modest, higher at peak periods
Driver	Usually decent, often good
Maintenance	Owner funded
Operator Costs	Operator bears all and tends to underestimate. Is the business model profitable and sustainable?

Won't the cost drop by half if we go driverless and eliminate the person?



Commercial Driverless Car Operations

HOW UBER'S FIRST SELF-DRIVING CAR WORKS

Top mounted LIDAR beams 1.4 million laser points per second to create a 3D map of the car's surroundings.

There are 20 for braking v and other obstacles.

A colored camera puts LIDAR map into color so the car can see traffic light changes.

Antennae on the roof rack let the car position itself via GPS.

LIDAR modules on the front, rear, and sides help detect obstacles in blind spots.

A cooling system in the car makes sure everything runs without overheating.

Characteristics

Convenient

Availability

Accommodations

User Costs

Driver

Maintenance Costs

Operator Costs

Disadvantages

Use as needed (assume good convenience), will operators focus on highest profit routes?

Good hailing technology assumed

Shared or individual user? Cramped or spacious? Are you the first or last pickup?

5X to 10X that of Uber

No personal aspect

Company funded

Likely to be significant, complex systems, lots of technology, costly to purchase vehicles, expensive to update and upgrade cars and systems, high regulatory influence.

An enterprise level operation with company ownership, maintenance and route servicing. High costs may reduce disruptive potential lessening the ability of architects, land planners and municipalities to drastically cut back on parking.

The Age of Driverless Vehicles



- Regional urban phenomena, not suburban or rural,
- Only feasible in wealthy cities,
- Need dense population for a sufficient user base,
- Expect random transportation patterns,
- Commuters will use public transportation due to cost of service,
- Per mile cost of “commercial driverless” will be 5X to 10X personal car costs,
- Ride hailing has a “light” regulatory touch, driverless is institutional,
- Car manufacturers are likely to enter as service providers, with a profit motive,

Understand the market before you convert driverless property designs into real estate value.

Where Are We In The Cycle?



ECONOMIC REPORT CARD



Figure 2: Credit Suisse Recessionary Indicators Dashboard

Start of Recession	Yield Curve	Inflation Trends	Labor Market	Credit Perform	ISM Mfg.	Earnings Quality	Housing Market
Nov-73	↓	↓	↓	↓	↓	--	↓
Jan-80	↓	↓	↓	↓	↓	--	↓
Jul-81	↓	↑	↑	↓	↓	--	↓
Jul-90	↓	↓	↓	↓	↓	↓	↓
Mar-01	↓	↓	↓	↓	↓	↓	↔
Dec-07	↓	↓	↔	↓	↓	↓	↓
Present	↑	↑	↑	↑	↑	↑	↑

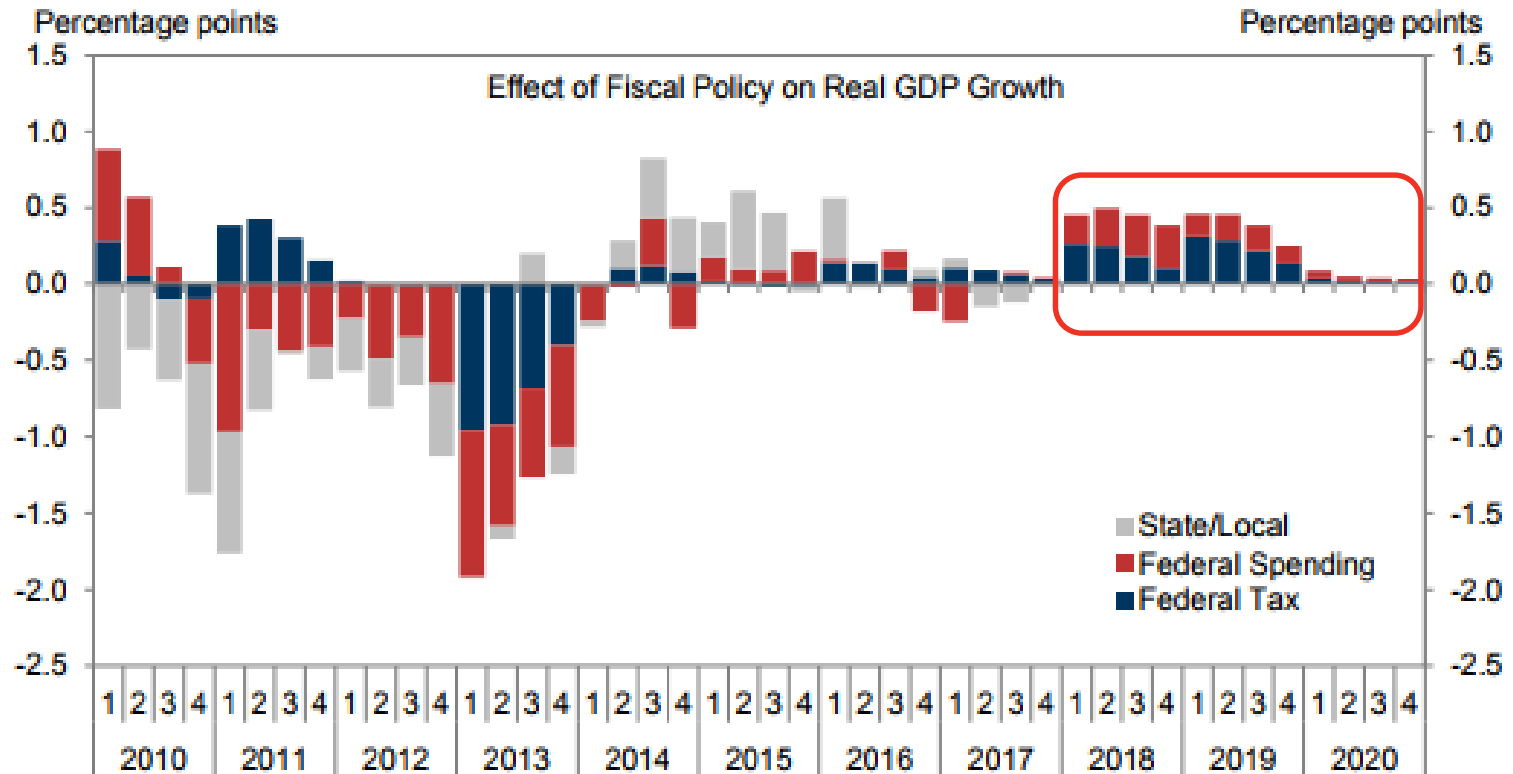
Key: ↓ Recessionary ↑ Expansionary ↔ Neutral

Source: Standard & Poor's, Federal Reserve, Bureau of Labor Statistics, National Statistical Agencies, National Bureau of Economic Research, ISM, Census Bureau, Haver Analytics®, Credit Suisse

TAX REFORM WILL BOOST GDP

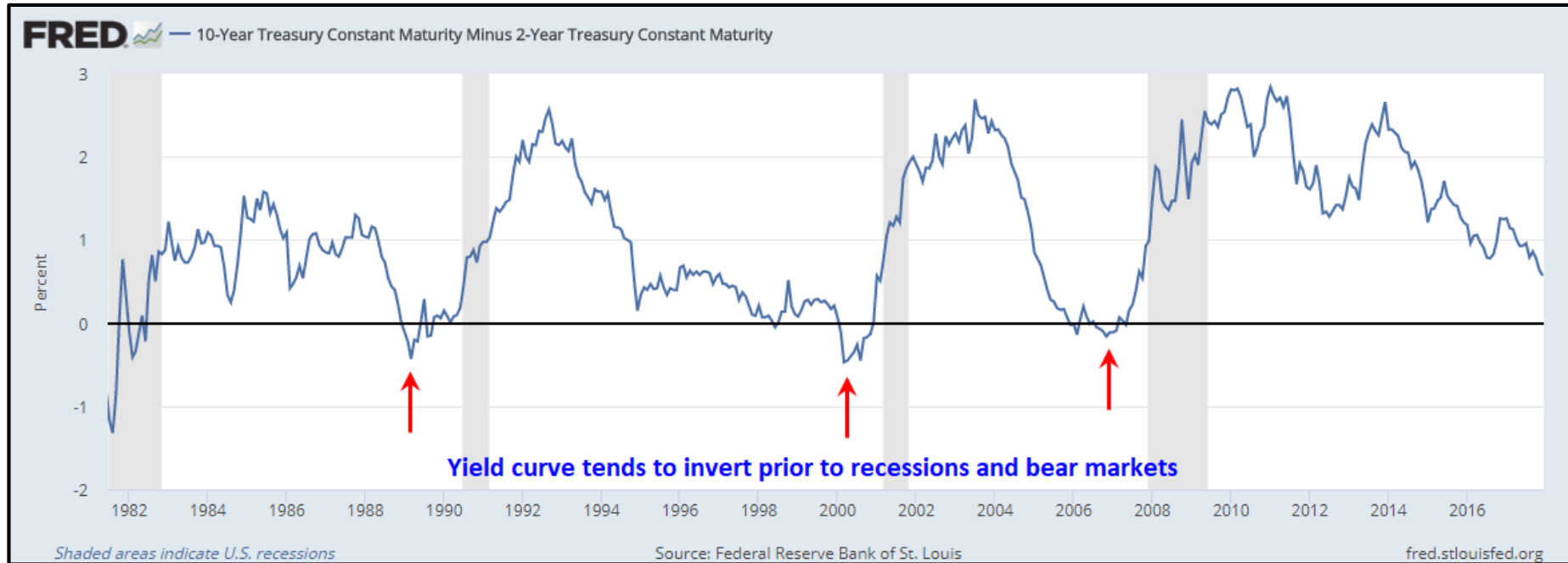


Exhibit 5: A Modest Boost from US Tax Reform

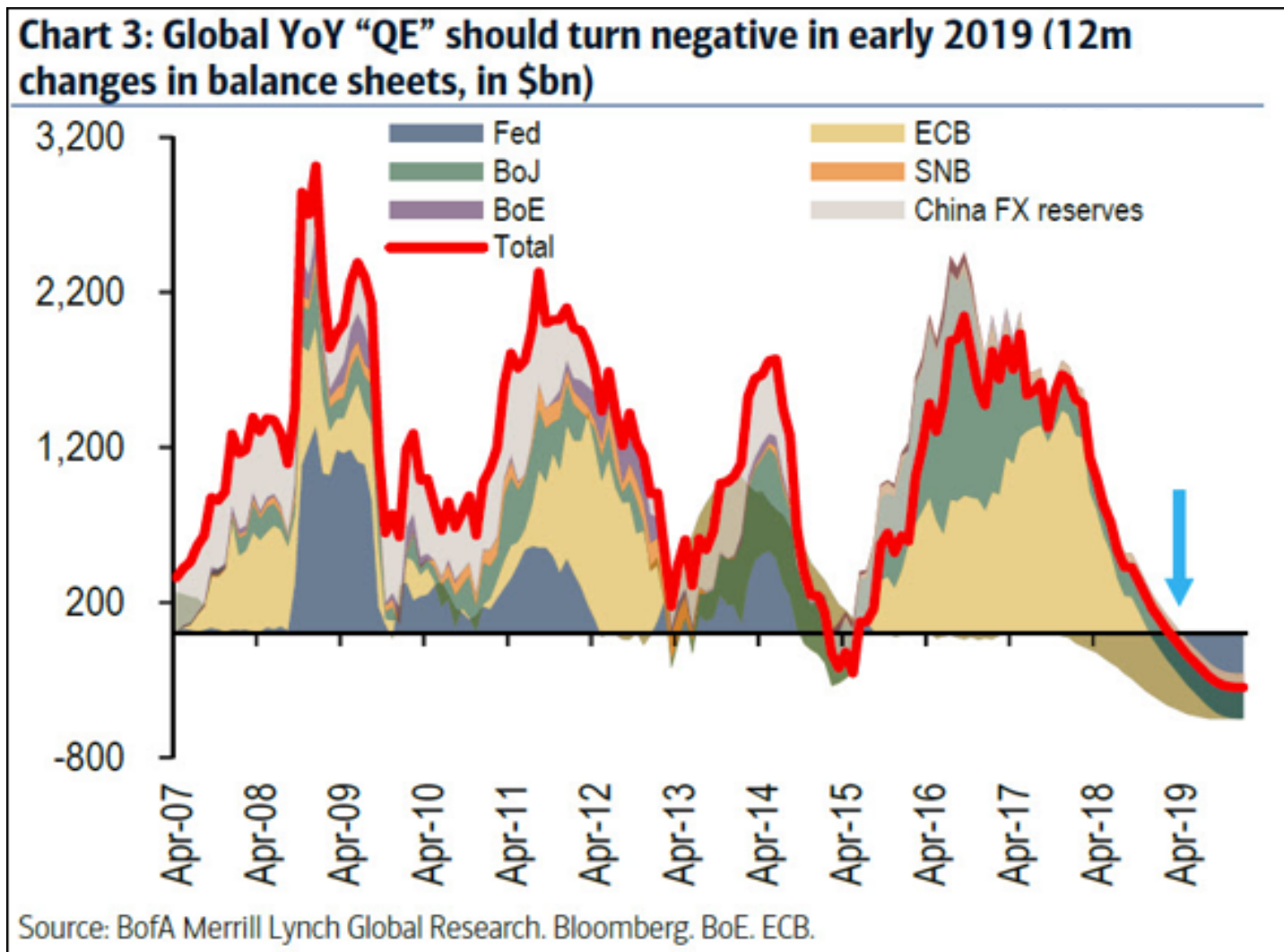


Source: Goldman Sachs Global Investment Research

TREASURY SPREADS OFFER INSIGHT INTO CYCLE MATURITY



QUANTITATIVE EASING HAS RUN ITS COURSE WORLDWIDE!



EMPLOYMENT GROWTH IS SLOWING



DEMAND FROM CHINA LIKELY TO REMAIN STRONG



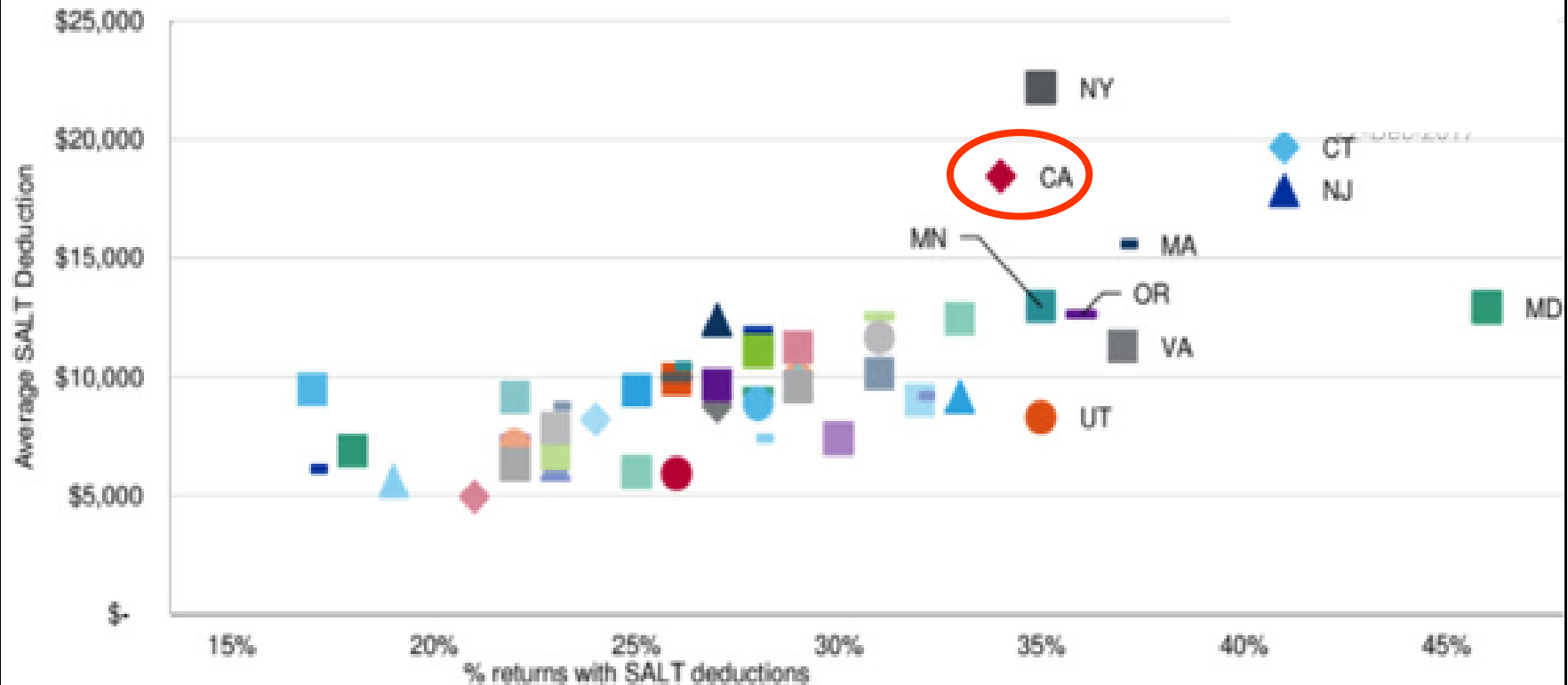
Tax Reform



STATE & LOCAL TAX DEDUCTIONS



Limits on SALT deduction affect high-tax states the most



Source: Internal Revenue Service

TAX REFORM DECREASES DISPOSABLE INCOME IN CALIFORNIA



How California Tax Liability Increases Compared to 2017

Property Tax Component (1)				
Sales Price	\$500,000	\$750,000	\$1,000,000	\$1,500,000
Property Taxes @ 1.75%	\$8,750	\$13,125	\$17,500	\$26,250
Non-Deductible Property Taxes Over \$10,000 Limit	-\$1,250	\$3,125	\$7,500	\$16,250
Mortgage Interest Component (2)				
Loan Amount @ 75% LTV	\$375,000	\$562,500	\$750,000	\$1,125,000
Year 1 Interest @ 4.5%	\$16,875	\$25,312	\$33,750	\$50,625
Non-Deductible Interest over \$24,000 Limit	-\$7,125	\$1,312	\$9,750	\$26,625
Year 1 Total Increase in Ownership Costs	\$0	\$4,437	\$17,250	\$42,875
Income Tax Component (3)				
Household Income @ 30% of Loan Amount	\$112,500	\$168,750	\$225,000	\$337,500
State Income Tax at Applicable Rate	\$11,588	\$17,381	\$23,175	\$38,138
Non-Deductible Taxes (1 + 2 + 3)	\$3,213	\$21,818	\$40,425	\$81,013
Non-Deductible Taxes as % of Sales Price	0.64%	2.91%	4.04%	5.40%

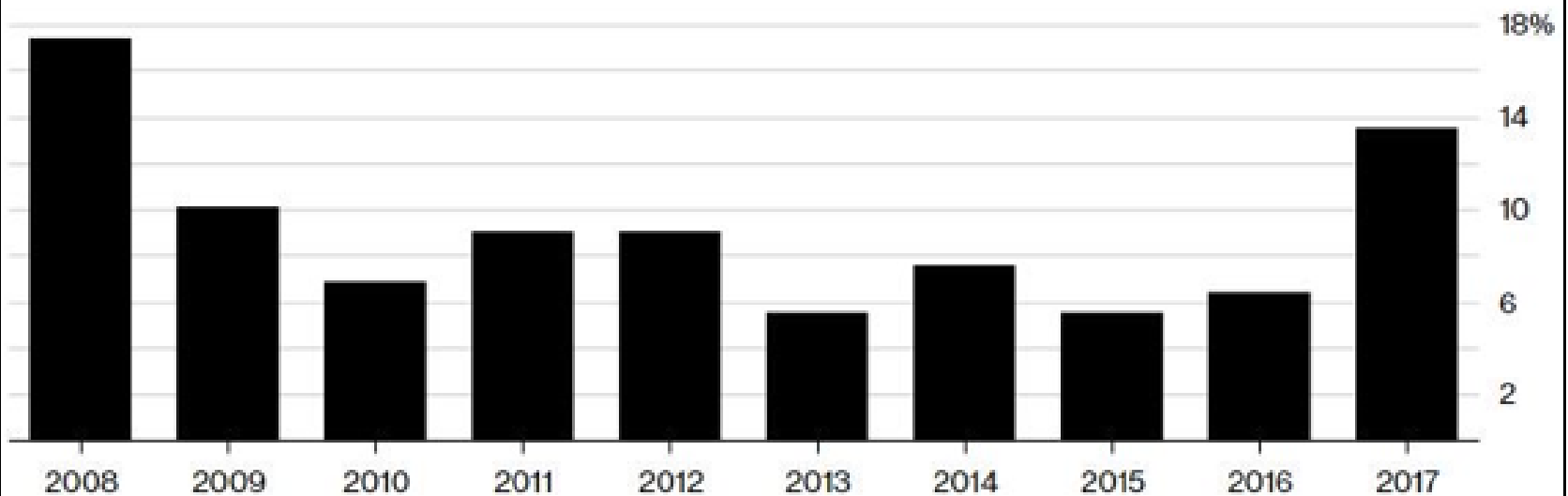
FIRST READINGS FROM TAX REFORM



Greenwich Sellers Get Real

To win a deal, luxury-home owners gave the biggest discounts since the end of 2008 on

■ Fourth-quarter average luxury discounts

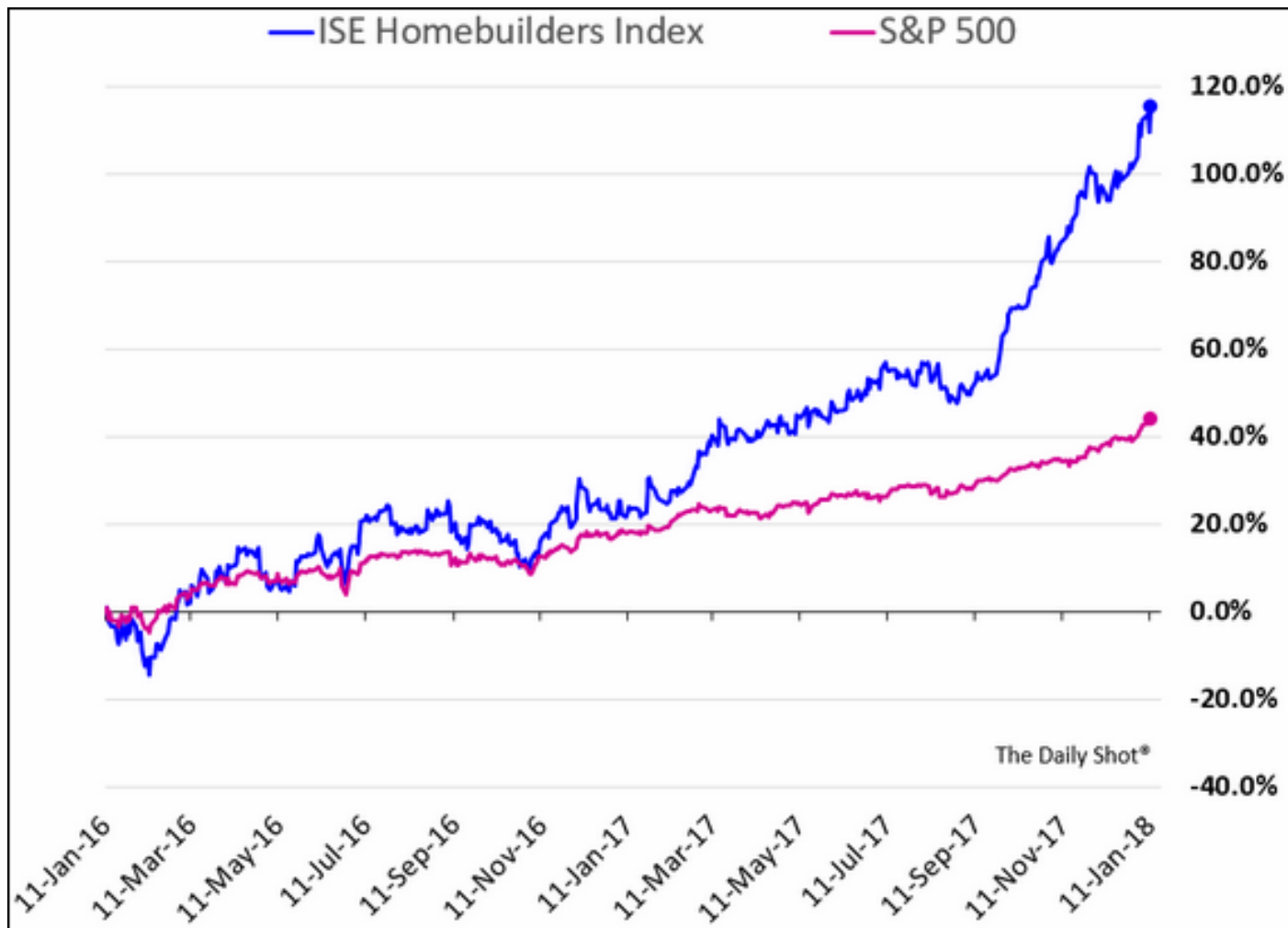


Source: Miller Samuel Inc. and Douglas Elliman Real Estate

Industry Trends in Homebuilding



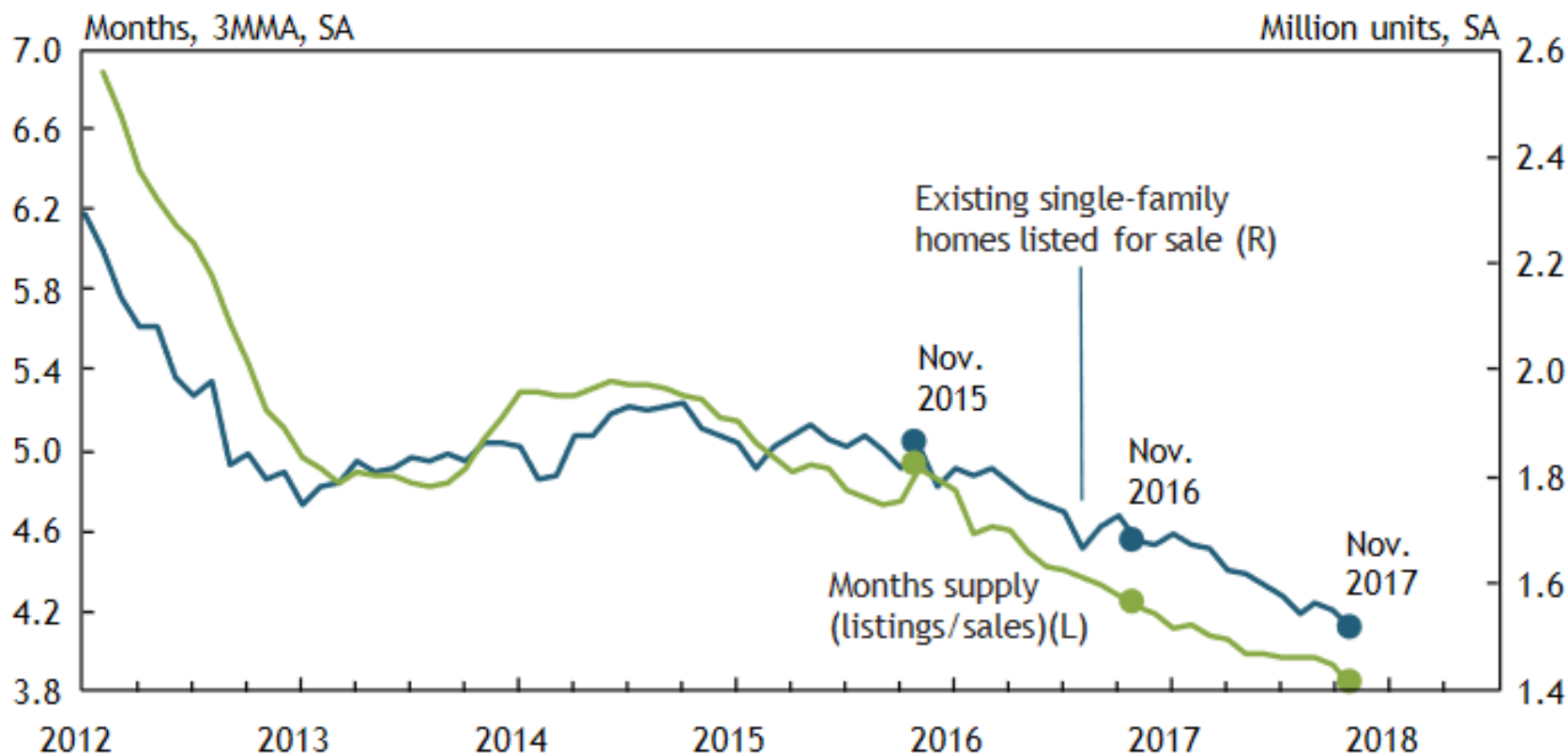
HOMEBUILDER VALUATIONS ARE BOUYANT



EXISTING HOME INVENTORIES ARE VERY LOW



Chart 2: Sales listings of existing single-family homes



Note: Months supply shown above differs from the value released by the National Association of Realtors because of seasonal adjustment and smoothing.

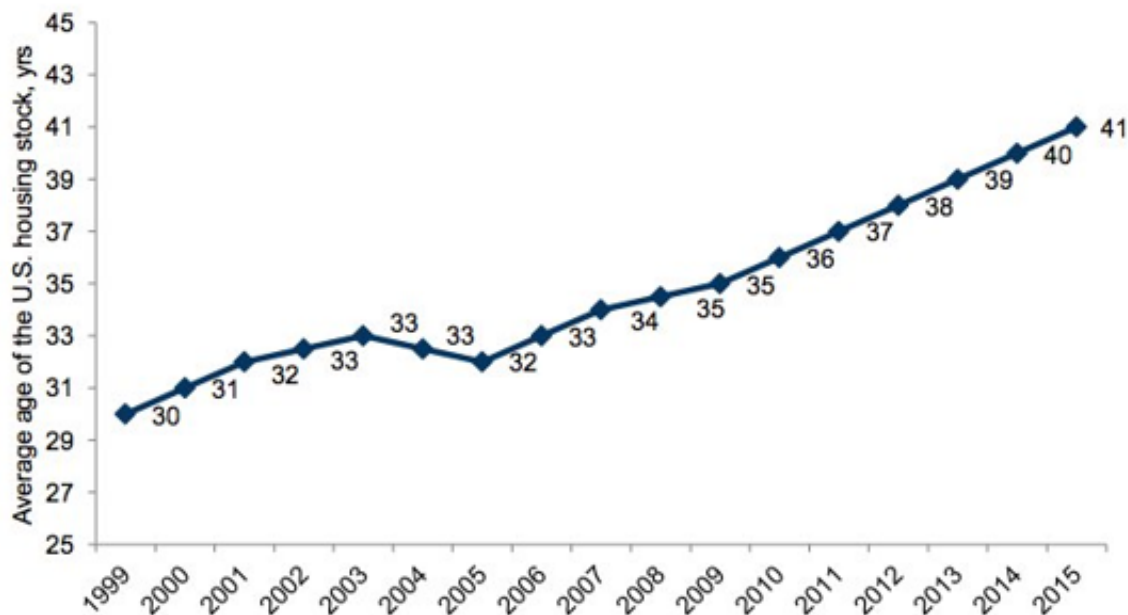
Source: National Association of Realtors (Haver Analytics).

U.S. HOUSING STOCK CONTINUES TO AGE



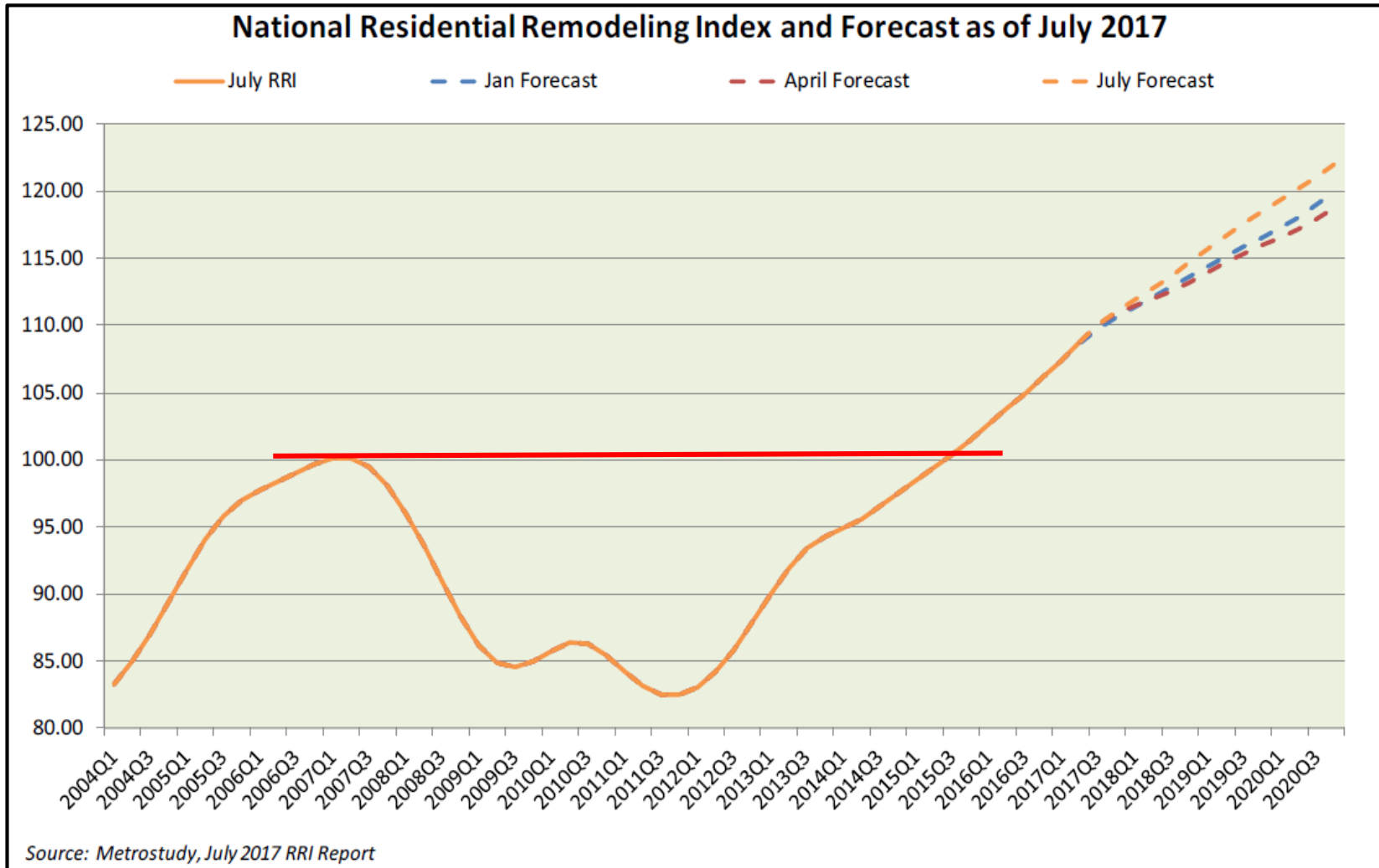
Exhibit 12: ...and we believe older housing stock argues for spending growth to continue

Age of U.S. housing stock in years, average



Source: AHS, Goldman Sachs Global Investment Research

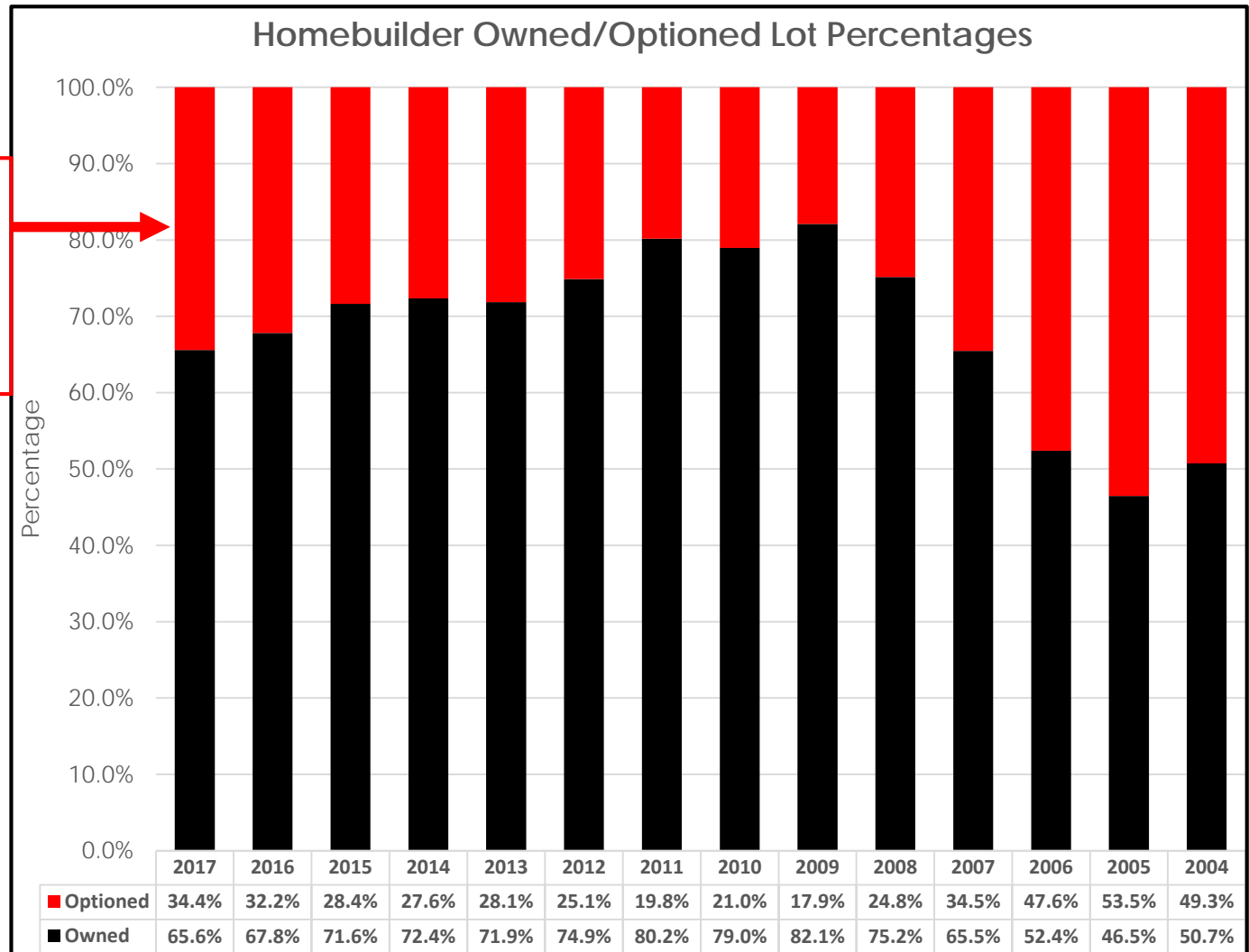
LACK OF NEW HOMES LEADS TO A SURGE IN REMODELING



BUILDERS ARE OPTIONING MORE LOTS



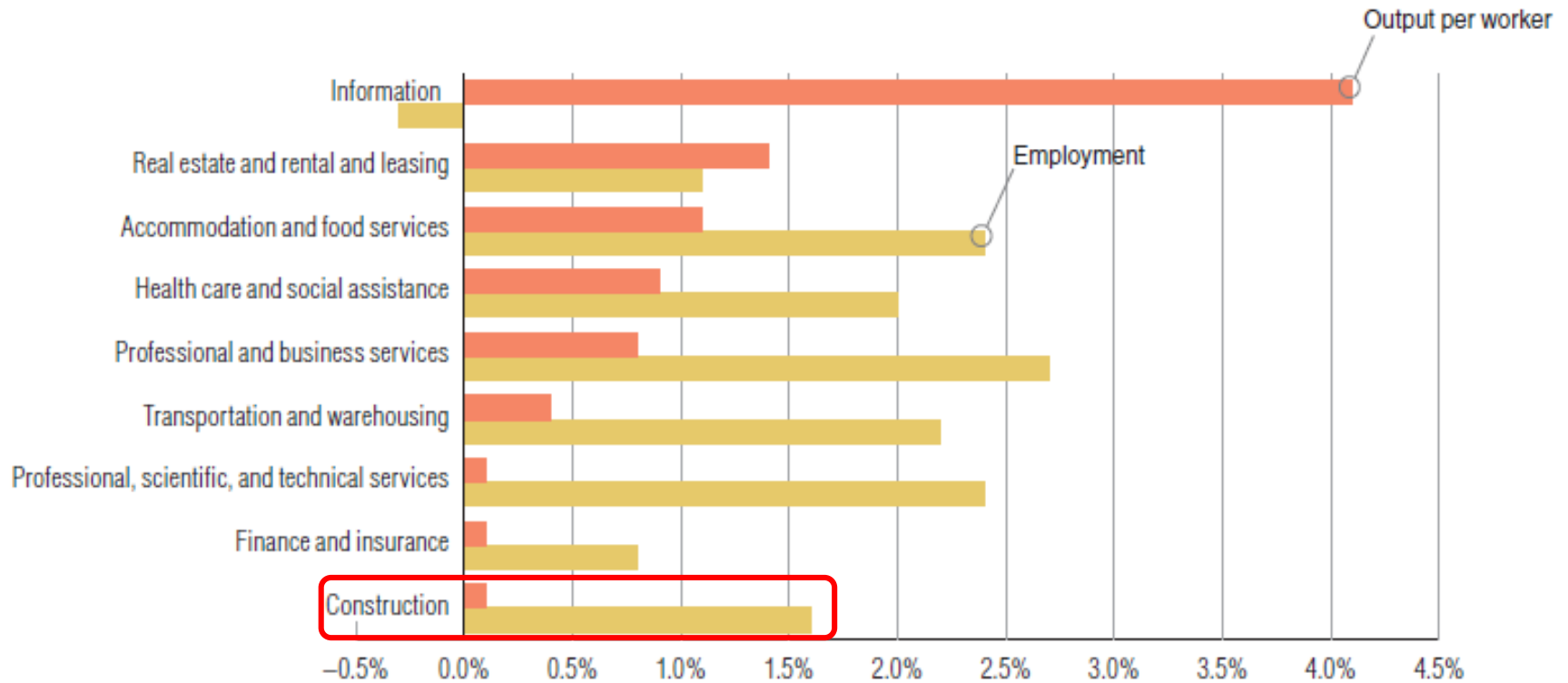
The percentage of lots controlled through options is increasing in recent years.



OUTPUT PER WORKER IS VERY LOW FOR THE INDUSTRY



Exhibit 1-8 Change in U.S. Worker Output versus Employment Growth by Sector, 2009–2017

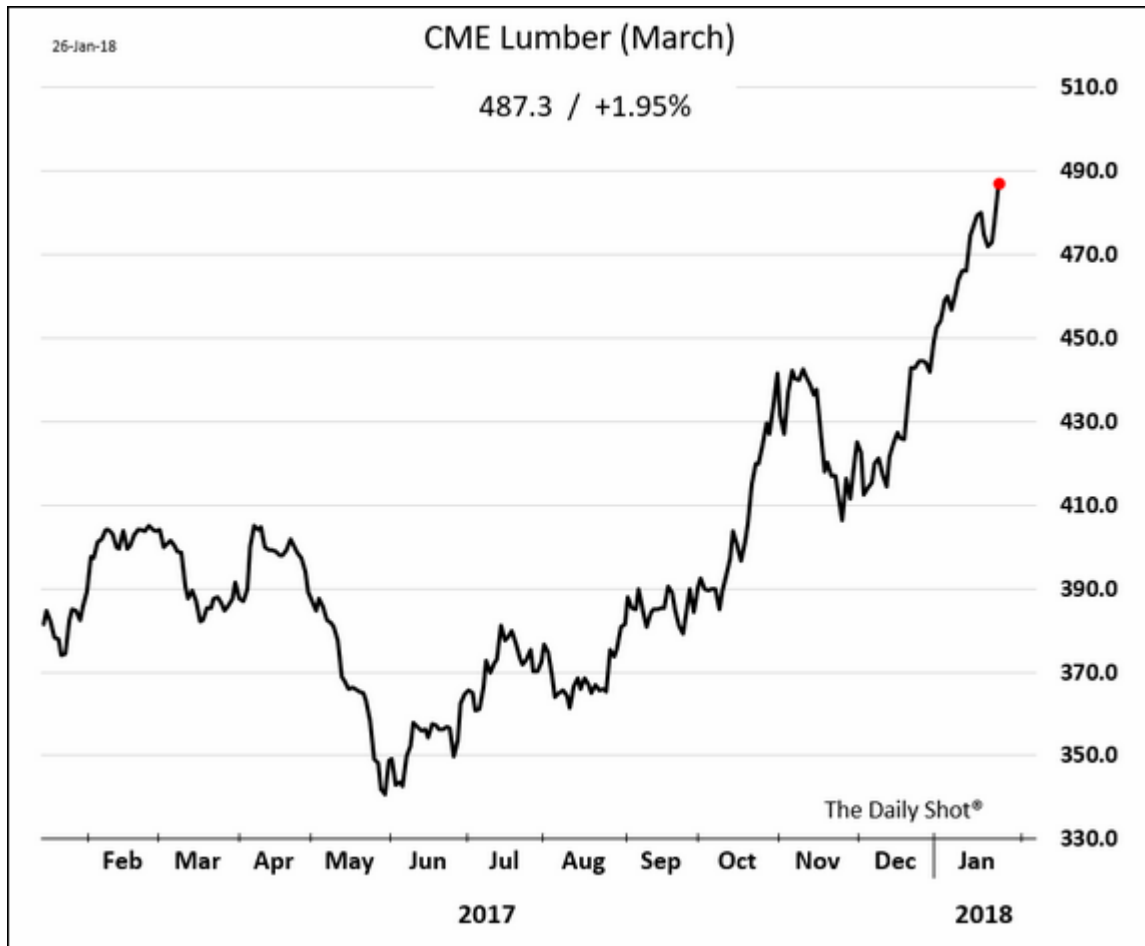


Sources: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics.

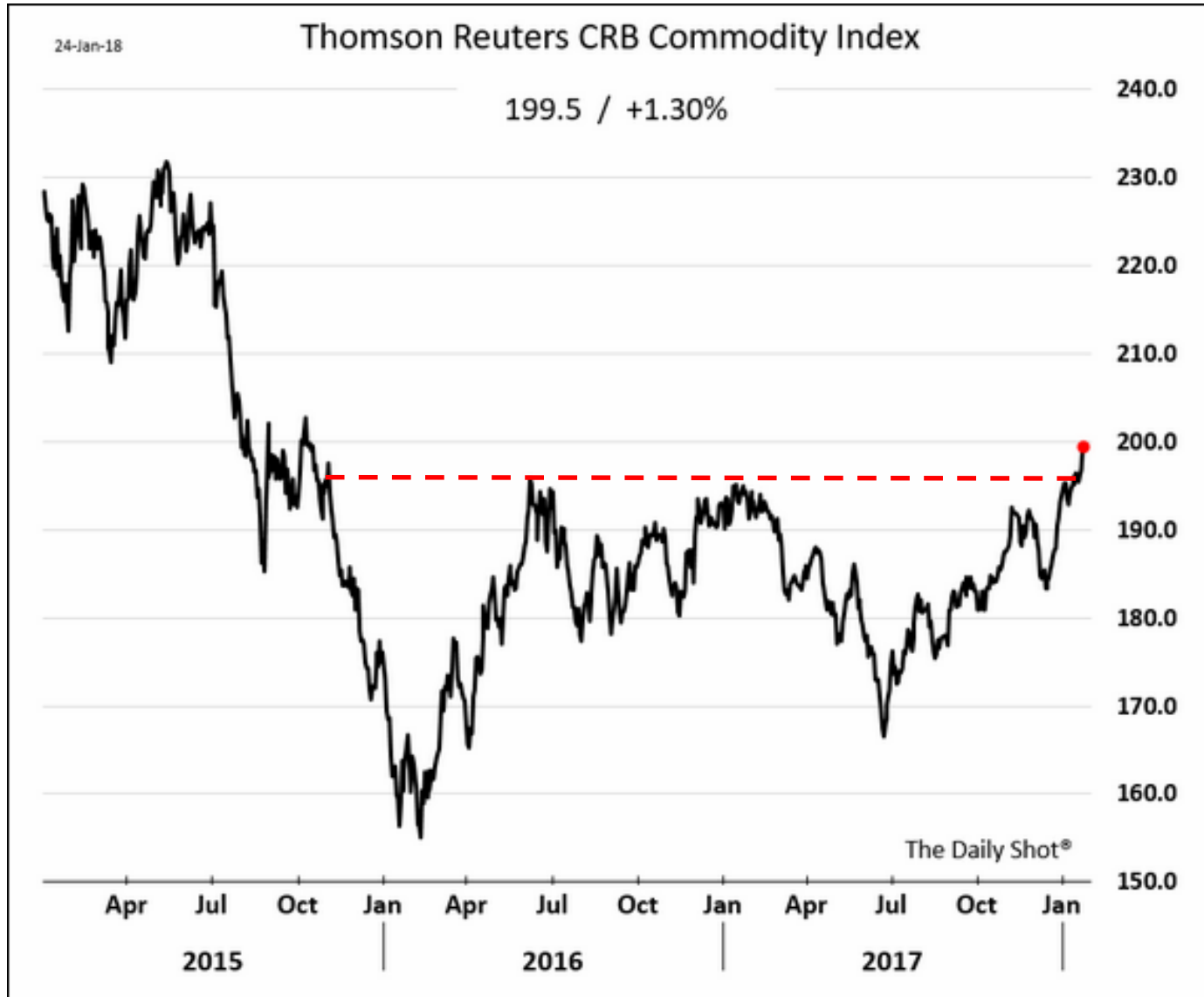
HOUSING COST INPUTS ARE RISING



- A 3,000 s.f. house requires 20,000 board feet of framing lumber and another 15,000 of other wood products.
- A \$100 increase in lumber prices would roughly translate into a \$12 per square foot increase in construction costs.
- Lumber prices get locked in months in advance so many of the recent increases are just beginning to hit the builders budgets.



MATERIAL PRICES TEND TO RALLY LATE IN THE CYCLE



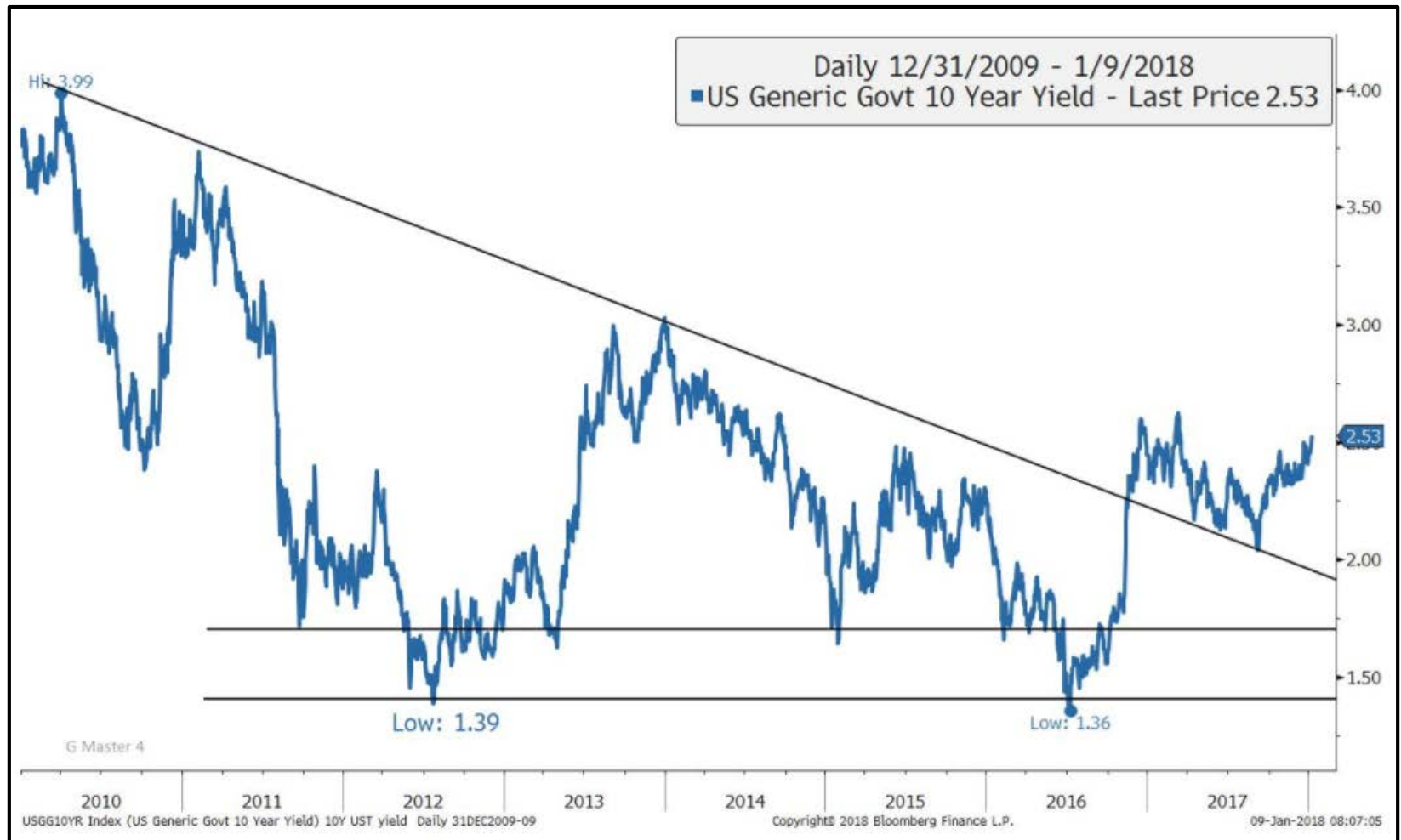
Interest Rate Markets



U.S. 5 YEAR TREASURY

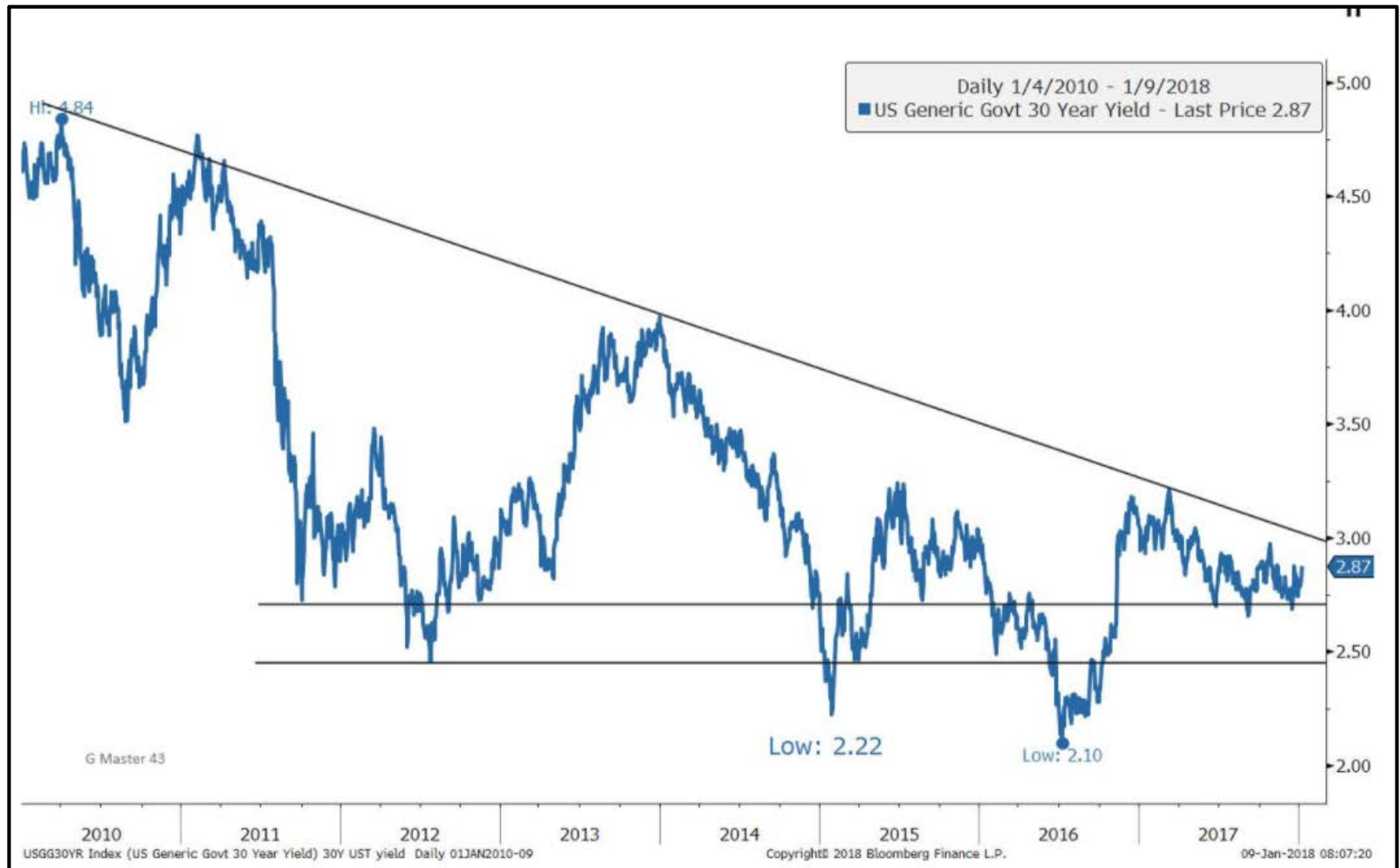


U.S. 10 YEAR TREASURY



Current yield on the 10 Year is above 2.70%

U.S. 30 YEAR TREASURY

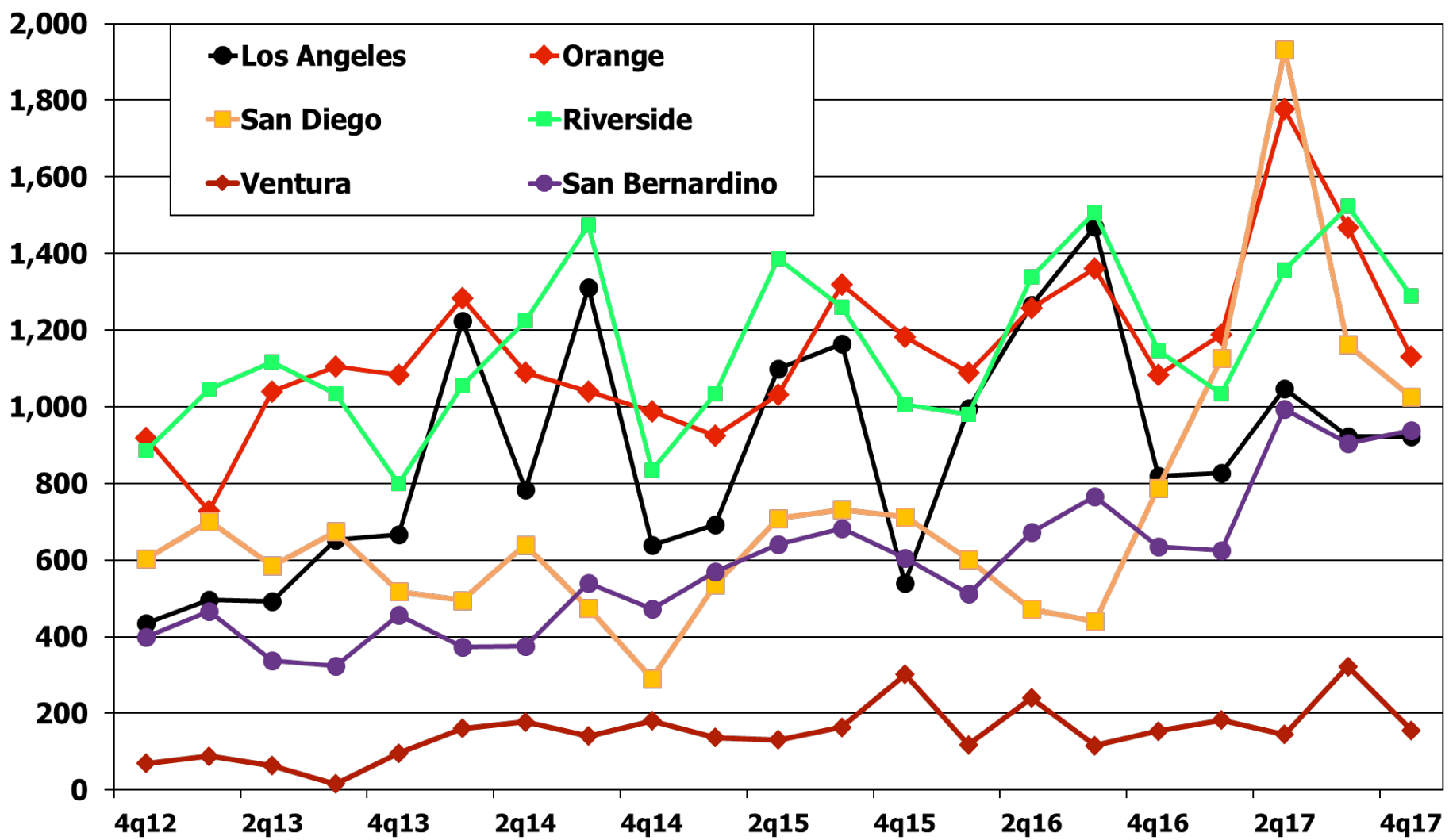


Only the long dated Treasuries have yet to break the downtrend line.

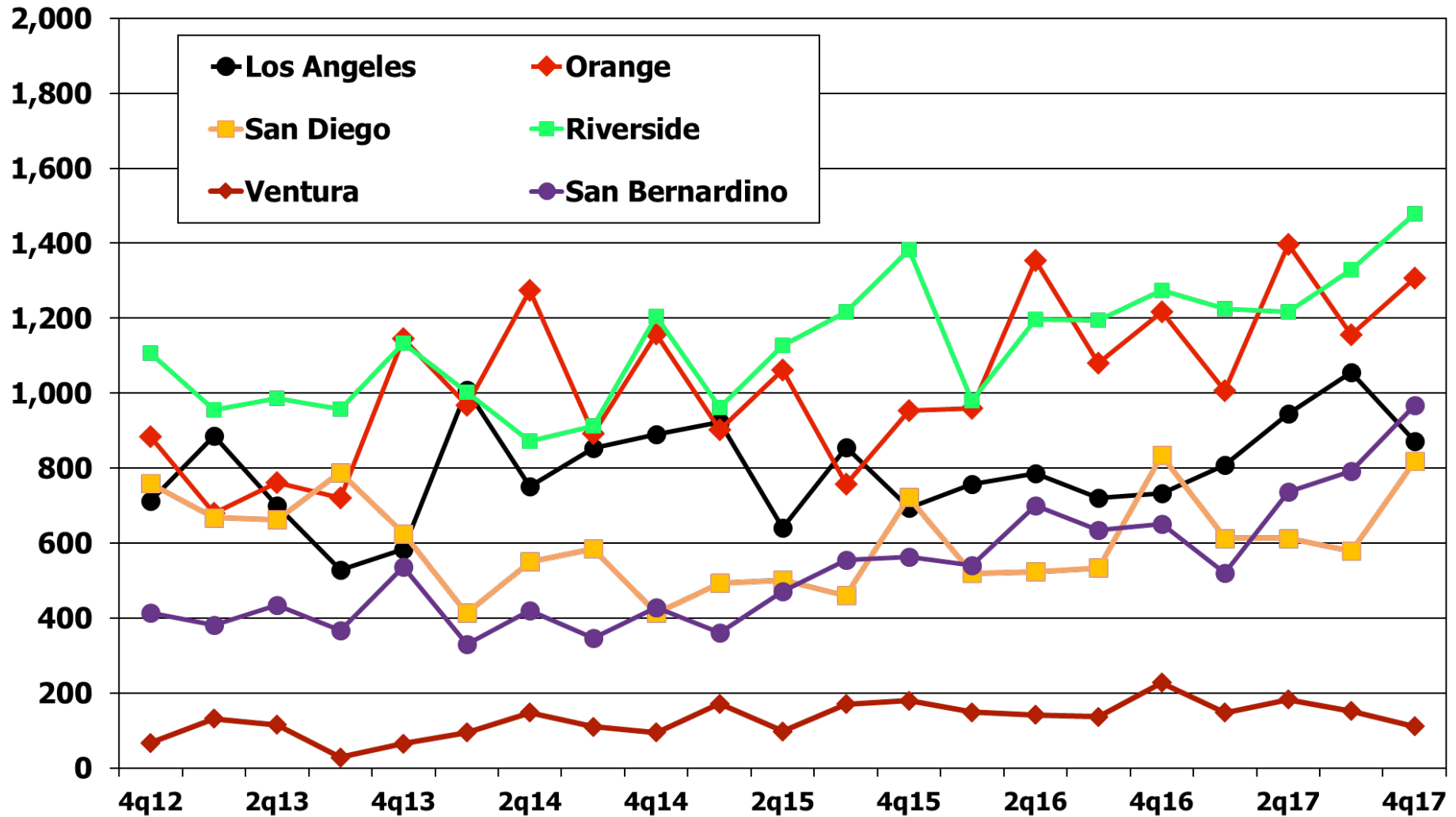
Southern California Housing Market Trends



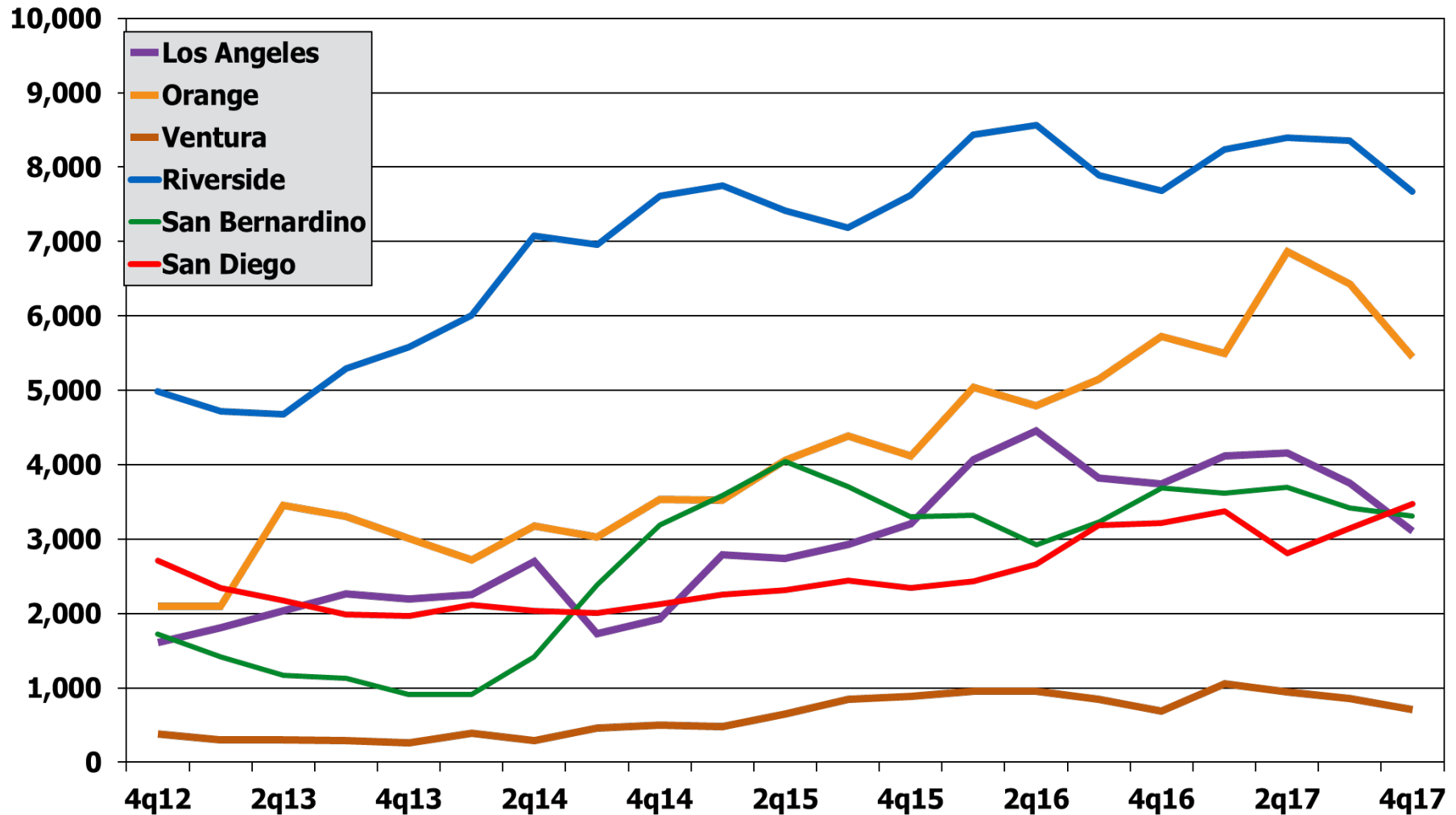
Southern California – Quarterly Starts



Southern California – Quarterly Closings



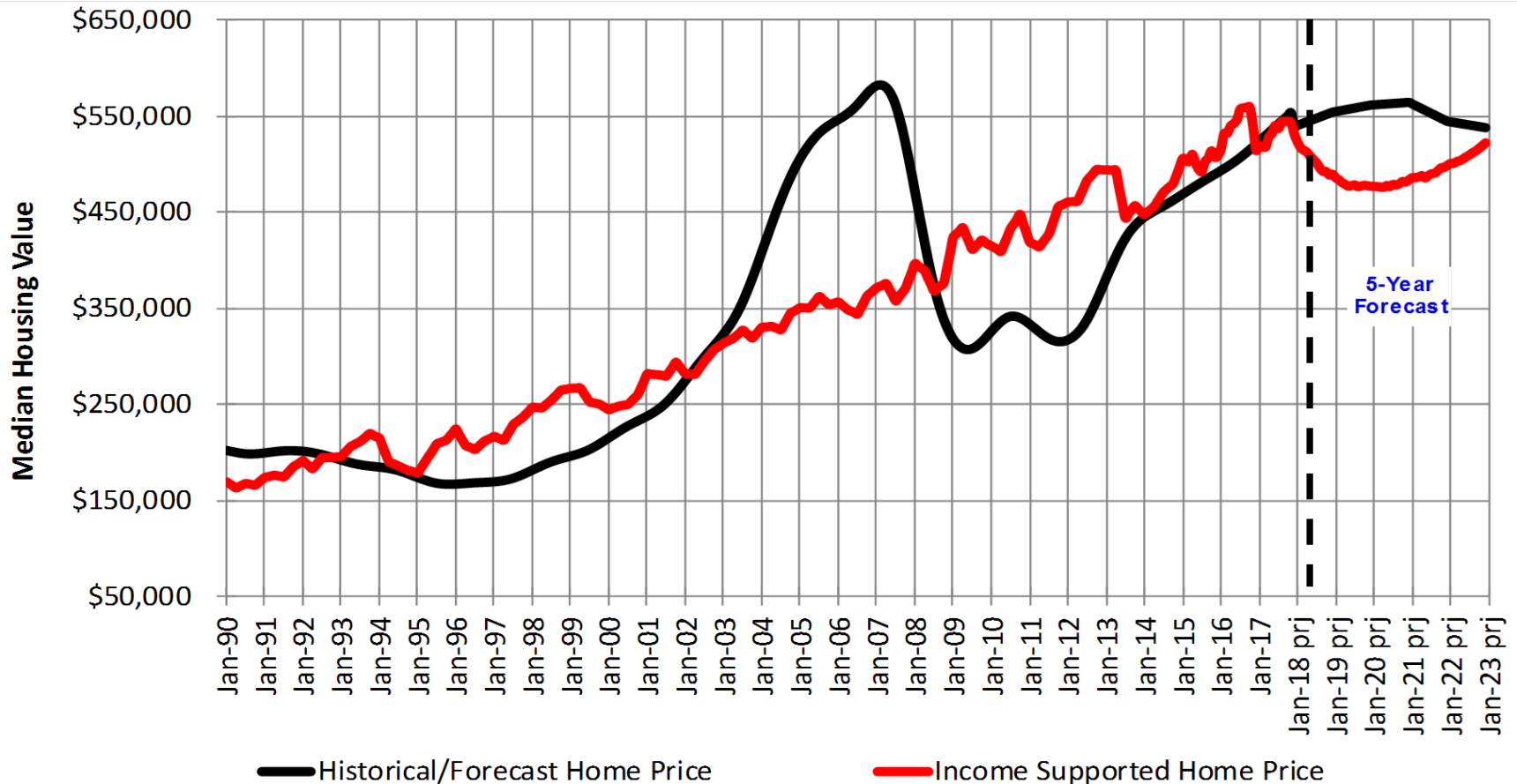
Southern California – Developed Lots



Southern California Valuation Patterns



HOUSING VALUATION PATTERNS
Southern California

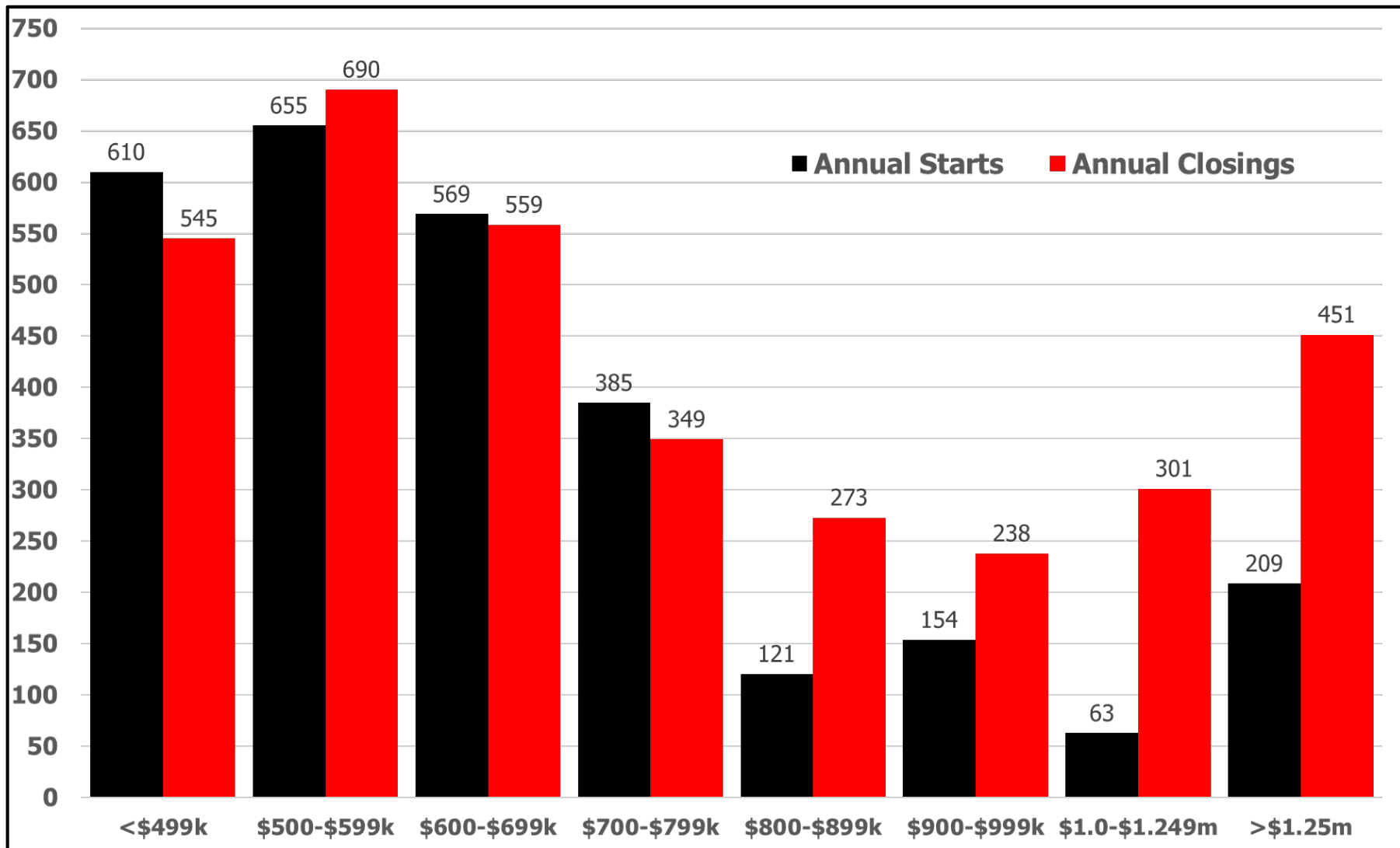


Source: Bureau of Labor Statistics; Moody's Analytics; Real Estate Economics
www.realestateeconomics.com

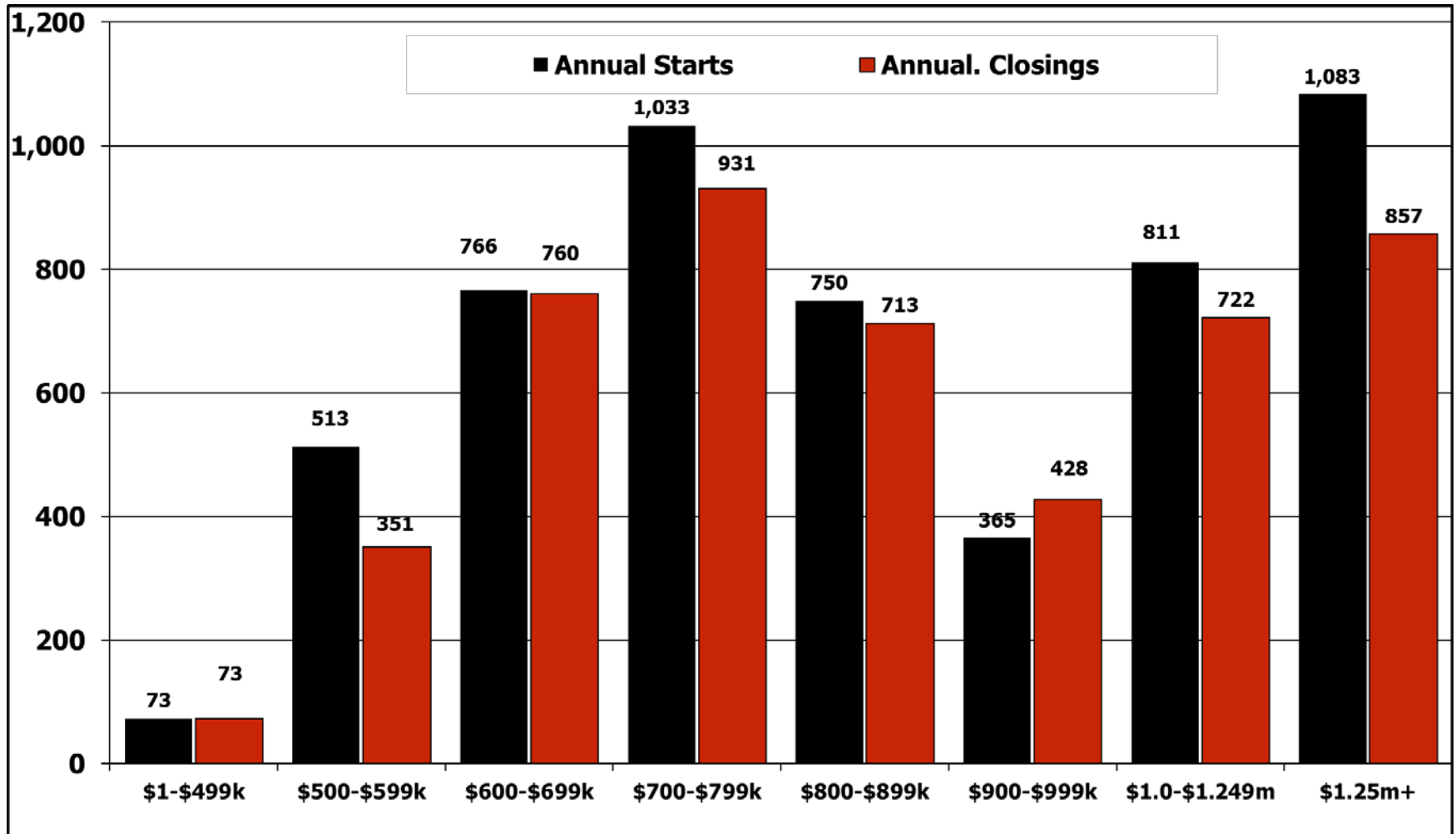
Pricing Trends By County 4Q 2017



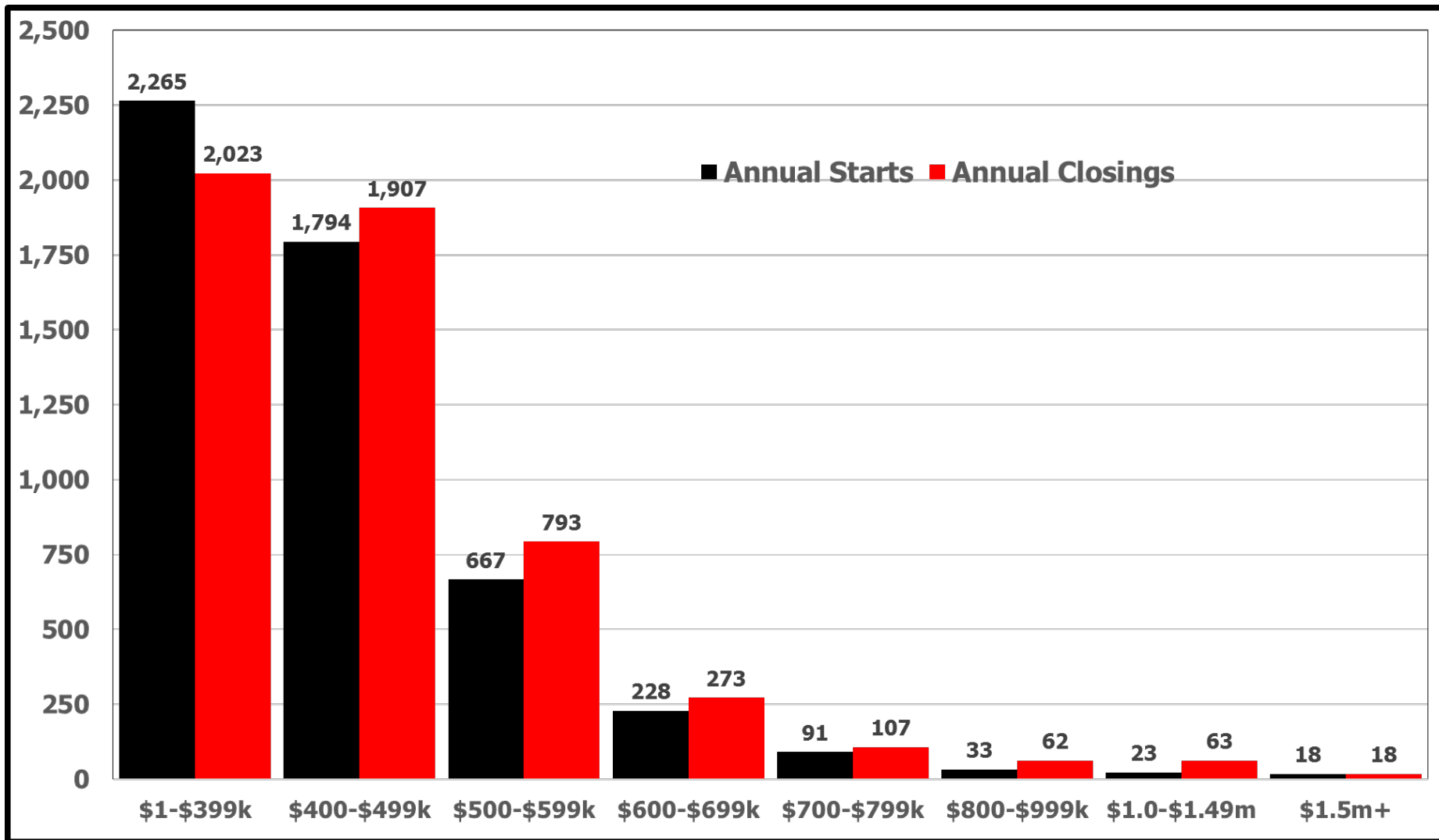
Los Angeles County – Starts and Closings by Price Range 4Q 2017



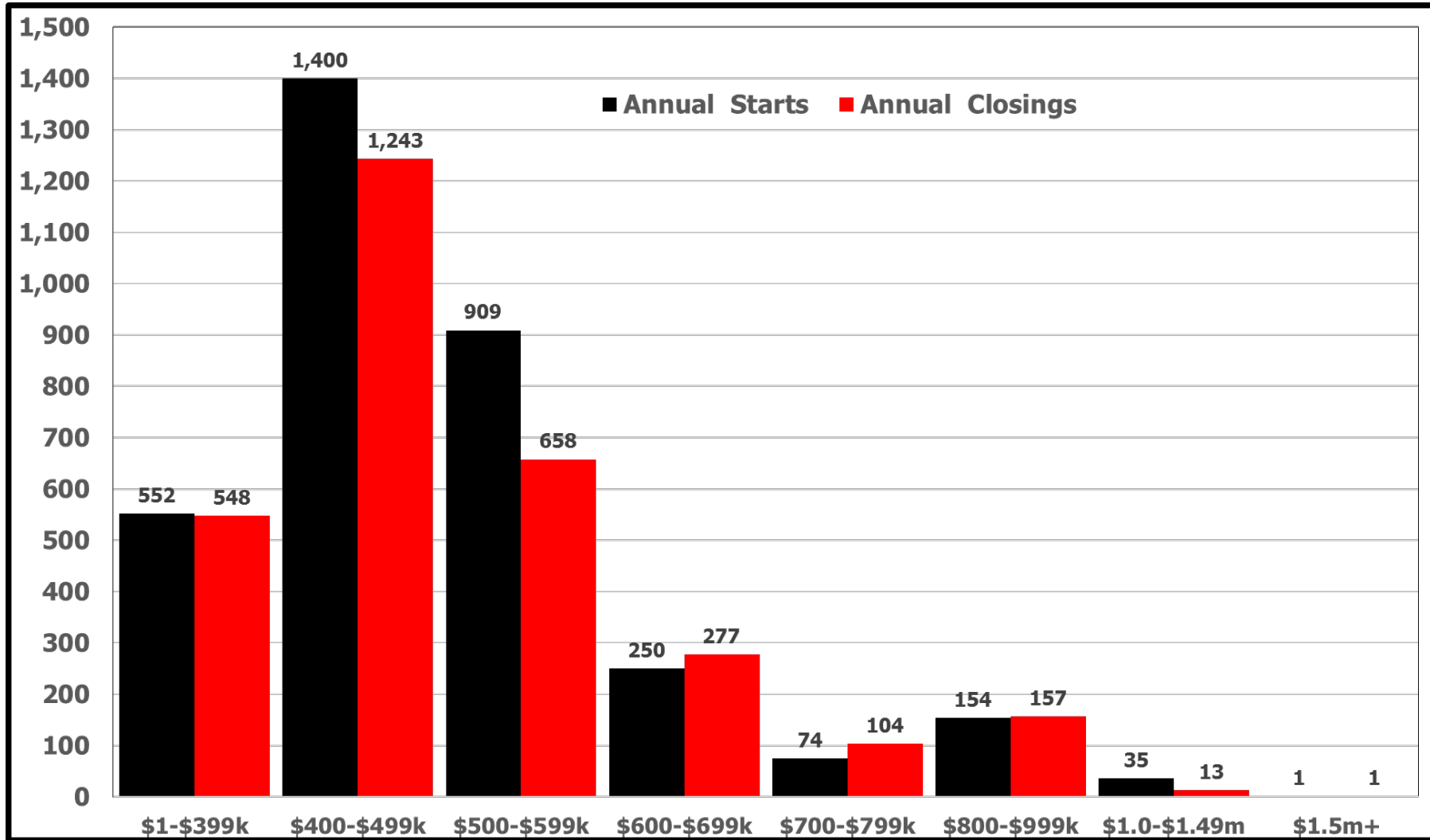
Orange County – Starts and Closings by Price Range 4Q2017



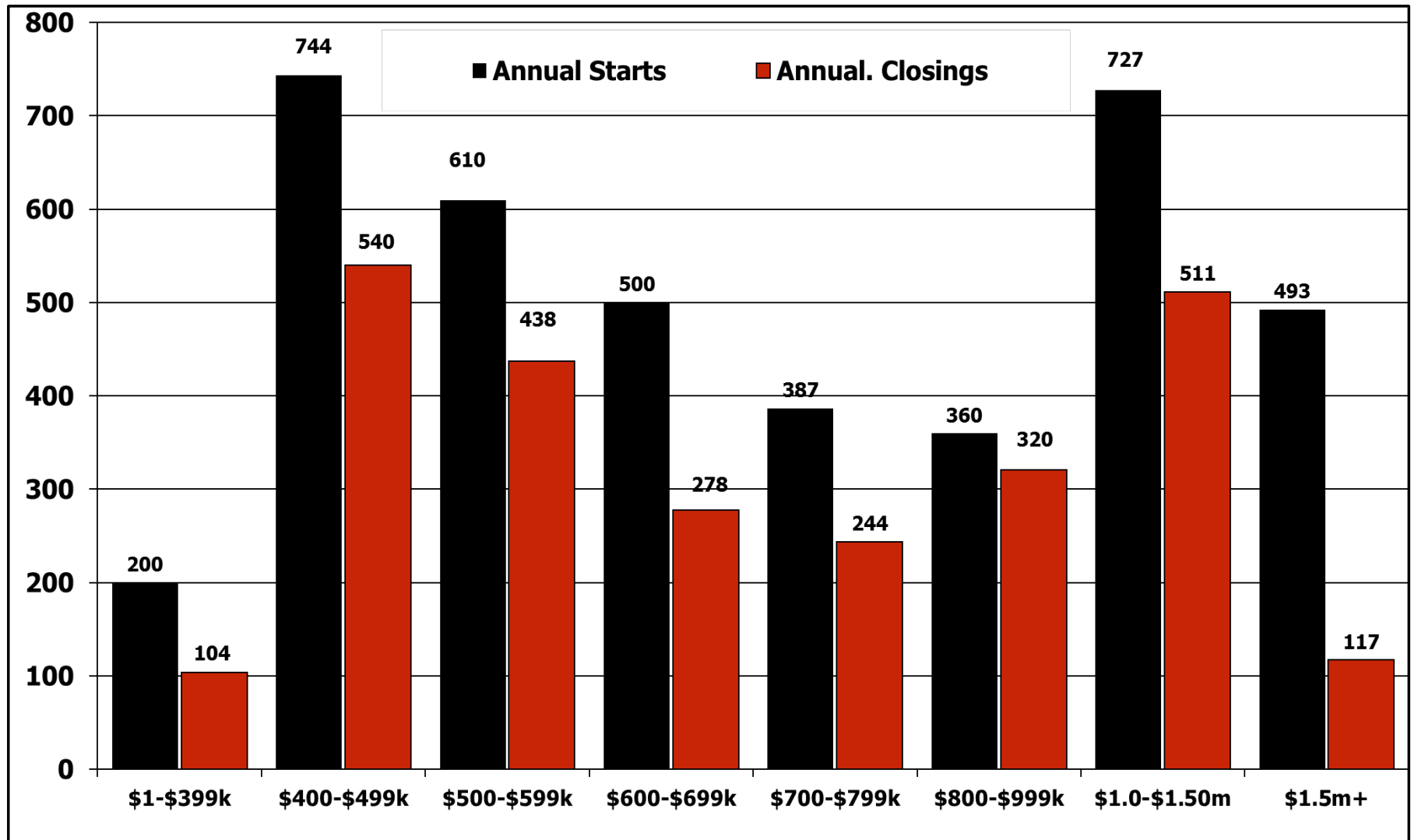
Riverside County – Starts and Closings By Price Range 4Q 2017



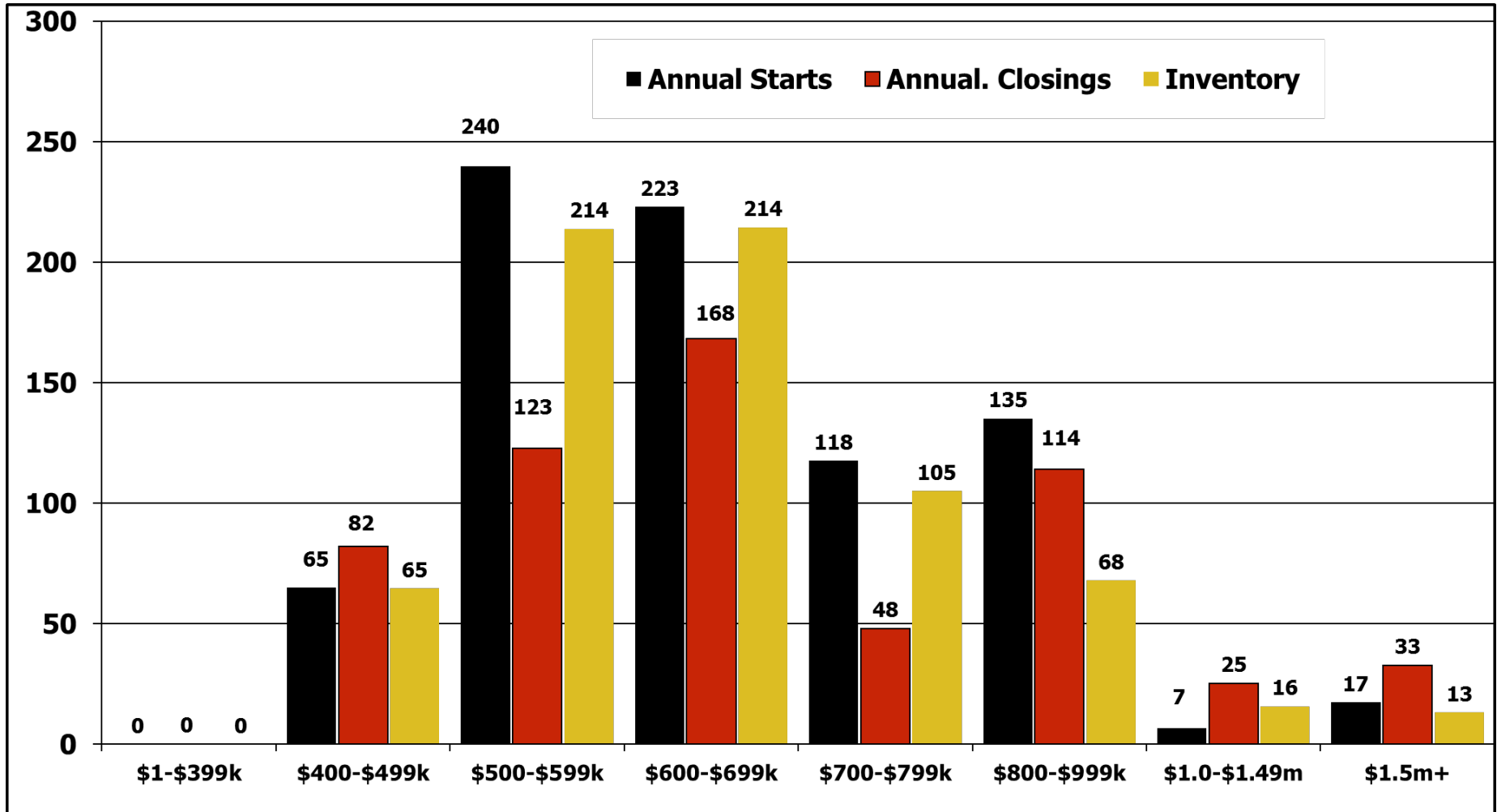
San Bernardino County – Starts and Closings By Price Range 4Q 2017



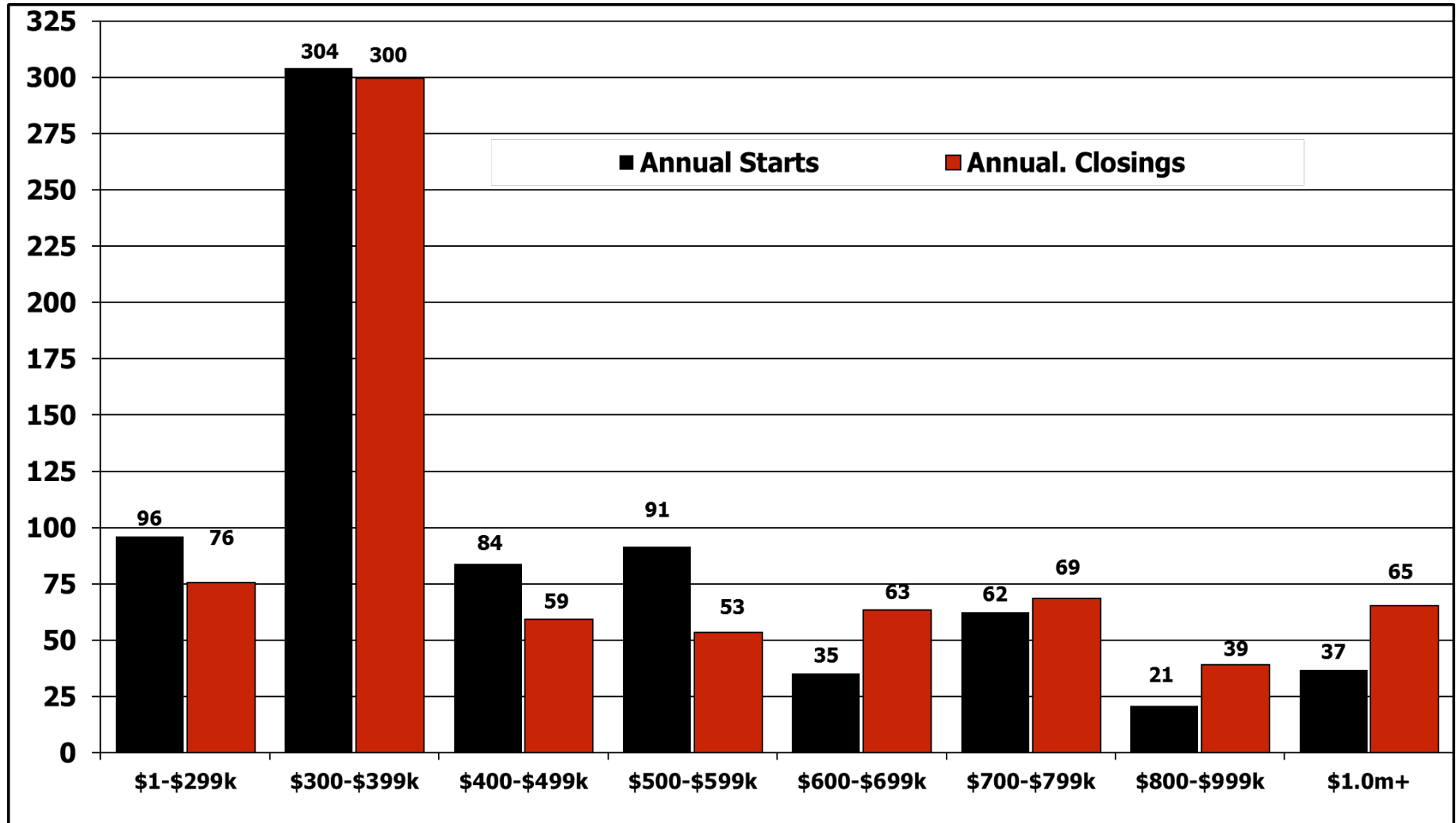
San Diego County – Starts and Closings By Price Range 4Q 2017



Ventura County – Starts, Closings AND Inventory By Price Range



Coachella Valley – Starts and Closings BY Price Range 4Q 2017 Includes Age Qualified



Southern California - Outlook



- **The Economy**

- There are no signs that a recession is imminent or likely to occur in the next 12 to 18 months,

- **The Cycle**

- There is little doubt that we're late in the cycle, its time to look ahead and anticipate change,

- **Supply Constraints**

- The market shows a labor shortage, higher land prices, a complicated entitlement environment and increasing product concentrations. The available supply is not well distributed by price.

- **Input Costs**

- Late cycle stages typically show rapidly rising labor and materials costs, we're seeing that now.

- **Bottom Line**

- The homebuilding process takes years to entitle land and then build homes, awareness of cycles and trends is essential to risk management.

Contact Information

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