

December 2017 Housing Commentary



Urs Buehlmann

Department of Sustainable Biomaterials

Virginia Tech

Blacksburg, VA

540.231.9759

buehlmann@gmail.com

and

Al Schuler

Economist (retired)

Princeton, WV

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This report is a free monthly service of Virginia Tech. Past issues can be found at: <http://woodproducts.sbio.vt.edu/housing-report/>

December 2017 Housing Scorecard

	M/M	Y/Y
Housing Starts	▽ 8.2%	▽ 6.0%
Single-Family Starts	▽ 11.8%	△ 3.5%
Building Permits	▽ 0.1%	△ 2.8%
Housing Completions	△ 2.2%	△ 7.4%
New Single-Family House Sales	▽ 9.3%	△ 14.1%
Existing House Sales ¹	▽ 3.6%	△ 1.1%
Private Residential Construction Spending	△ 0.5%	△ 6.2%
Single-Family Construction Spending	△ 0.4%	△ 8.7%

M/M = month-over-month; Y/Y = year-over-year

Housing Data

	December	November	Dec. 2016
Total permits*	1,302,000	1,303,000	1,266,000
Single-family permits	881,000	865,000	830,000
Multi-family 2-4 unit permits	39,000	39,000	39,000
Multi-family ≥ 5 unit permits	382,000	399,000	397,000
Total starts	1,192,000	1,299,000	1,268,000
Single-family starts	836,000	948,000	808,000
Multi-family 2-4 unit starts**	4,000	8,000	11,000
Multi-family ≥ 5 unit starts	352,000	343,000	449,000
Total completions	1,177,000	1,152,000	1,096,000
Single-family completions	818,000	784,000	765,000
Multi-family 2-4 unit completions**	13,000	15,000	8,000
Multi-family ≥ 5 unit completions	346,000	353,000	323,000

* All data are presented at a seasonally adjusted annual rate (SAAR).

** US DOC does not report 2-4 multi-family starts and completions directly, this is an estimation.

Source: U.S. Department of Commerce-Construction: www.census.gov/construction/nrc/pdf/newresconst.pdf; 01/18/18

Housing Data

	December	November	Dec. 2016
New single-family sales	625,000	689,000	548,000
Median price	\$335,400	\$334,900	\$327,000
Existing sales ^a	5,570,000	5,780,000	5,510,000
Median price	\$246,800	\$247,200	\$233,300
Private Residential Construction	\$526.1 billion	\$523.8 billion	\$495.4 billion
SF construction	\$275.6 billion	\$274.4 billion	\$253.6 billion
MF construction	\$64.0 billion	\$62.4 billion	\$61.2 billion
Improvement construction ^b	\$186.5 billion	\$186.9 billion	\$180.7 billion

^a NAR®

^b The US DOC does not report improvements directly, this is an estimation. All data is SAAR and is reported in nominal US\$.

Sources:

NAR® www.realtor.org/topics/existing-home-sales; 01/24/18

U.S. Department of Commerce-Construction: www.census.gov/construction/nrs/pdf/newressales.pdf; 01/25/18

U.S. Department of Commerce-C30 Construction: www.census.gov/construction/c30/pdf/privsa.pdf; 02/01/18

Conclusions

Housing remains in its steady, slow-growth mode. Latest numbers show an eight percent decline in total starts in December, indicating the typical seasonal slow-down. Especially the lower-priced housing starts are less than historical average, indicating problems in the future. Without housing activity, wood product prices remain weak.

December's housing data is mixed at best – total starts are down by 8.2% (m/m), single family homes starts are down by 11.8% (m/m), permits down by 0.1% (m/m), completions up by 2.2% (m/m), and existing home sales were down by 3.6% from the month before.

With meager economic growth (average growth since 2009 2.1%, slowest recovery since WWII) and with 51% of all worker's in the U.S. making less than \$30,000/year, it's hard to envision a scenario where the U.S. housing market returns to "normal" anytime soon. Slowing economies in China, Brazil, among others, and continuing problems in Europe's banking sector all add up to numerous negative macro-factors endangering a robust housing recovery, in particular:

- 1) A constrained quantity of well-paying jobs being created;
- 2) a tepid economy;
- 3) declining real median annual household incomes;
- 4) strict home loan lending standards – though loosening with new programs
- 5) slow world economy; and
- 6) global uncertainty

November 2017

EU Housing Scorecard

		M/M	Y/Y
Production in Construction ^A	EU 28	△ 0.6% ^s	△ 2.7% ^s
	EU 19	△ 0.5% ^s	△ 2.7% ^s
	Germany	△ 0.9%	△ 4.8%
	France	▽ 0.6%	▽ 0.2%
	UK	△ 0.4% ^p	△ 0.1% ^p
	Spain	△ 0.4% ^{ps}	△ 0.9% ^p
Building permits (m ² floor) ^A	EU 28	--	--
	EU 19	△ 3.9% ⁽¹⁰⁾	△ 12.3% ^{s(10)}
	Germany	▽ 2.2%	▽ 8.3%
	France	▽ 0.1% ^s	△ 3.8% ^e
	UK	--	--
	Spain	△ 11.2 ^{s(10)}	△ 24.6 ^{e(10)}

M/M = month-over-month; Y/Y = year-over-year

Source: Eurostat (<http://ec.europa.eu/eurostat/web/short-term-business-statistics/data/main-tables>; 02/09/18)

^A see <http://ec.europa.eu/eurostat/web/short-term-business-statistics/overview/sts-in-brief>

^eestimate ^sEurostat estimate ^pprovisional -- no data available ⁽¹⁰⁾October data

Housing comments – February 2018

- *Housing had a pretty good year in 2017 : total starts were up 2.4%; SF was up even more at 8.5% as multi family was off – this is good as millenials seem to be returning to homeownership. Millenials, by the way, are now the largest segment of our population, exceeding the baby boomers, and are the key to future housing demand.*

- *The low rate environment may be over as the 10 year bond approaches 3%. This is actually good for the economy and housing as long as the increase is gradual. Rates have been kept unrealistically low by the FED since the 2008 financial crises, and it is time for rates to return to a more realistic level. Unrealistic low rates cause asset bubbles – and bubbles always end badly.*

- *Something to think about – is home ownership still an integral component of the “American Dream”? I think so – but it is going to take more time for millenials to agree with me. I dislike renting for similar reasons I won’t lease a car. Ownership is important to me.*

Different strokes for different folks.

- *Resale market up 1.1% in 2017 – pricing remains a problem*

- *New home sales were up 14% in 2017, but low inventory and*

GDP grew 2.3% in 2017 - getting better, but, longer term prospects are not good without improved productivity and larger workforce. A smarter immigration system is best solution for short term improvement! ***Sadly, our dysfunctional political system is incapable of fixing our major problems!***

Problems going forward:

- ***low productivity***
- ***Household formation continues to fall as demographics are not favorable – smart immigration policy can help alleviate this problem***
- ***Debt***
- ***Interest rates and inflation on the horizon as the labor market continues to tighten***
- ***Government gridlock***
- ***Geopolitical concerns – N.Korea; China, Russia; terrorism;***

“Biggest problem facing America’s economy – declining public trust In federal government – caused by political system that doesn’t serve the public interests anymore – it serves private interests of the two political parties.”

Why is this Important? As more people disengage from the political process, we are left with growing apathy, crime, violence, declining quality of life – ultimately this will weaken housing demand as the economy suffers, and homeownership falls.

There is no “silver bullet” solution – but, the system can be fixed, but it requires major investment by the citizenry. *My opinion – we need to elect people who have the guts to shape legislation that has the best interests of this country. Today, we have very few such people in Congress. This is why we have so little trust in the Federal government. Like so many Americans, I’m disgusted with our sad sack politicians and a political system that serves primarily self interests.*

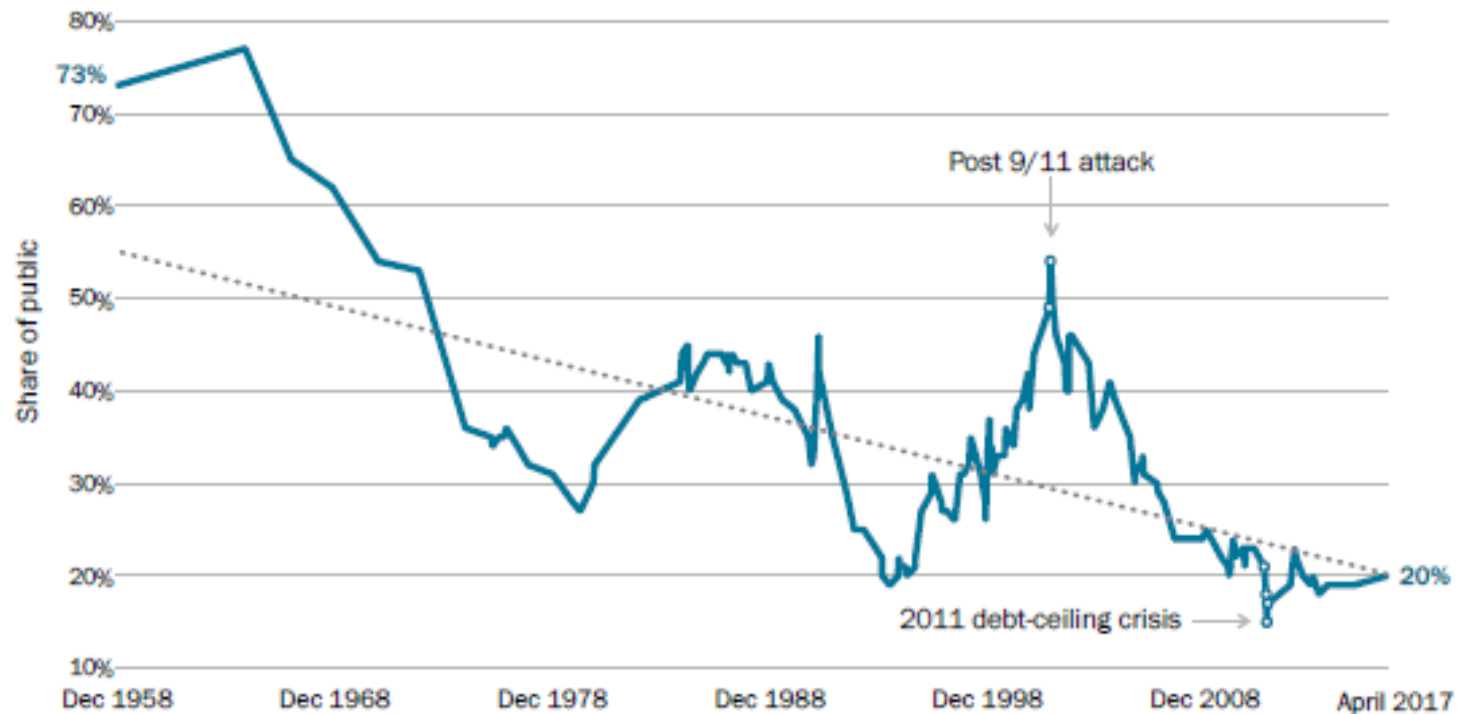
From latest Harvard case study by Porter et al.

(<http://www.hbs.edu/competitiveness/Pages/default.aspx>)

80% of Americans don't trust the federal government according to recent study by M. Porter et al.

FIGURE 1: DECLINING PUBLIC TRUST IN THE FEDERAL GOVERNMENT

As of April 2017, about one in five Americans trust the federal government always or most of the time.

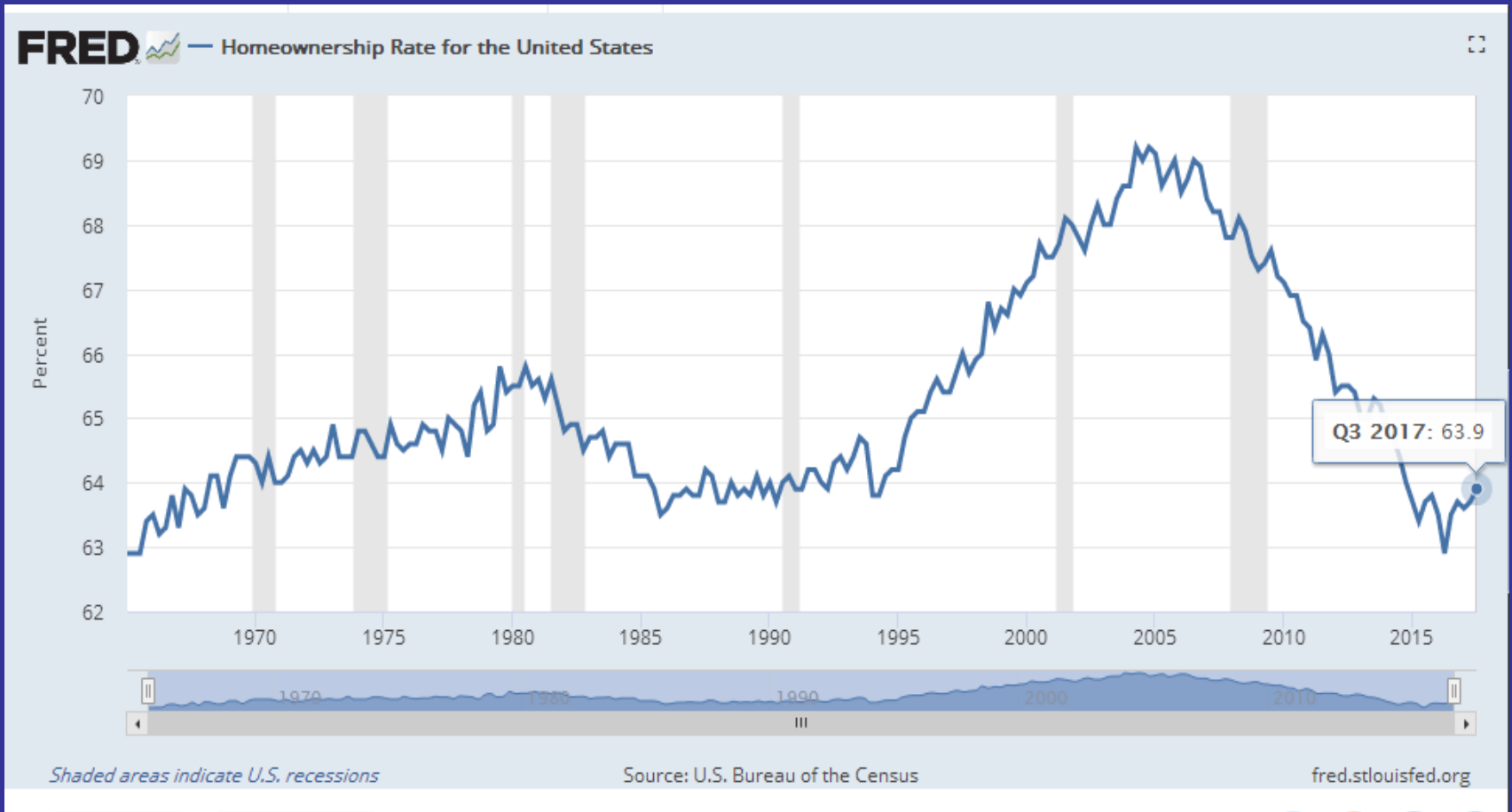


Note: From 1976-2016, data are three-survey moving averages. Post-9/11 markers indicate two surveys in October 2001; debt-ceiling markers indicate four surveys in 2011 after the U.S. hit the debt ceiling in May.

Source: Data from "Public Trust in Government: 1958-2017," Pew Research Center, May 3, 2017, <http://www.people-press.org/2015/11/23/public-trust-in-government-1958-2015/>, accessed August 2017.

Homeownership – where is it headed?

Falling Homeownership rate – has it bottomed, or just a pause before continuing to fall? Actually, it has returned to its long term trend of 64% following the housing collapse that was driven by “flim flam” mortgages, faulty credit scores, lax regulations, and greedy home buyers believing that house prices could only go up.



Source: Census (<https://www.census.gov/housing/hvs/data/q413ind.html>)

Homeownership increased for 1st time in 13 years in 2017 ----

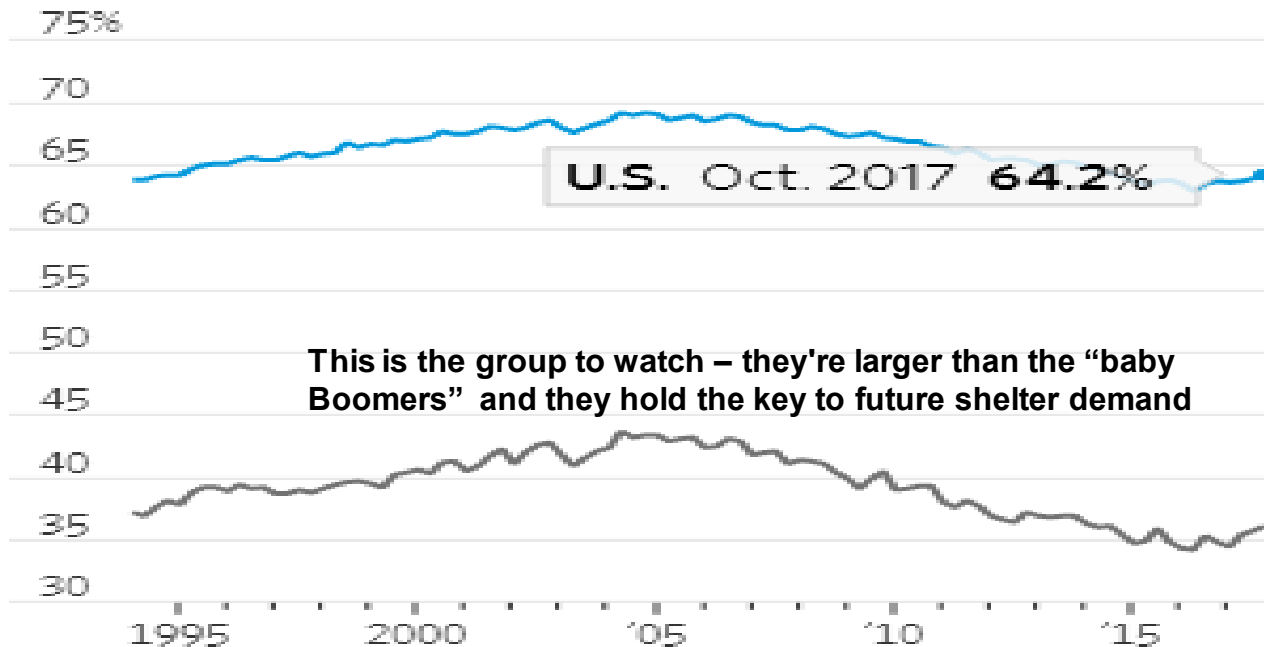
“This time, what’s driving the market is a shift in favor of owning rather than renting coming from the largest home buying generation since the baby boomers: millennials.”

Laura Kusisti, WSJ Jan 30, 2018.

Buying While They’re Young

Homeownership rate, by age

■ Under 35 years ■ U.S.



Source: Commerce Department

Homeownership – will it continue to be an essential part of the “American Dream”?

Maybe not: a recent WSJ article discusses the home rental market and the article suggests that homebuilding will remain weak because builders can't find construction workers; land is becoming scarce (due in part to onerous regulations); and many builders have credit issues. **So, supply is restricted** (this drives prices up and out of reach for many buyers).

Demand is weak due to tight lending standards; bad credit for many borrowers, lack of saving by buyers, and demographics are unfavorable.

Conclusion by home rental companies is renting will continue to grow and homeownership will continue to fall.

Time will tell – today's millennials are not the same as their parents. Many young people are attracted to urban city life (and renting) due to housing costs, amenities, transportation, job opportunities, i.e., many are shunning the “burbs”!

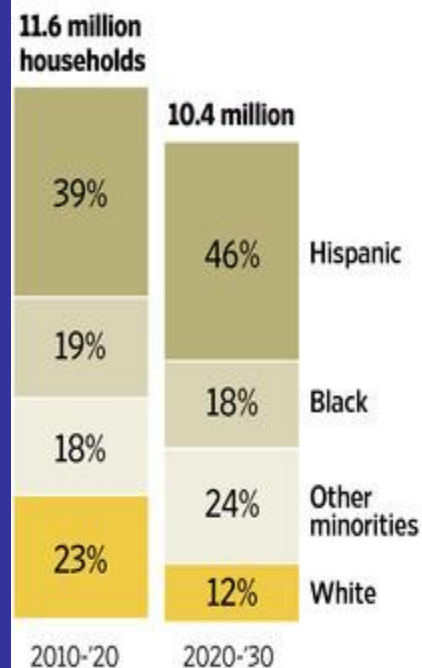
(<https://www.wsj.com/articles/with-merger-deal-blackstone-starwood-bet-on-being-americas-biggest-home-landlord-1502361000>)

(<https://www.wsj.com/articles/chicago-property-market-heats-up-as-food-companies-pile-in-1502794801>)

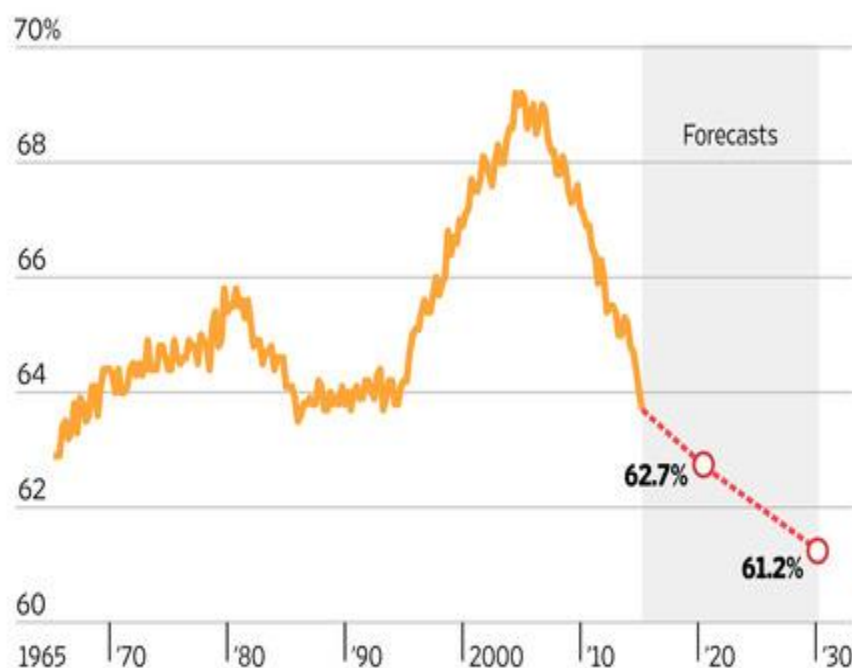
Minorities will account for more household formation growth – 77% this decade and 88% next decade. But, they are less likely to own a home due to lower incomes, and other affordability problems – that means homeownership falls, and renting increases! (sources; The Urban Institute; Commerce Dept; and Harvard Joint Center for Housing Studies)

Home Builders

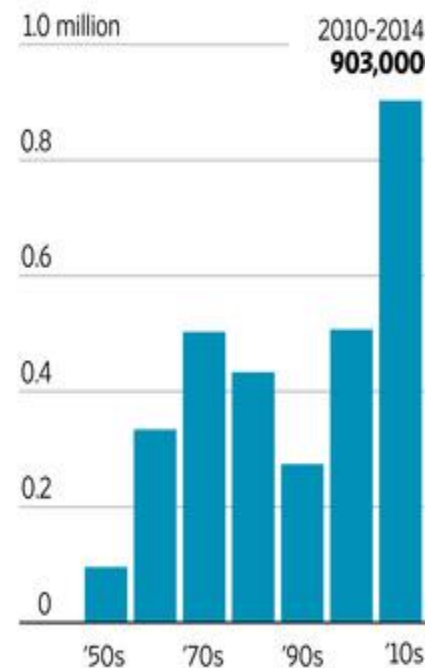
Minorities, who will account for more household-formation growth...
Net new households



...are less likely to own homes, which will drag down the U.S. homeownership rate....



...as rental growth surges. Average annual net growth in renter households



Sources: Urban Institute (household formation, homeownership rate forecasts); Commerce Department (homeownership rate); Harvard Joint Center for Housing Studies (renting households)

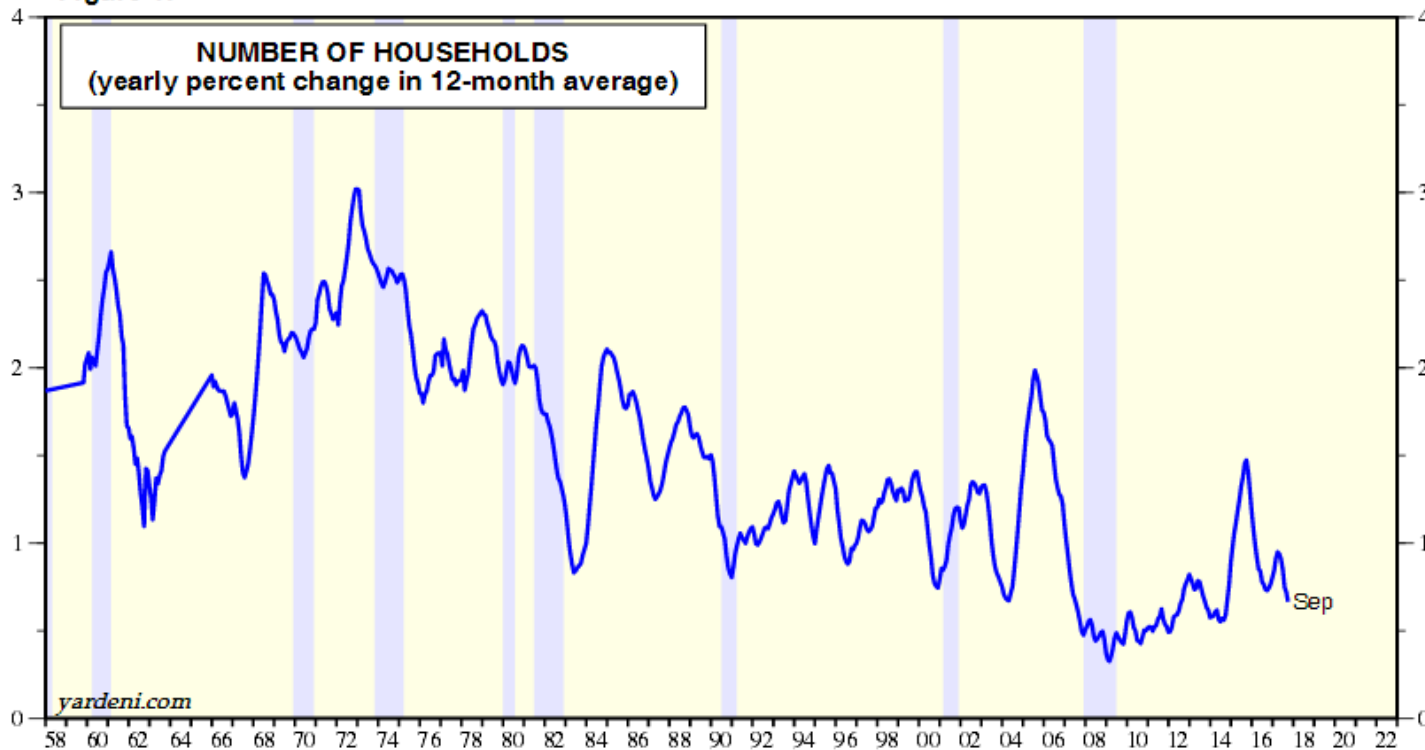
THE WALL STREET JOURNAL.

Household Formation

Major long term problem for housing industry – poor demographics, aging baby boomers, falling birth rates, all contribute to this problem. Short term fix – smarter immigration policy! BTW, this is similar problem for the economy (e.g., falling labor supply).

Household Formation

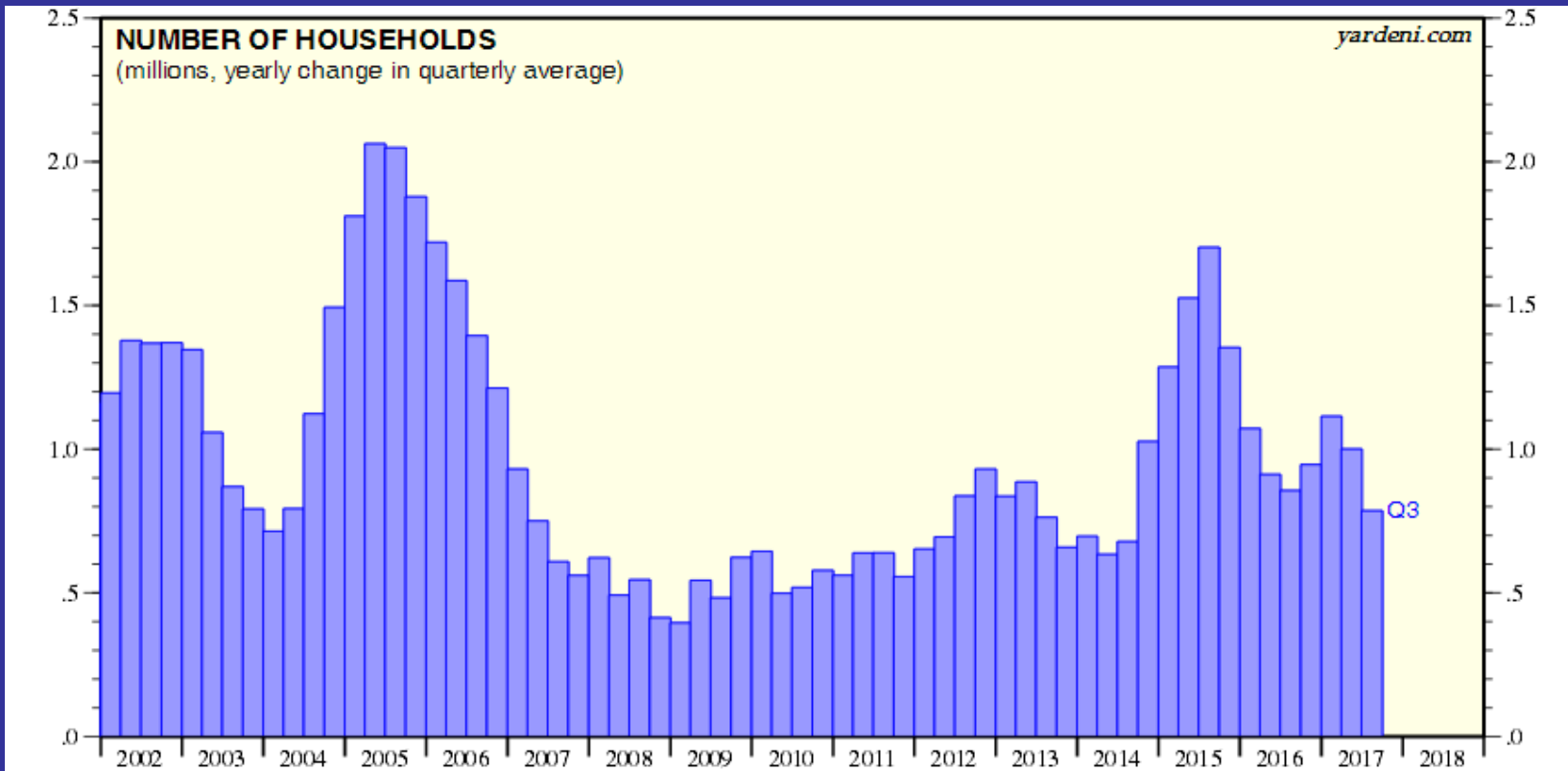
Figure 1.



Source: US Department of Commerce, Bureau of the Census.

Note: Shaded areas denote recessions according to the National Bureau of Economic Research.

Annual change in number of households(HH formation is the key to shelter demand – rentals or ownership, which sector will be favored in next decade?)



Source: Census Bureau.

Immediate problem for housing – too little supply!

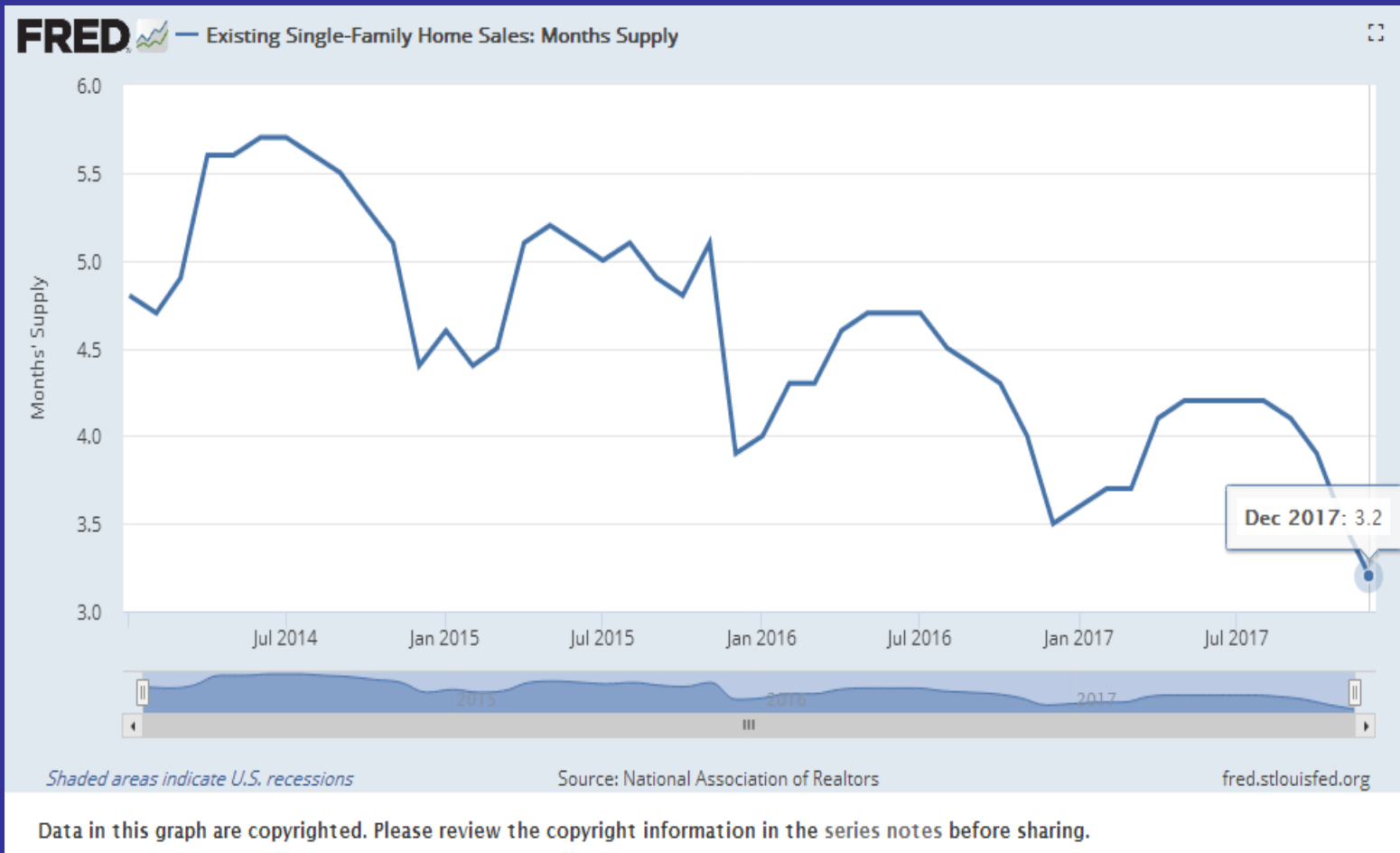
This drives prices higher and out of reach for many buyers, especially 1st time buyers.

Typically, supply is about 6 months (time it takes to sell existing inventory at current sales rates). Today, existing home inventory is 3.2 months while new home inventory is 5.4 months. Many homeowners are reluctant to list their homes because buying another one is expensive while builders are reluctant to build new homes due to costs, driven partly by labor and land shortages in parts of the country. Also, many builders have credit problems.

Today, prices are increasing two times as fast as incomes, so this problem is actually getting worse. Also, mortgage rates are increasing, and credit remains tight following new rules in the aftermath of the 2008 financial crisis. E.g., existing home prices up 6.2% while wages are up 3% on an annual basis

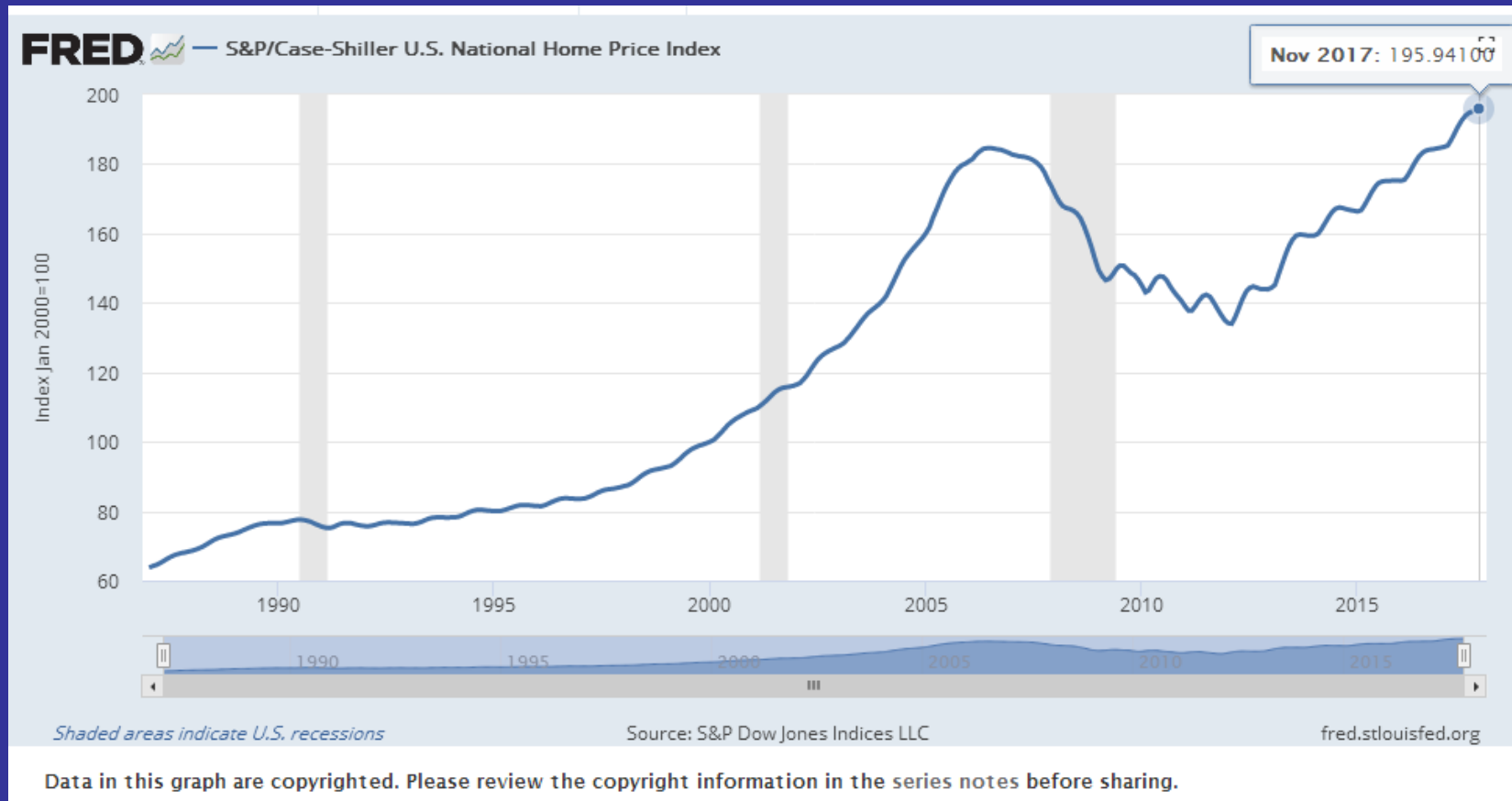
Prognosis – housing could remain below par for some time!

Low Existing home inventory (3.2 months) drives prices higher - out of reach of most 1st time buyers.



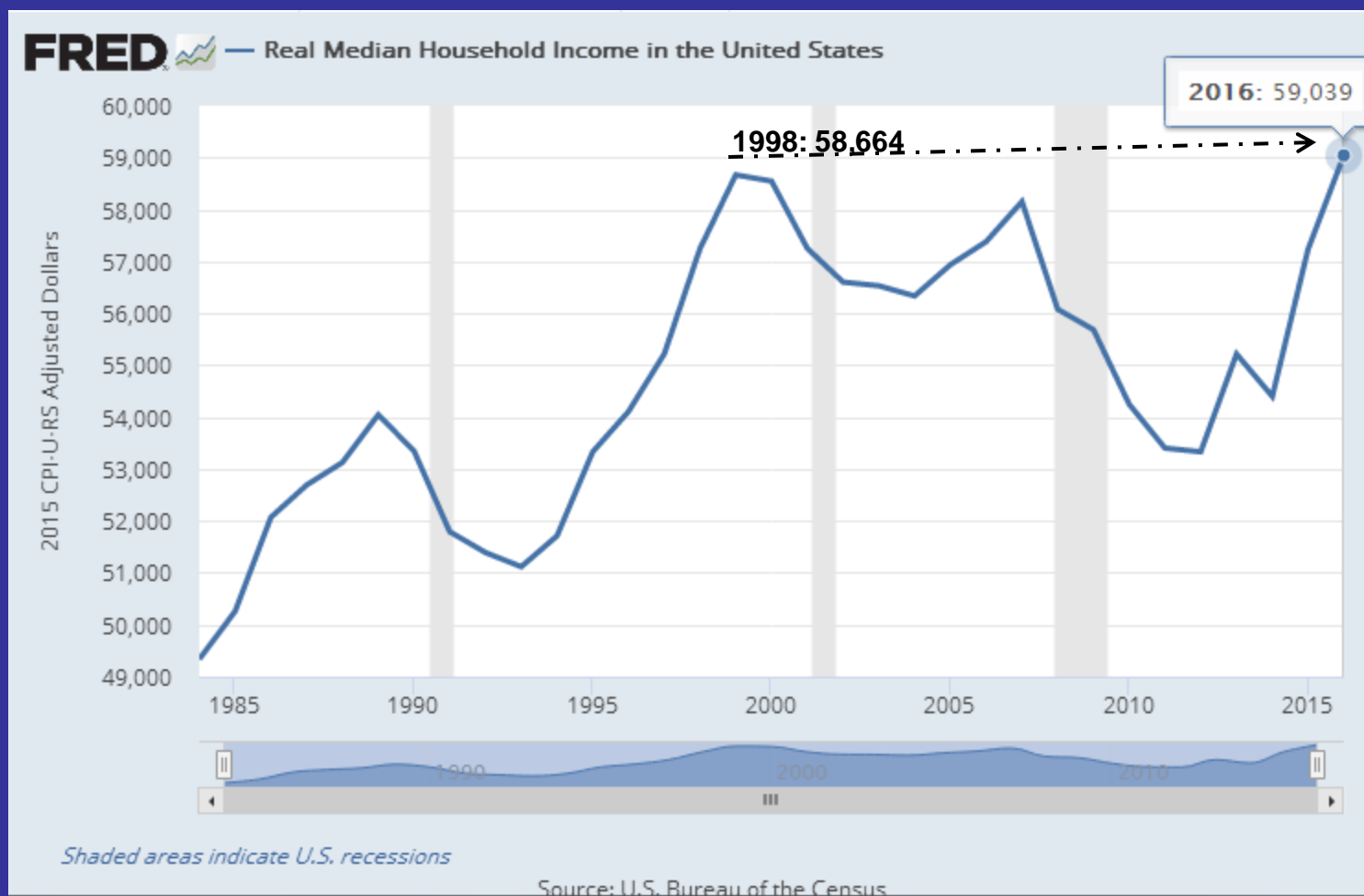
(<https://fred.stlouisfed.org/series/HSFSUPUSM673N>)

Case-Schiller national existing home prices – up 46% in past 5 years – driven primarily by short supply and demand for upscale homes – up 5.9% in past 12 months



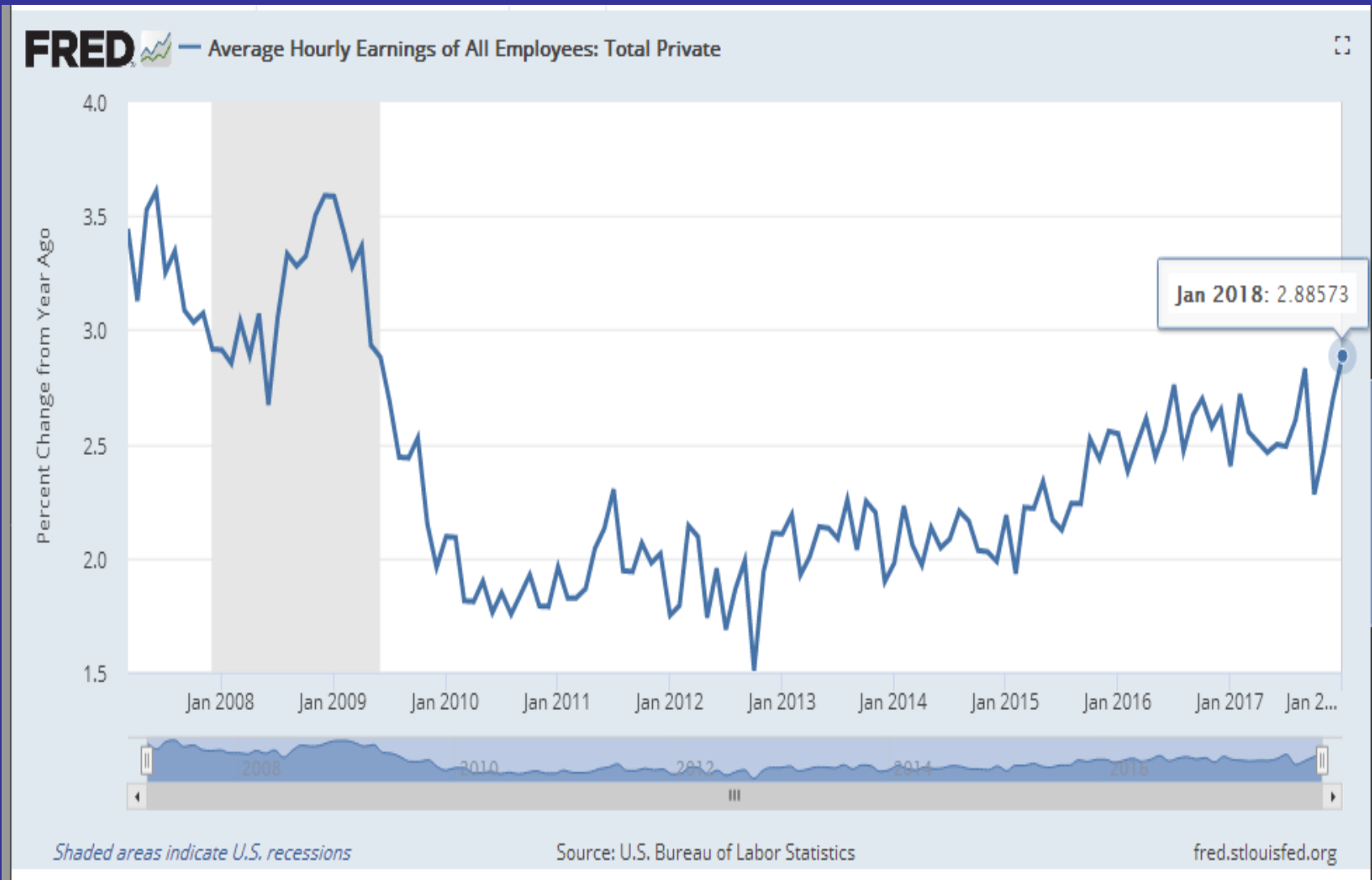
(<https://fred.stlouisfed.org/series/CSUSHPINSA>)

Real incomes today same as 1998 – i.e., little progress in two decades – unemployment at record low levels, yet wage growth has lagged – **but, it increased 3.2% (real dollars) in 2016 – so, maybe things are turning around?**



(<https://fred.stlouisfed.org/series/MEHOINUSA672N>)

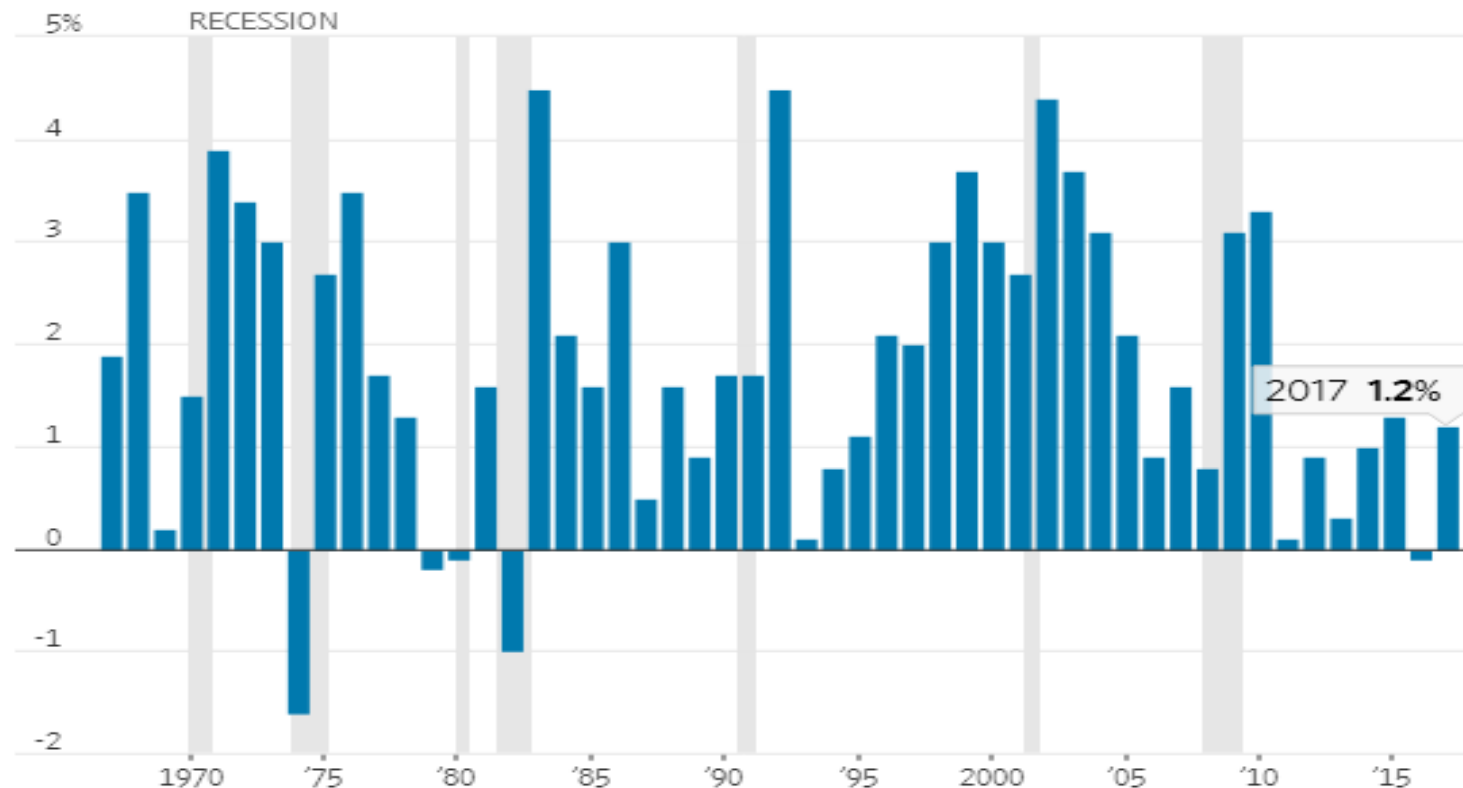
Wages are finally picking up as the labor market tightens – this is good for housing



Productivity is key to stronger wage gains, better economic growth, and stronger demand for housing! How do we get better productivity? Investment in the future – consume less today! Invest in education; infrastructure; health care; and research. This investment has **averaged 1.2%/year since 2007, compared with 2.1%/year since 1947.**

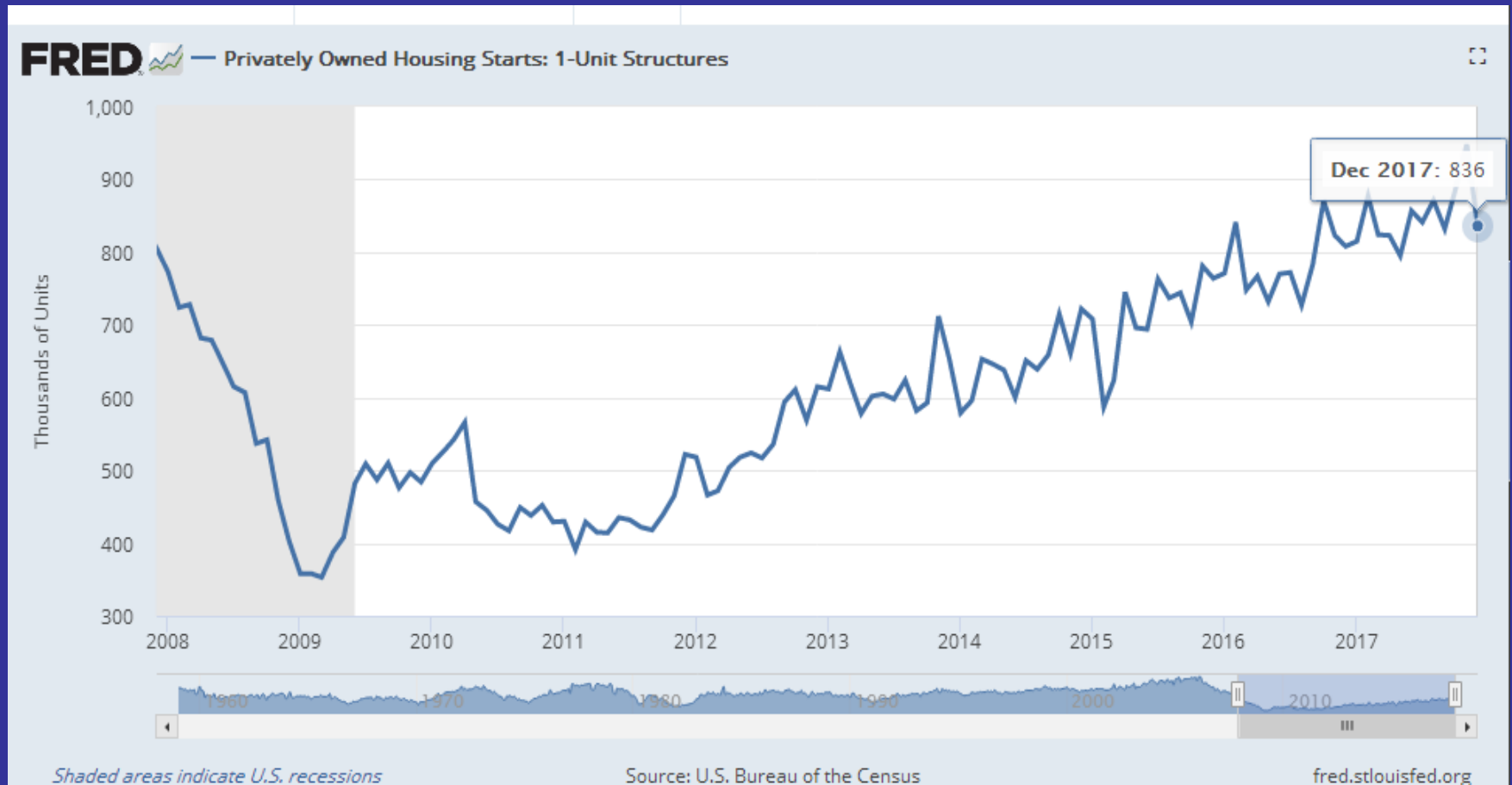
Sluggish Production

Change in worker productivity, from a year earlier



Source: Labor Department

Weak housing starts to contribute to the supply shortage and drives prices higher – it has taken 10 years for starts to return to 2008 levels and we’re still below the peak reached in 2005. But, housing continues to improve!



GDP – where is it headed?

- **Measurement problems? Maybe.**
- **Weak productivity for sure**
- **Shrinking workforce – no brainer**
- **Lack of inflation despite “free money” for past 8 years suggest weak demand? Or maybe forces from globalization forces keeping inflation at bay?**

Bottom line – GDP growth has been weak for the past two decades – clearly, we’re not addressing the main problems.

Short term fix – smarter immigration system.

Long term – infrastructure spending; tax reform; address debt; fix K-12 education; and maybe we need to consider a 3rd party to deal with our ineffective duopoly – two party system.

Comment on GDP* – we may be underestimating the contribution of technology to GDP. Traditional metrics rely on dollars to measure GDP – however, it is difficult to convert many gains from technology to “dollar equivalents” E.g., technology often improves quality of life, but how do we put a “dollar value” on this? This affects both dollar value of GDP and productivity. Here is article from “The Economist” on the subject:

<https://www.economist.com/news/briefing/21697845-gross-domestic-product-gdp-increasingly-poor-measure-prosperity-it-not-even>

Bottom line – we may be underestimating actual GDP measurement and we may be shortchanging productivity. This combination effect would significantly “underestimate current GDP”, and our estimate of future GDP growth.

GDP growth rate = (labor force growth rate)(productivity growth rate**)**

***The Gross Domestic Product measures the value of economic activity within a country. Strictly defined, GDP is the sum of the market values, or prices, of all final goods and services produced in an economy during a period of time.” (from Wikipedia)**

Here is another suggestion on how to fix the economy:

GDP = (labor force) (productivity). “Economics 101”

We have an aging work force and our fertility rate has been falling for decades. That means a slow growing labor force. Productivity has been weak for decades too. Yes, we need to invest for the future – R&D; Infrastructure spending; less regulation; fix K-12 system. But, we also need immigrants.

Solution – develop a smart immigration system that brings in educated, hard working people with technical skills that will support better productivity growth and address our shrinking labor force too.

Yes, we still need to bring in refugees too – that is the mark of a compassionate country. But, the focus today needs to be highly educated, English speaking (doesn't have to be perfect, but workable) people with technical skills and a strong work ethic.

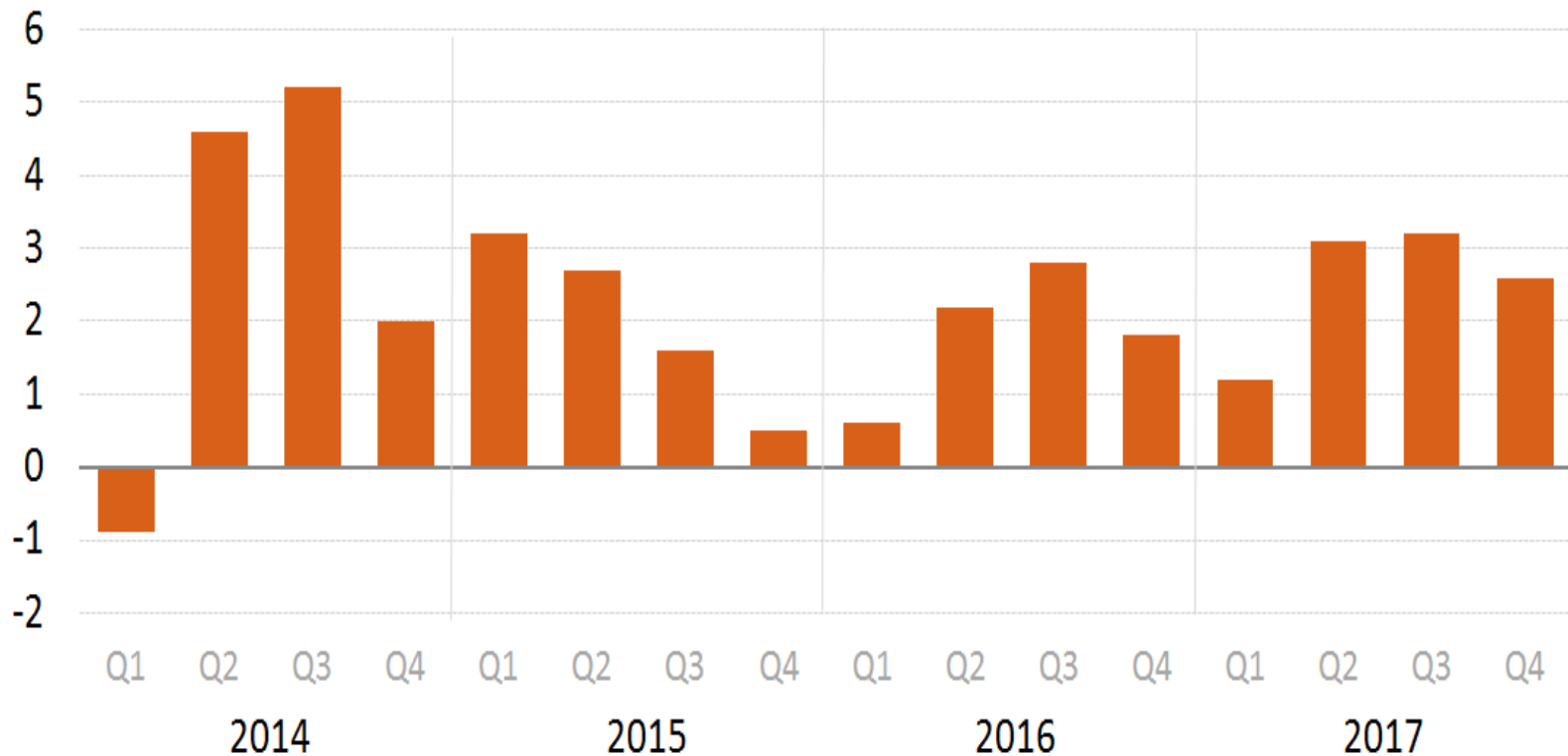
A more interesting comment on the U.S. economy by Greg Ip

WSJ (<https://www.wsj.com/articles/the-economy-needs-amazons-but-it-mostly-has-ges-1498037403>)

Innovation is one solution – “we need more companies like Amazon And fewer like GE” notes Mr. Ip

U.S. GDP rebounded in 2017 - increasing 2.6% in 4th qtr and 2.3% for the year

Real GDP: Percent change from preceding quarter



U.S. Bureau of Economic Analysis

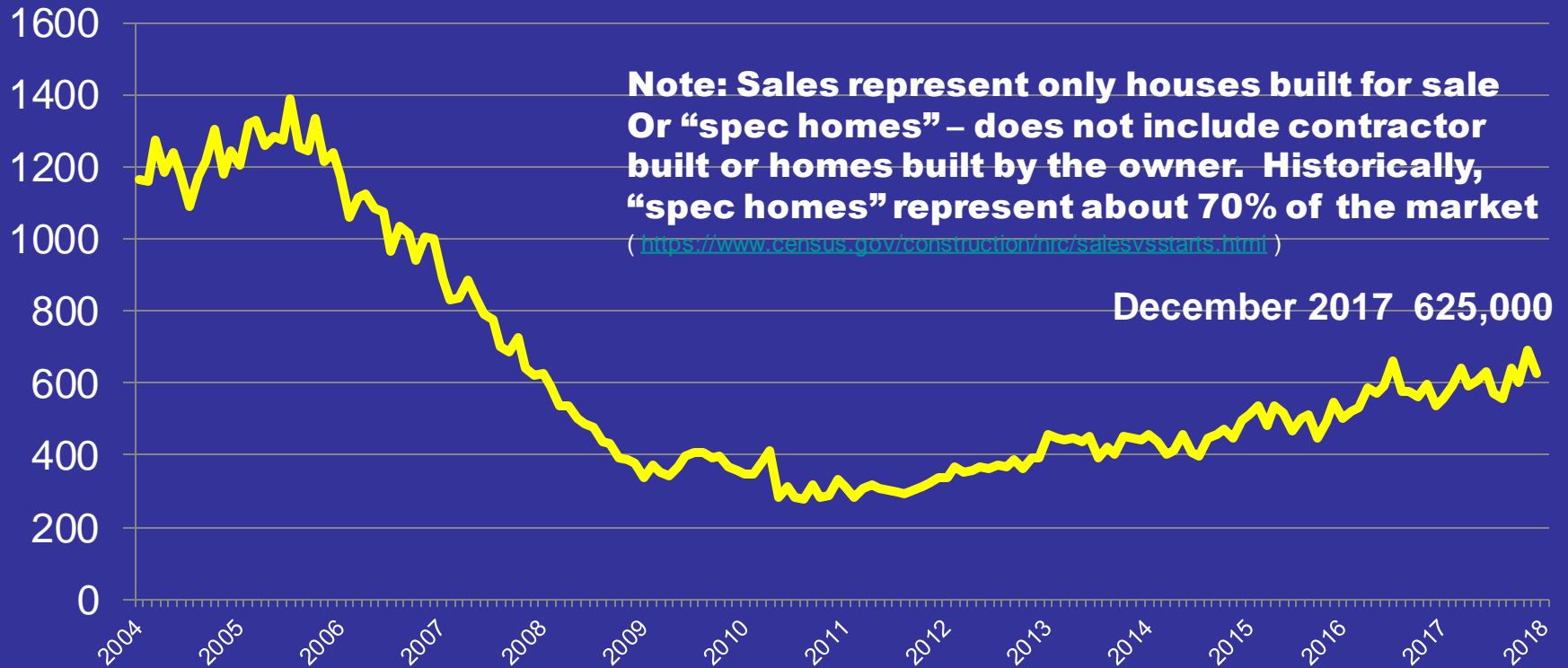
Seasonally adjusted at annual rates

Additional housing comments

New Single Family Home sales are the key statistic to watch for wood Products demand – sales drive housing starts – this drives demand for wood products!

Up 14% from last year!

Thousands, SAAR



Source: Census (<http://www.census.gov/const/www/newressalesindex.html>)

Resale market has stalled over past year - tight Supply (which drives prices), currently at 3.2 months, remains a problem. Healthy market is about 6 months supply. Median prices are up 5.8%, annual basis.

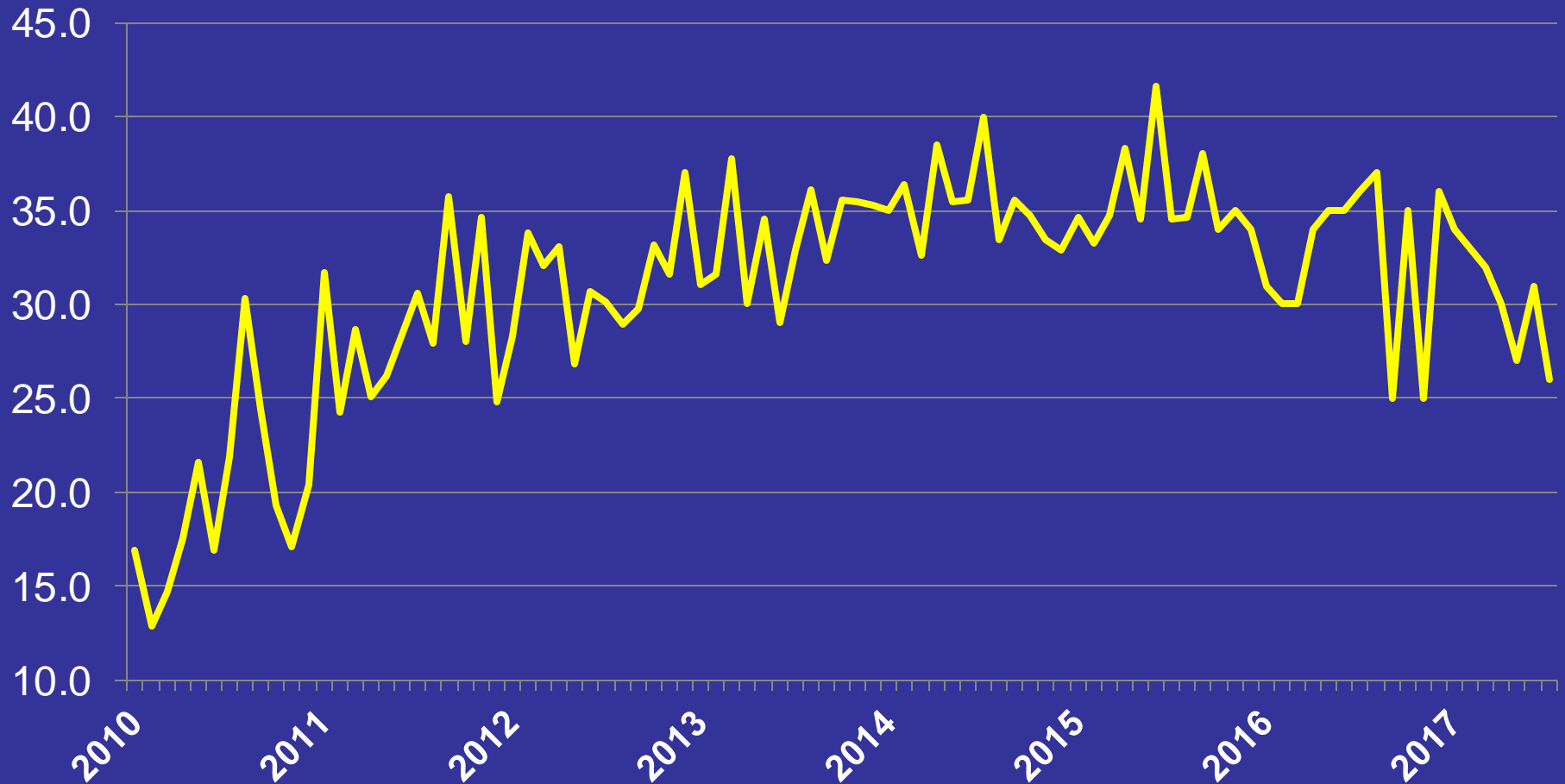
Some good news – 1st time buyers now at 34% for 2017

Single family (including condos), Monthly, Thousand units, SAAR



Multi family share of housing starts – upward trend has leveled off, however, single family rentals (SFR) are increasing rapidly. So, the rental market is simply shifting from multi family to SFR?

Multi family starts (percent)



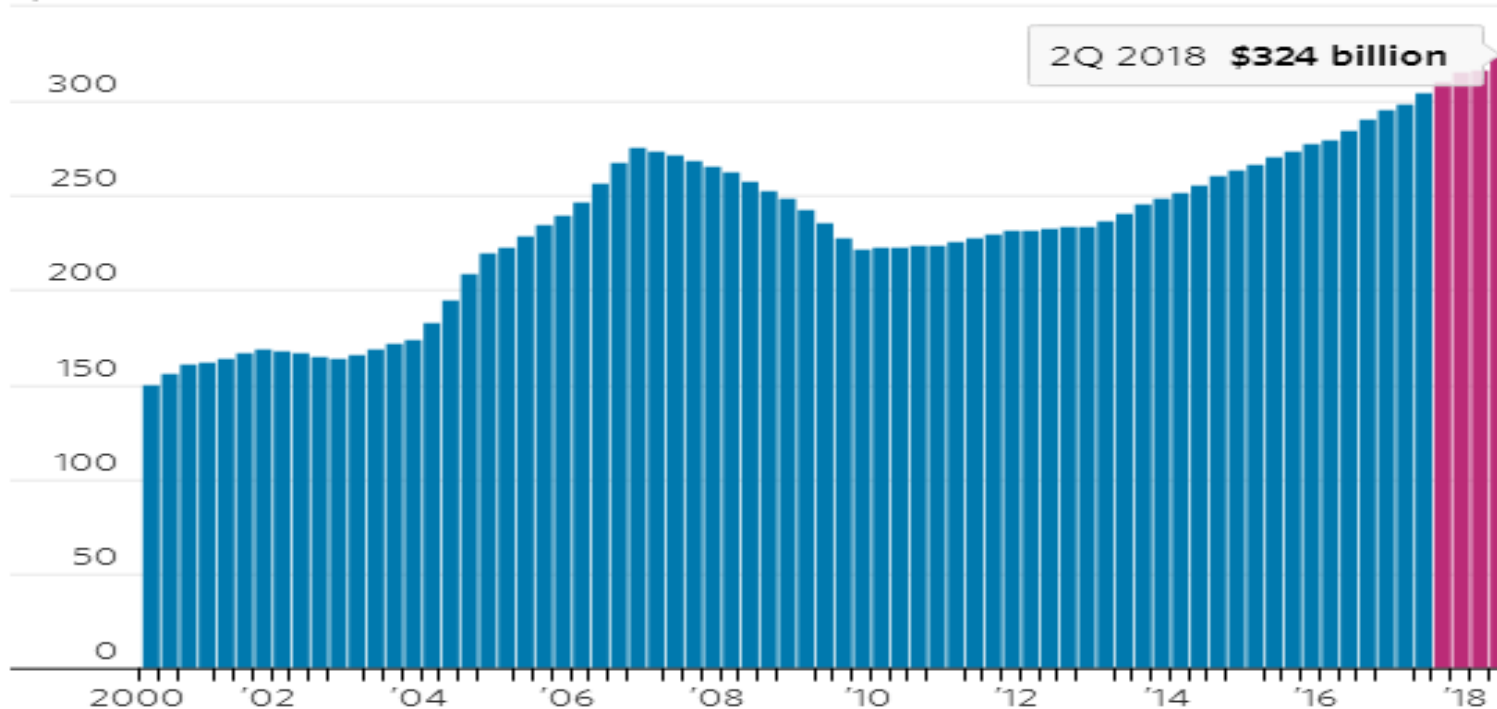
Source: Census

Remodeling market growth is expected to continue into 2018

Remodeling Gains

Home improvement spending is expected to grow at a swift clip into 2018, according to the Leading Indicator of Remodeling Activity (LIRA). Four-quarter moving total:

\$350 billion

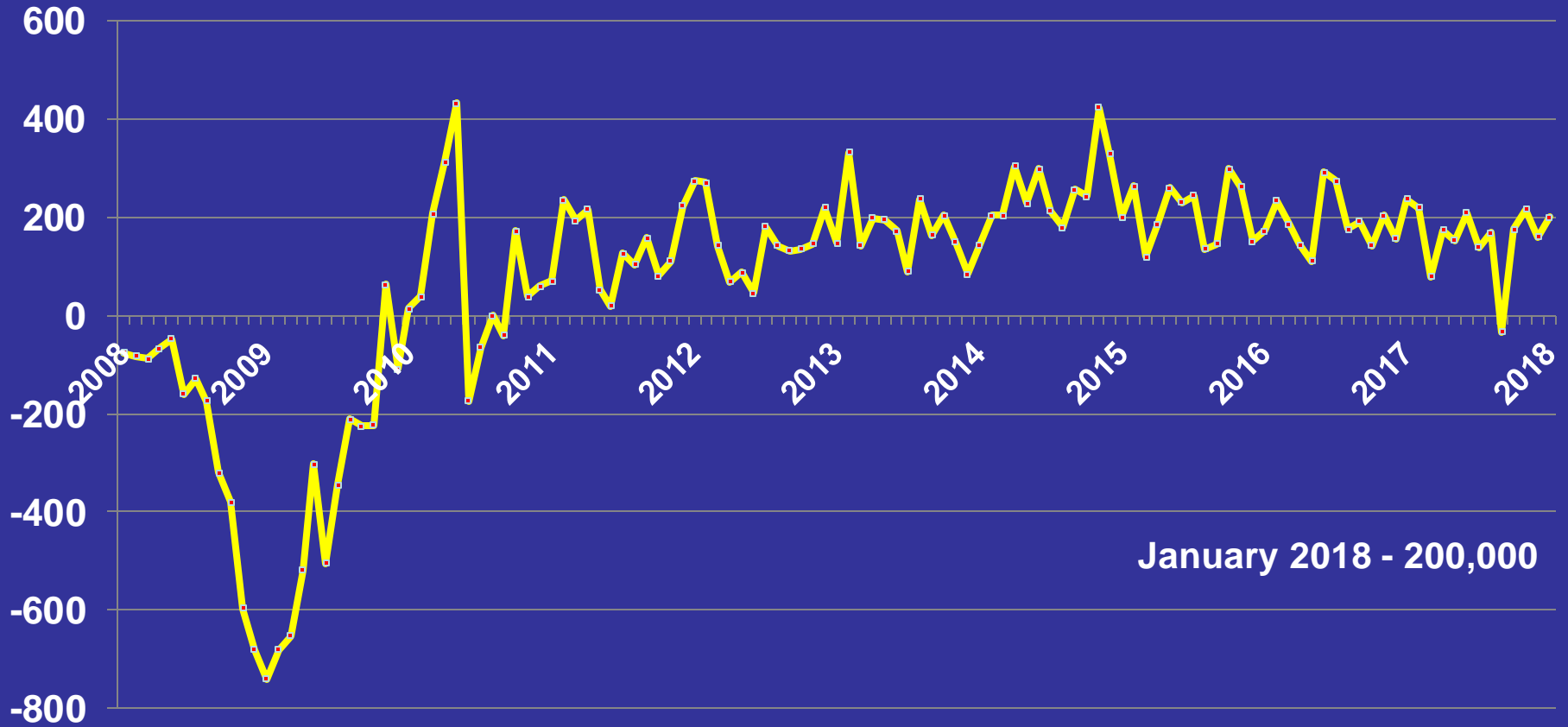


Note: Figures for the remainder of 2017 and 2018 represent projections
Source: Harvard University, Joint Center for Housing Studies

THE WALL STREET JOURNAL

Employment situation – steady at 200,000 gains per month

Net change in non farm payrolls – monthly, thousands



Source: U.S. BLS (www.bls.gov)

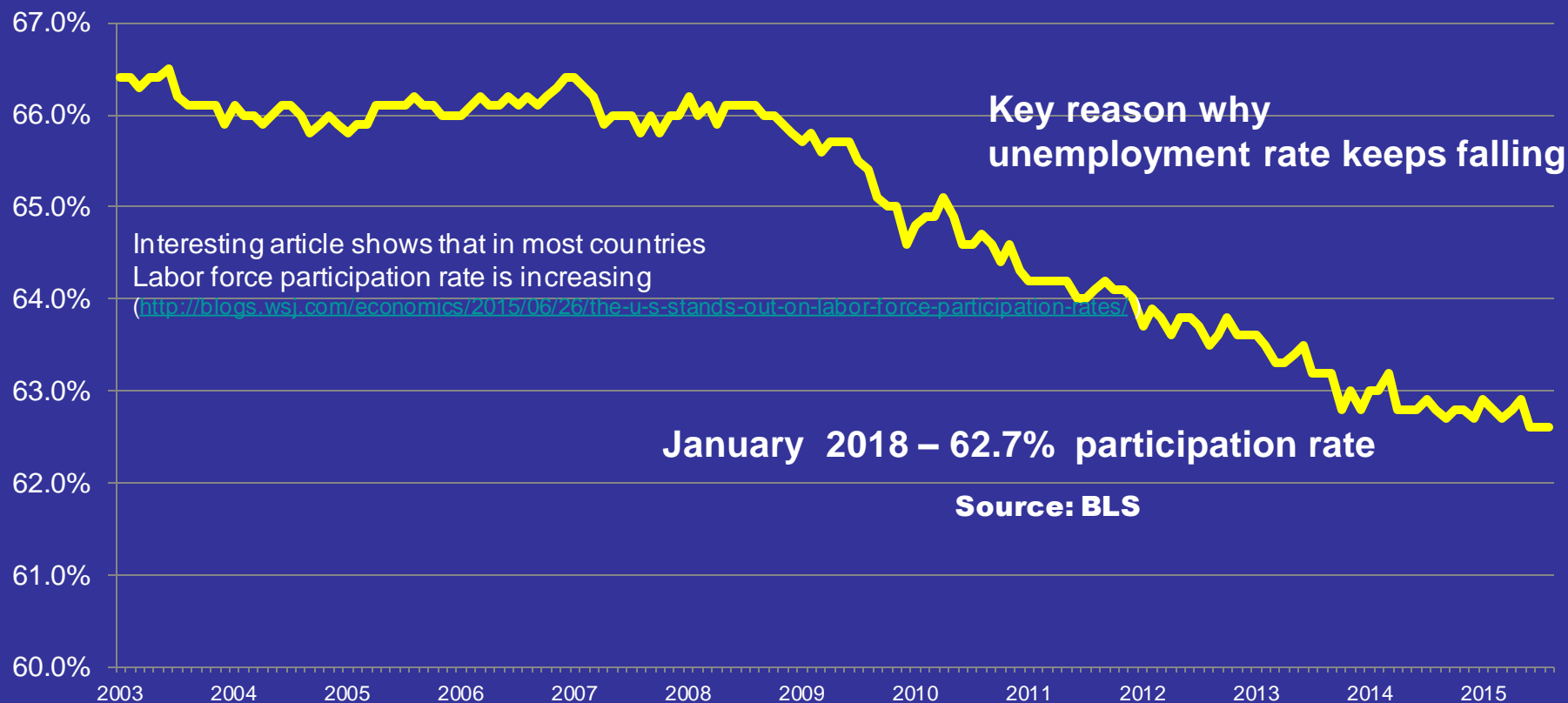
Unemployment rate keeps coming down – but, 5.1 million remain “underemployed” – working part time, but want full time jobs – another 1.6 million are “marginally attached” including 421,000 discouraged – total = 13.5 million including official 6.8 million unemployed



Labor force participation rate is shrinking – demographics is one reason – another reason – bloated welfare system – 130 million people on some form of welfare (food stamps, long term disability, housing allowances, Medicaid, ...) - - we'll see skilled labor shortages increase over the next decade - we're already seeing construction related shortages with brick layers, masons, electricians, plumbers, etc.

Excellent article (<http://finance.yahoo.com/news/should-i-go-to-a-trade-school-162413337.html#>)

% of civilian adult population that are working



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