

# November 2016 Housing Commentary



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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/>

# November 2016

## Housing Scorecard

	M/M	Y/Y
Housing Starts	▽ 18.7%	▽ 6.9%
Single-Family Starts	▽ 4.1%	△ 5.3%
Building Permits	▽ 4.7%	▽ 6.6%
Housing Completions	△ 15.4%	△ 25.0%
New Single-Family House Sales	△ 5.2%	△ 16.5%
Existing House Sales <sup>1</sup>	△ 0.7%	△ 15.4%
Private Residential Construction Spending	△ 1.0%	△ 3.0%
Single-Family Construction Spending	△ 1.8%	▽ 0.9%

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

# Housing Data

	November	October	Nov. 2015
Total permits*	1,201,000	1,260,000	1,286,000
Single-family permits	778,000	774,000	735,000
Multi-family 2-4 unit permits	39,000	30,000	29,000
Multi-family $\geq 5$ unit permits	384,000	456,000	522,000
Total starts	1,090,000	1,340,000	1,171,000
Single-family starts	828,000	863,000	786,000
Multi-family 2-4 unit starts**	3,000	15,000	7,000
Multi-family $\geq 5$ unit starts	259,000	462,000	379,000
Total completions	1,216,000	1,054,000	973,000
Single-family completions	774,000	749,000	642,000
Multi-family 2-4 unit completions**	10,000	6,000	14,000
Multi-family $\geq 5$ unit completions	432,000	299,000	317,000

\* 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](http://www.census.gov/construction/nrc/pdf/newresconst.pdf); 12/16/16

# Housing Data

	November	October	Nov. 2015
New single-family sales	592,000	563,000	508,000
Median price	\$305,400	\$302,700	\$317,000
Existing sales <sup>a</sup>	5,610,000	5,570,000	4,860,00
Median price	\$234,900	\$234,100	\$220,000
Private Residential Construction	\$462.9 billion	\$458.2 billion	\$449.5 billion
SF construction	\$247.6 billion	\$243.7 billion	\$249.8 billion
MF construction	\$61.8 billion	\$63.6 billion	\$55.9 billion
Improvement construction <sup>b</sup>	\$153.4 billion	\$151.3 billion	\$143.7 billion

<sup>a</sup> NAR®

<sup>b</sup> 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](http://www.realtor.org/topics/existing-home-sales); 12/21/16

U.S. Department of Commerce-Construction: [www.census.gov/construction/nrs/pdf/newressales.pdf](http://www.census.gov/construction/nrs/pdf/newressales.pdf); 12/16/16

U.S. Department of Commerce-C30 Construction: [www.census.gov/construction/c30/pdf/privsa.pdf](http://www.census.gov/construction/c30/pdf/privsa.pdf); 01/03/17

# Conclusions

Housing continues to improve, but the pace remain agonizingly slow. Starts are less than half the peak 8 years ago - single family remains weak - multi family continue to be the preferred option for many, both young and older people. Credit remains a big problem for many first time buyers. The solution to the weak housing market is a stronger economy; lots of good paying jobs; and providing hope for a better future for many Americans.

November's housing data is mixed – total starts are down by 18.7% (m/m), single family homes starts are down by 4.1% (m/m), permits are down by 4.7% (m/m), completions are up by 15.4% (m/m), and existing home sales are up by 0.7% from the month before.

With meager economic growth (average growth since 2009 is 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. Continuing problems in Europe's banking sector and debt problems in Greece 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) relatively modest increases in real median annual household incomes;
- 4) strict home loan lending standards – though loosening with new programs
- 5) slow world economy; and
- 6) global uncertainty

# October 2016

## EU Housing Scorecard

		M/M	Y/Y
Production in Construction <sup>A</sup>	EU 28	△ 0.4% <sup>s</sup>	△ 1.1% <sup>s</sup>
	EU 19	△ 0.8% <sup>s</sup>	△ 2.2% <sup>s</sup>
	Germany	△ 1.1%	△ 0.8%
	France	△ 1.9%	△ 2.8%
	UK	▽ 0.5% <sup>p</sup>	▽ 0.5% <sup>p</sup>
	Spain	▽ 0.3% <sup>ps</sup>	△ 3.1% <sup>p</sup>
Building permits (m <sup>2</sup> floor) <sup>A</sup>	EU 28	-.-	-.-
	EU 19	△ 6.1% <sup>(09)</sup>	△ 22.7% <sup>s(09)</sup>
	Germany	▽ 2.0%	△ 5.9%
	France	▽ 11.1% <sup>s</sup>	△ 4.5% <sup>e</sup>
	UK	-.-	-.-
	Spain	△ 24.0% <sup>s(09)</sup>	△ 70.3% <sup>e(09)</sup>

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>;  
01/17/17)

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

<sup>e</sup> estimate <sup>s</sup> Eurostat estimate <sup>p</sup> provisional -.- no data available <sup>(09)</sup> September data

## Housing comments – November 2016

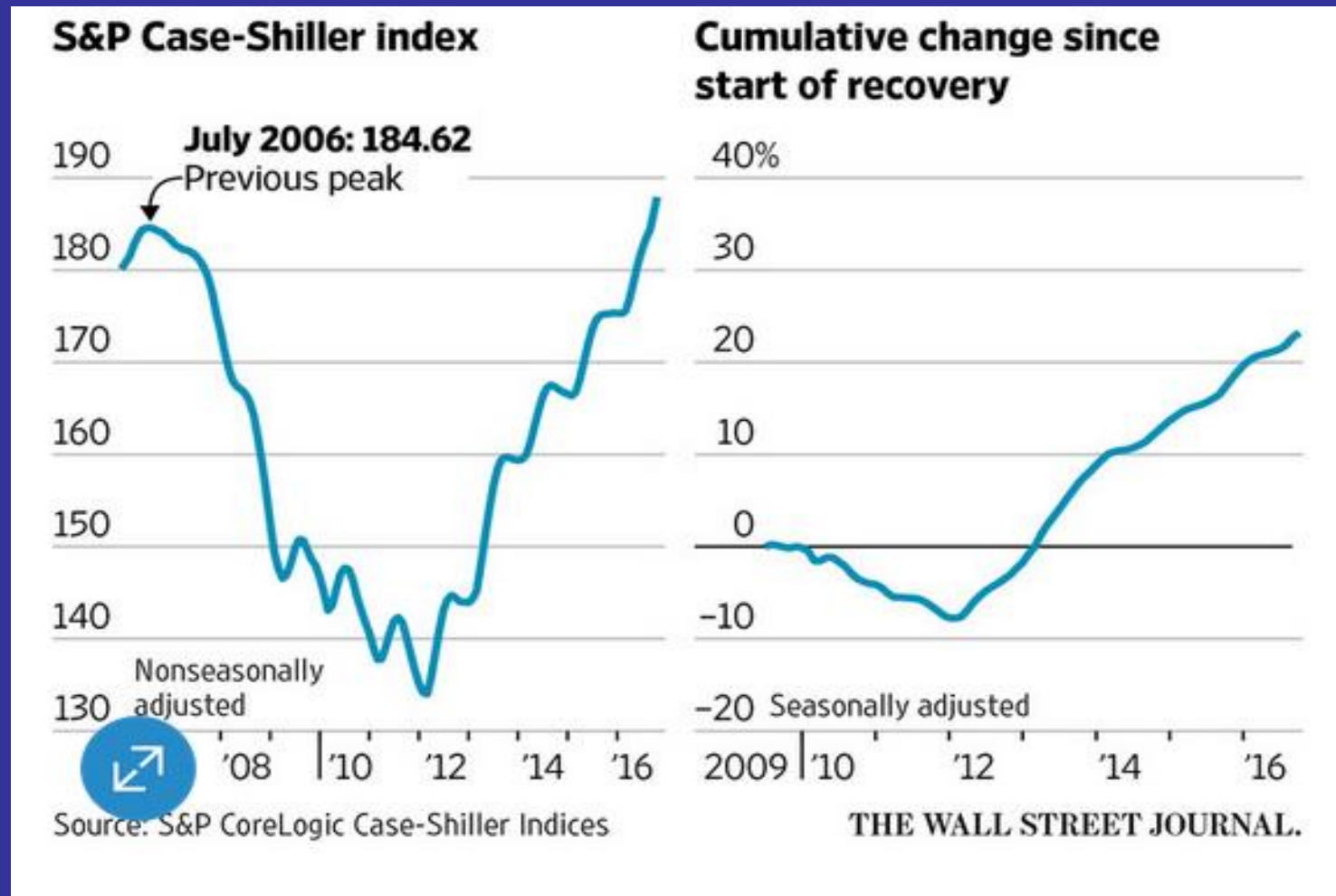
- *November starts were down 19% to 1.090 ( SAAR) - SF at 828,000 (SAAR) – down 4% - MF was down 44% ( yes, 44%) – that was the driver! MF is typically quite volatile. YOY, total starts are down 7%*
- *1<sup>st</sup> time buyers now make up 33% of the market – getting close to the norm of 40%. And , prices are almost back to pre recession levels.*
- *Home ownership rate down to 63.5% in QTR3 2016 – **lowest ownership rate in 50 years!** Financing problems; changing preferences (to renting); and rising home prices - problem for 1<sup>st</sup> time buyers*
- *Resale market increased 1% - 5,610,000 (annual rate) – low inventory (4 months) driving prices higher – sales up 15% from last November*
- *New home sales were down 1.9% to 574,000 SAAR, but up 18% YOY*
- ***Job creation is improving – Nov. +178,000 - unemployment at 4.6%***
- ***30 year fixed rate mortgage inched up over 4% – will impact some prospective buyers.***
- *The electoral college confirmed Trump as President. Bottom line --- The people have spoken – we want change. The election was essentially an indictment of the past 8 years - eight years of a mediocre/”JV” Presidency with programs and an agenda that left the Middle Class behind; an overregulated economy; an ineffective foreign policy; broken health care system;.....*



**Here is an example of an overregulated economy – why our GDP growth has been pathetic for years and will continue unless we get government out of the way of innovation, job creation, ....**

**Can you believe it took two years to replace the elevator in the Washington monument?  
Are we a third world country, or do we just have too much regulation?**

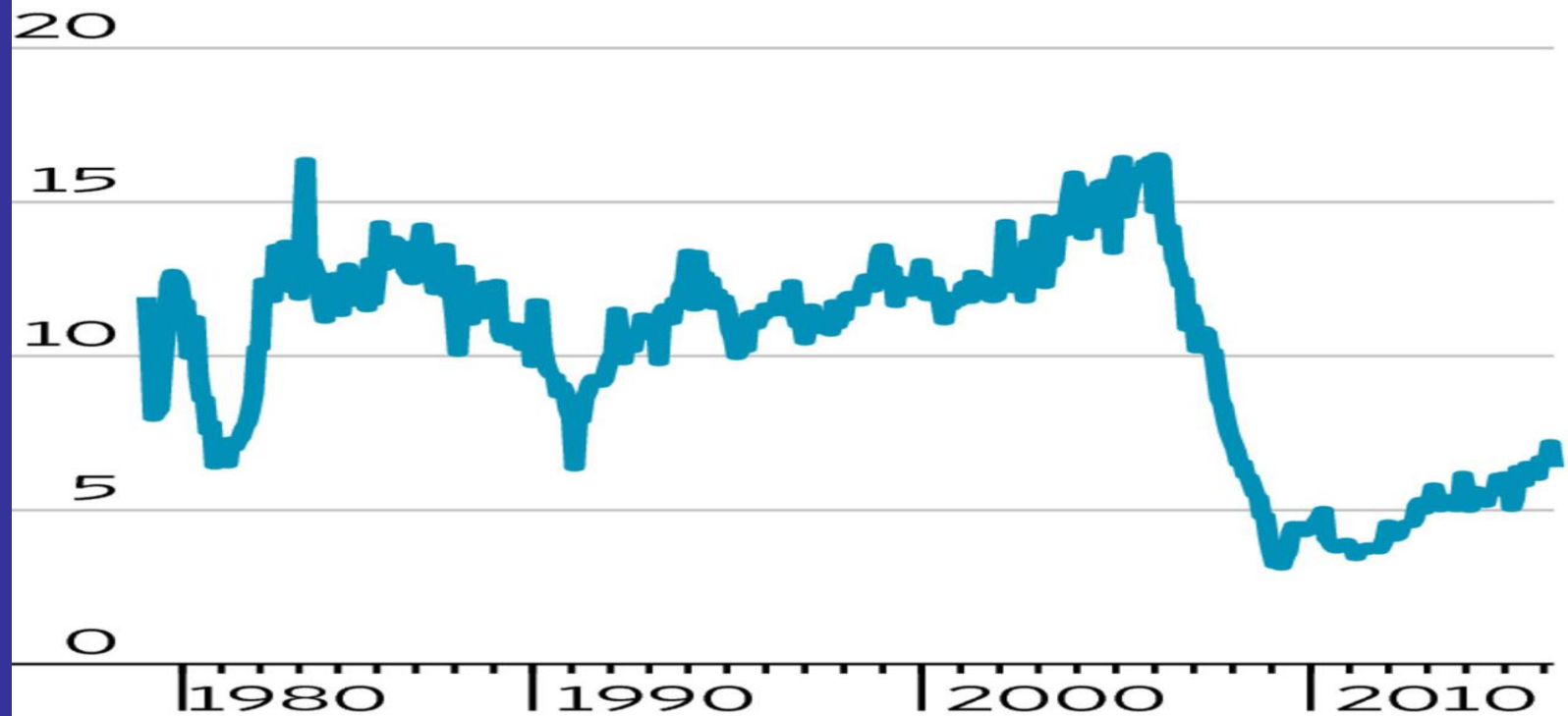
**1<sup>st</sup>, some good news: Home prices are recovering – another sign the market Continues to strengthen – good news for existing owners, but problems for potential buyers**



Adjusting for population growth, single-family construction is barely back to the prior troughs of recessions in 1981 and 1991, according to research from mortgage giant Fannie Mae ( Chris Kirkham, WSJ). Weak demand from young people remains big problem as job prospects, credit problems and student debt forced many to renting.

## Rebuilding, Slowly

U.S. single-family housing starts per 1,000 households



Source: U.S. Census; Fannie Mae  
**THE WALL STREET JOURNAL.**

**My comments on the economy – it's improving – but, let's see what it does when the Fed raises rates – currently, it is propped up by low interest rates – can it grow without accommodative monetary policy?**

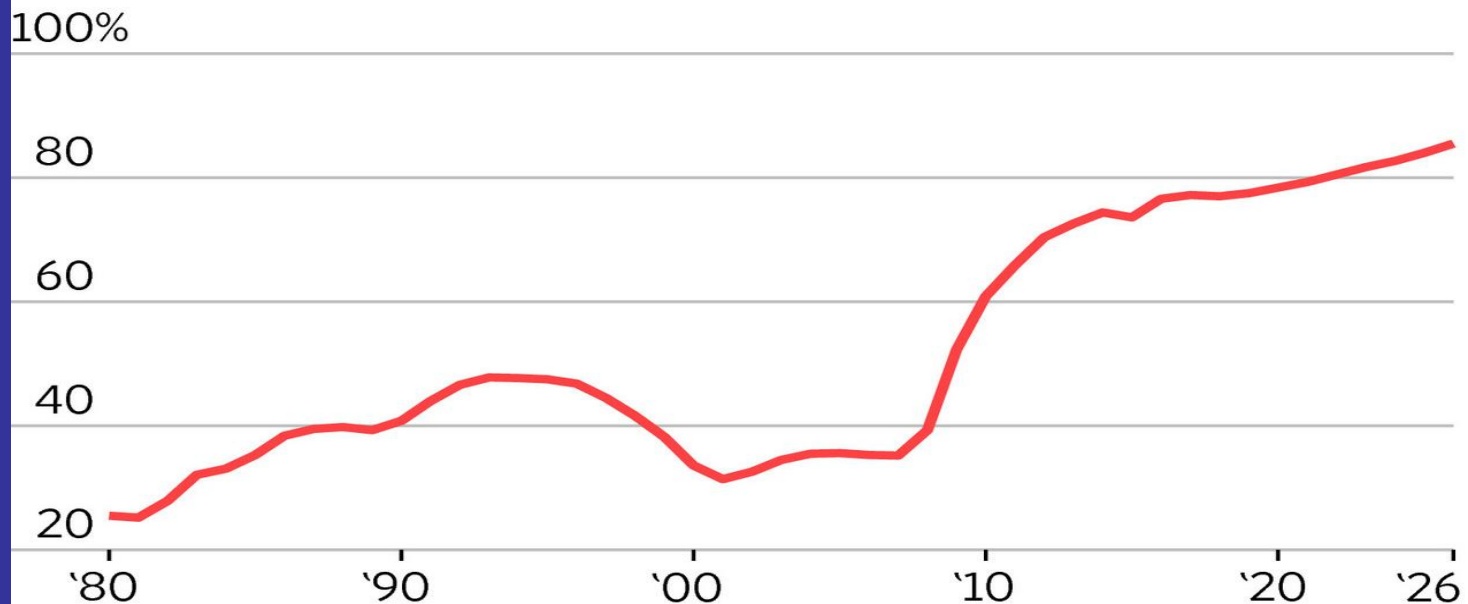
**Business investment remains weak as Washington gridlock and uncertainty discourages investment needed to create jobs. Also, businesses don't invest when they see excess capacity – i.e., they don't invest into a weak economy that shows little sign of improving beyond 1% - 2% GDP growth.**

**I believe we, Europe, and many other countries are following Japan into a prolonged period of weak growth, low inflation, and low interest rates. Central banks can't fix our problems – when will we learn? Debt - Innovation – Productivity are issues that need to be addressed! Hopefully, Trump will do the things that need to be done – infrastructure investment; tax reform; reduce onerous regulations; deal effectively with immigration issues; address entitlement issues; and get our huge debt under better management!**

Huge problem facing this country is **public debt** – that's the debt that has to be repaid. Total debt today ~ \$20 trillion, of which \$14 trillion is “public debt”. The \$6 trillion (“borrowed”) by the Treasury from the Social Security, Medicare, And Highway trust funds is gone/spent. Here is link to real time debt clock (<http://www.usdebtclock.org/>). PS. Public debt now equals 75% of GDP – we're getting very close point of no return – where principal plus Interest payments exceed our capacity to pay, and lenders refuse to lend – that's when “the shit hits the fan” – the USA of Greece!!!

## The Obama Debt Legacy

Federal debt held by the public as a share of the economy, 1980-2026 (2016-2026 estimated)

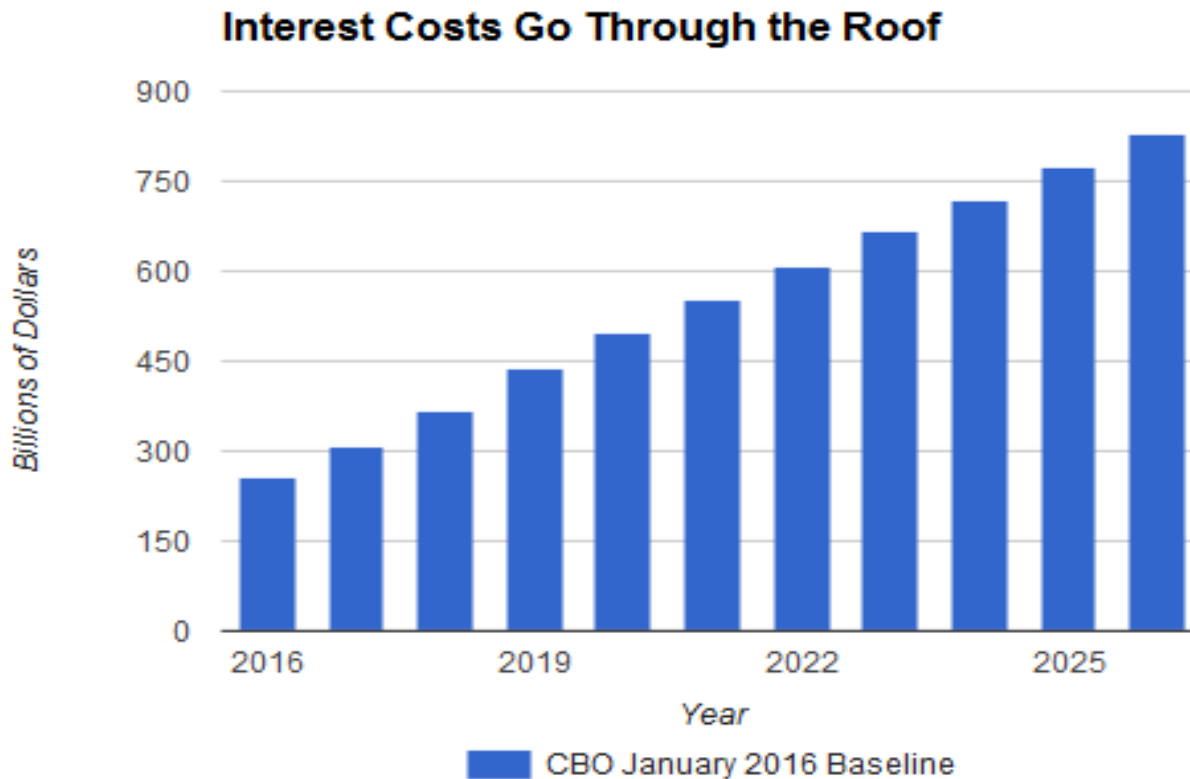


Source: Congressional Budget Office

**Main problem with \$20 trillion debt is that paying down that debt (including interest) will reduce government spending on social programs, including Social Security, Medicare/Medicaid, housing allowances for the poor, food stamps,... Furthermore, investments in technology, research/development, education, infrastructure, will suffer, hurting productivity even more. And, defense spending will suffer as well. These investments and social programs are critical to future growth, GDP, standard of living, and security of our nation. And, yes, a return to a healthy housing market.**

**Not sure why we don't see this as a major threat to our future – Probably because we don't understand the magnitude of the problem. Also, the politicians do a great job in “passing the buck” – i.e., delaying the ‘day of reckoning, promising that we'll tax the rich, the banks, etc. – i.e., someone else will pay for the fixes. Guess what – that won't work – they are not main problem – as a country, we consume too much, save too little, and don't invest enough in our future. We are the problem, and we are the ones who must fix the problem.**

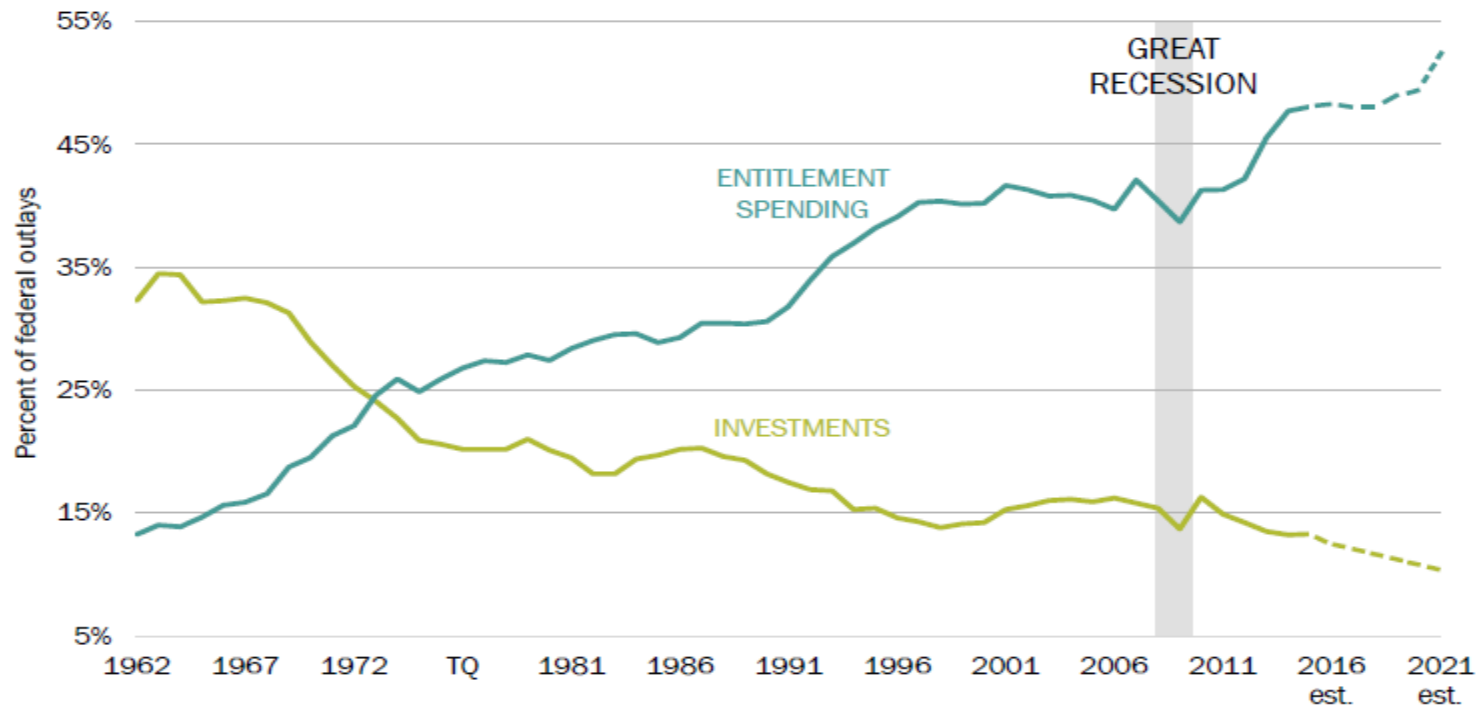
**Problems with too much debt – servicing costs will squeeze social programs ( Social Security, Medicare Medicaid, food stamps, ..), R&D, education spending, infrastructure investments, .....**



Source: Congressional Budget Office, January 2016

**Going into debt is OK if you're investing for the future - but, we're not!**  
**For decades, we, as a nation, have been living a fantasy life.**  
**Entitlement spending is now approaching 50% of the federal budget while investment spending (critical to maintain our competitiveness) has been declining for the past 60 years (from Porter study).**

**FIGURE 9: SHIFTING COMPOSITION OF FEDERAL SPENDING**



Note: Entitlement spending includes outlays for Social Security, Medicare, Medicaid, CHIP, and Affordable Care Act Subsidies. Investments includes outlays for infrastructure, R&D (both defense and non-defense), and education. 2016-2021 figures are Office of Management and Budget estimates. TQ refers to the Transition Quarter from July 1, 1976 to September 30, 1976, after which the federal government changed its fiscal year. Dotted line is a forecast based on previous Office of Management and Budget estimates. Shaded area indicates the recession of December 2007 to June 2009 as defined by the National Bureau of Economic Research.

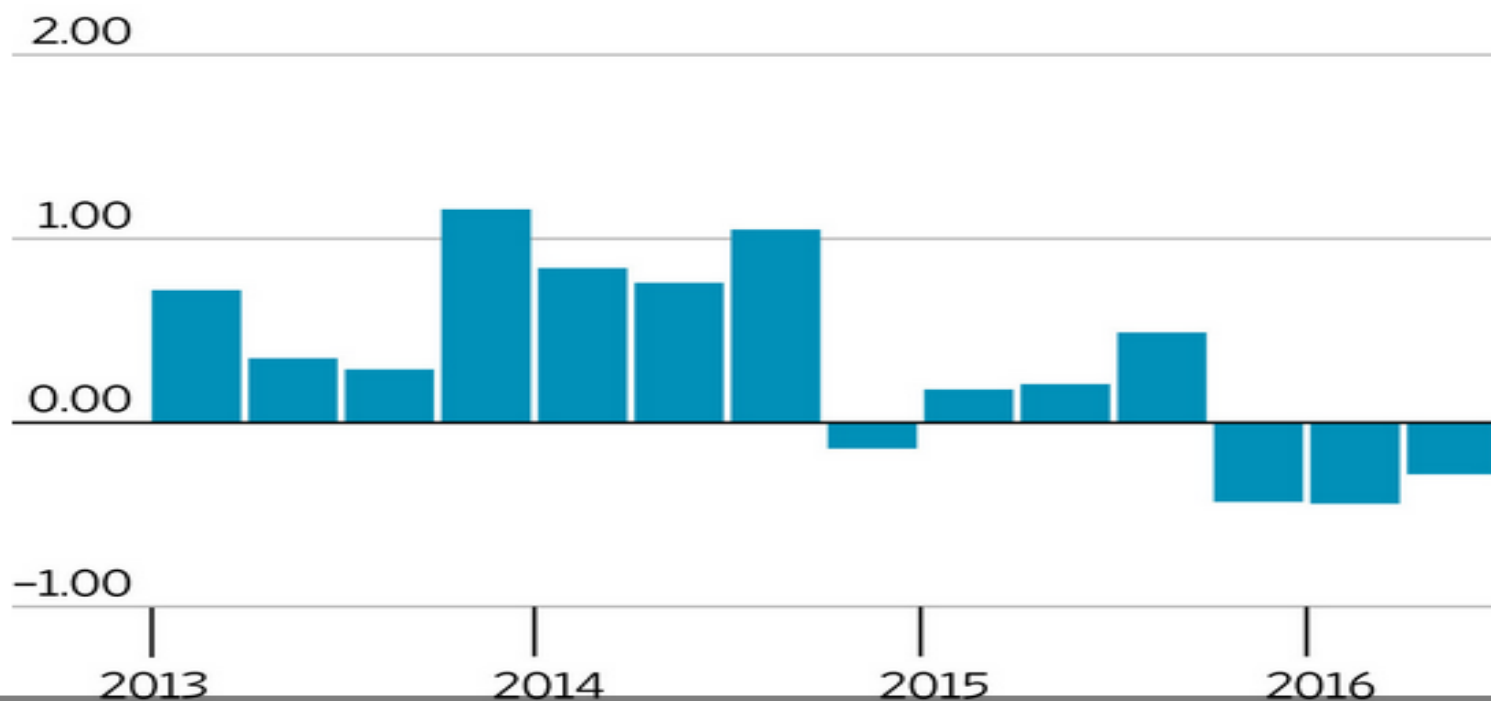
Source: Office of Management and Budget; author's calculations.



**Business isn't investing either --- has been trending lower for the past several years. That's why GDP growth remains weak. That means income growth will remain weak and housing will continue to underperform, and creation of good paying jobs will remain an elusive goal.**

## Business Isn't Investing

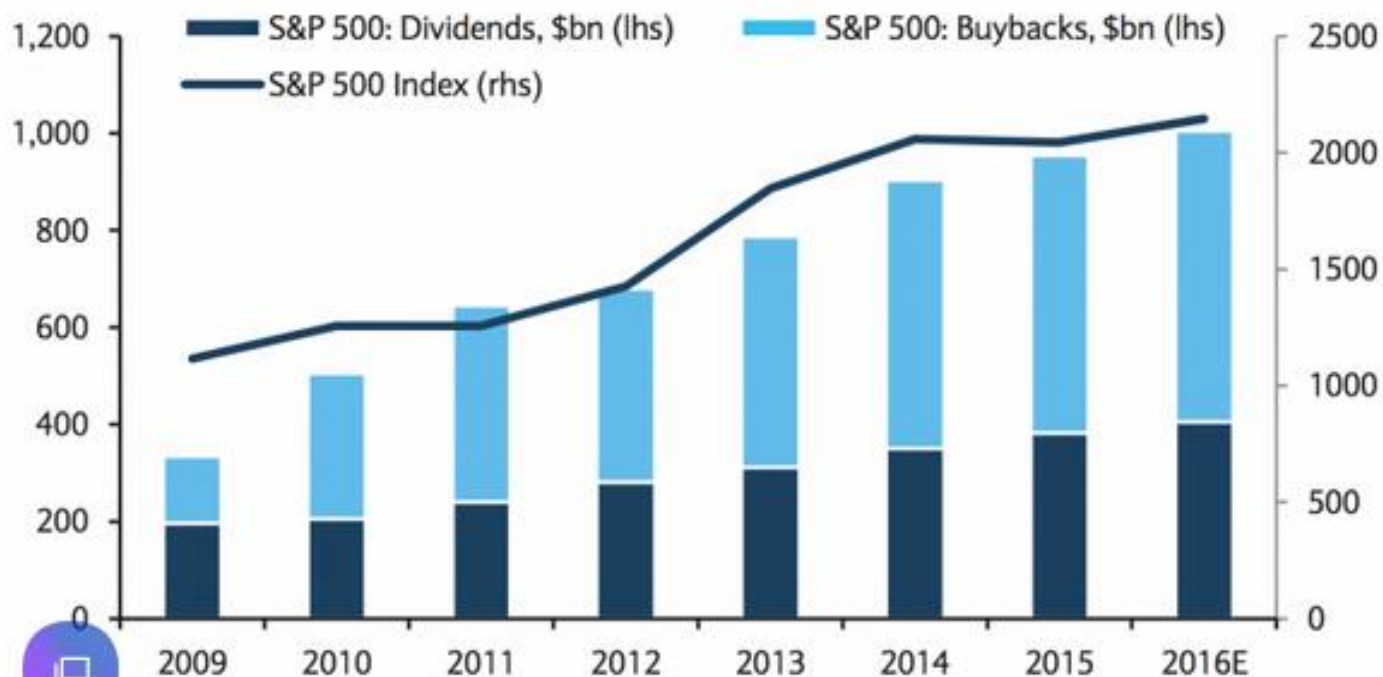
Contribution to quarterly GDP, in percentage change, from fixed nonresidential investment, 2013-July 2016



Source: Bureau of Economic Analysis

**This is what businesses do when they don't see much growth – instead of investing in plant, equipment, technology, they buy back stock and increase dividends. Good short term strategy, but does little to make the company/business more competitive.**

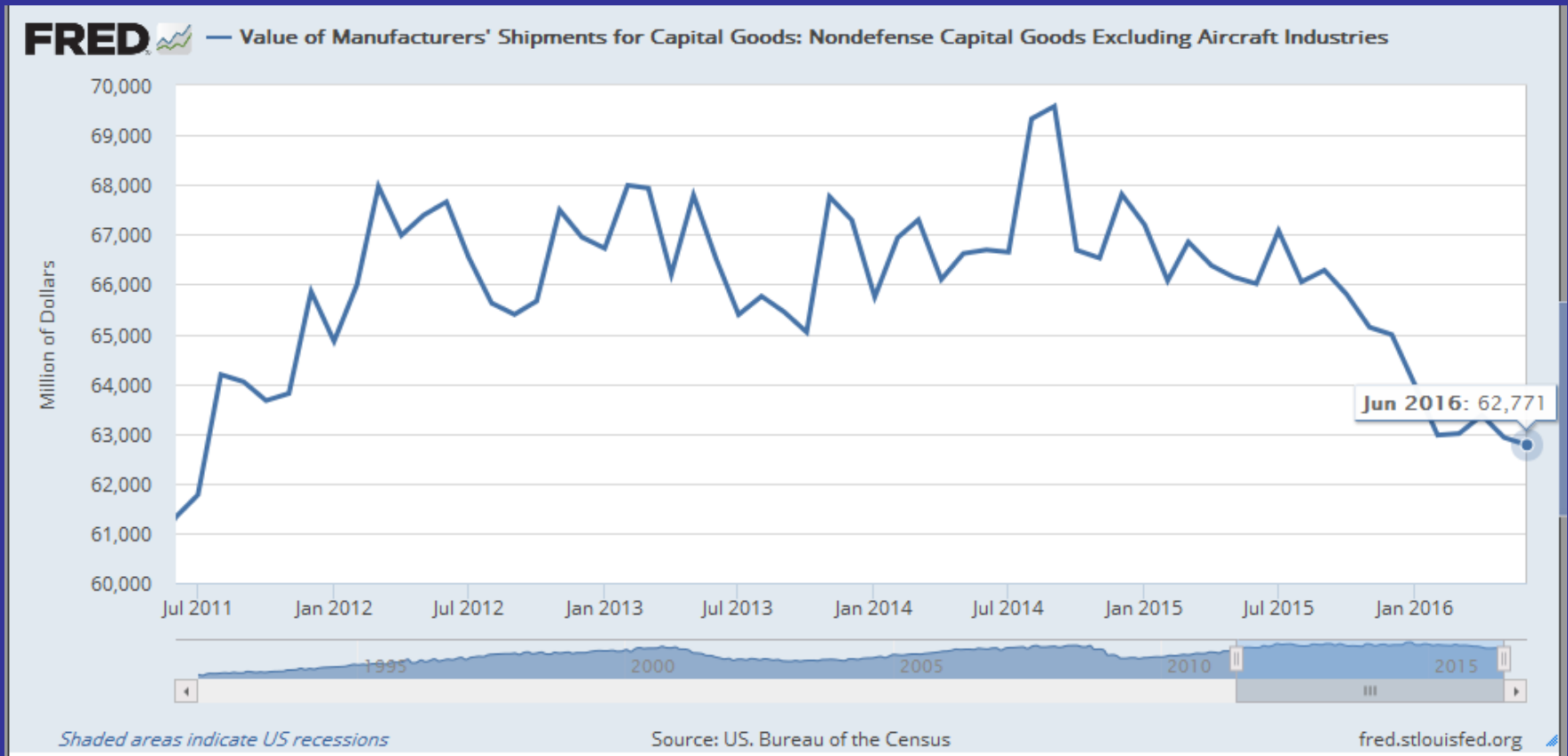
**Payouts (dividends plus buybacks) are poised to top \$1 trillion for the first time in history in 2016**



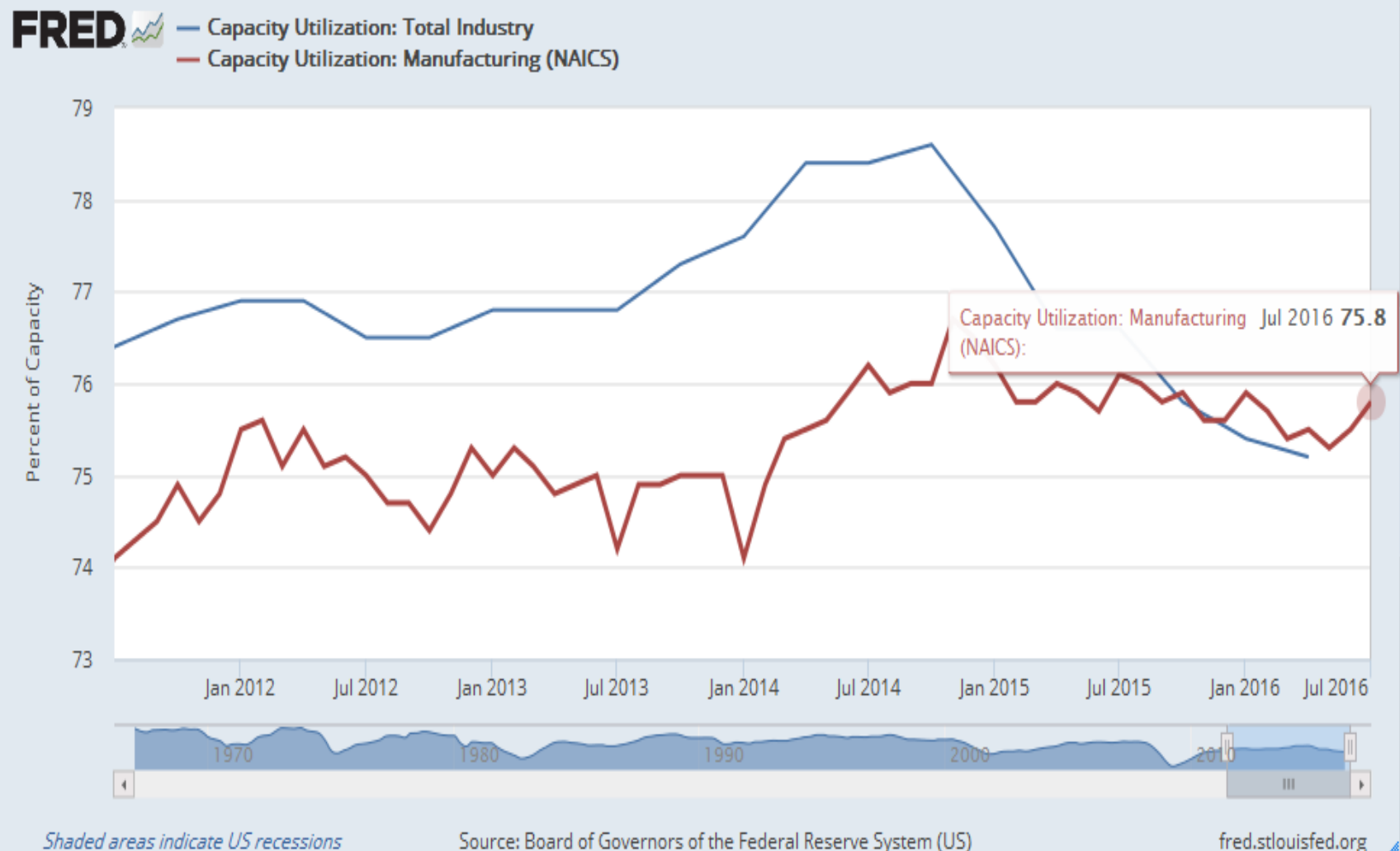
Source: S&P, Haver, Barclays Research

Annual cash payouts are about to hit \$1trillion. (Image: Barclays)

**Capital spending has been trending lower for past 4 years**  
**Why? Companies not confident of future – uncertainty re:**  
**tax code, regulations; Washington grid lock!**



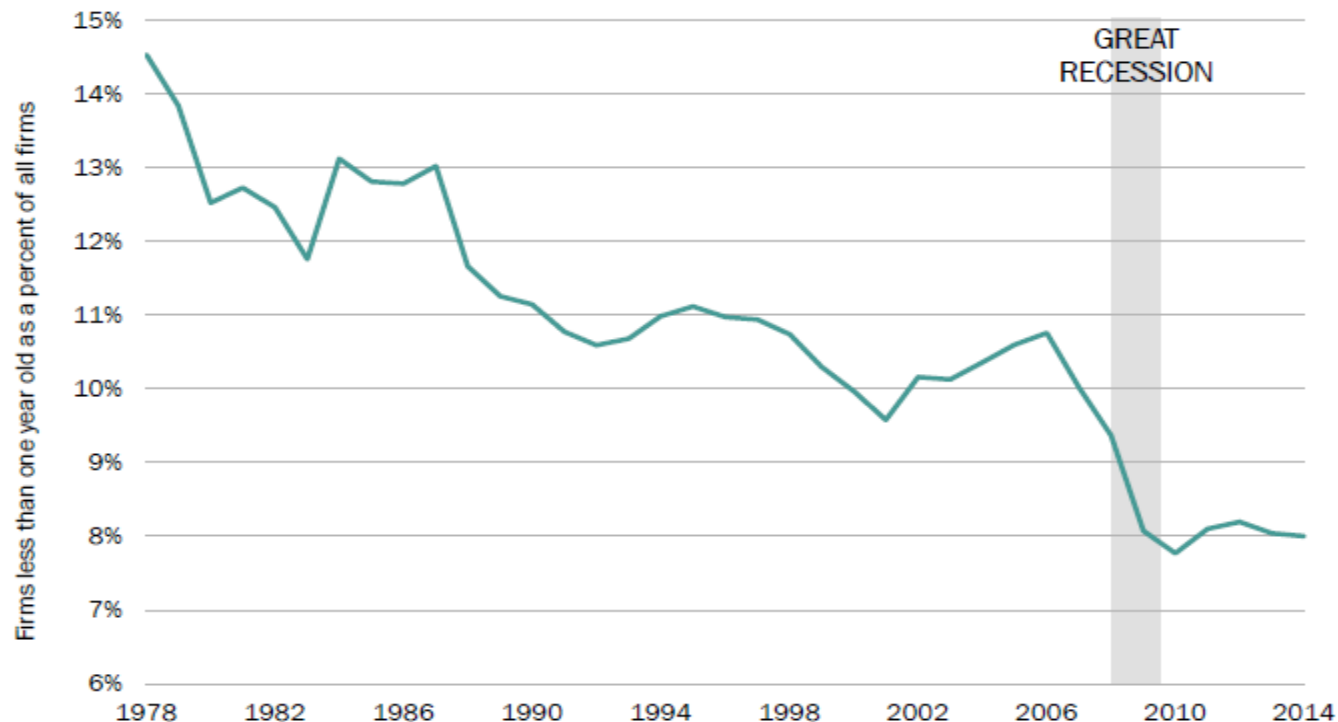
**Business won't invest (and create jobs) when there is excess capacity – capacity utilization below 80% suggests “excess capacity” exists – we’ve had 2 years of falling capacity utilization – the culprit is probably the weak economy!**



## Another structural problem – new business formations are down significantly – (from the Porter study) – why job creation is slow

**FIGURE 12: SLOWDOWN IN NEW BUSINESS FORMATION**

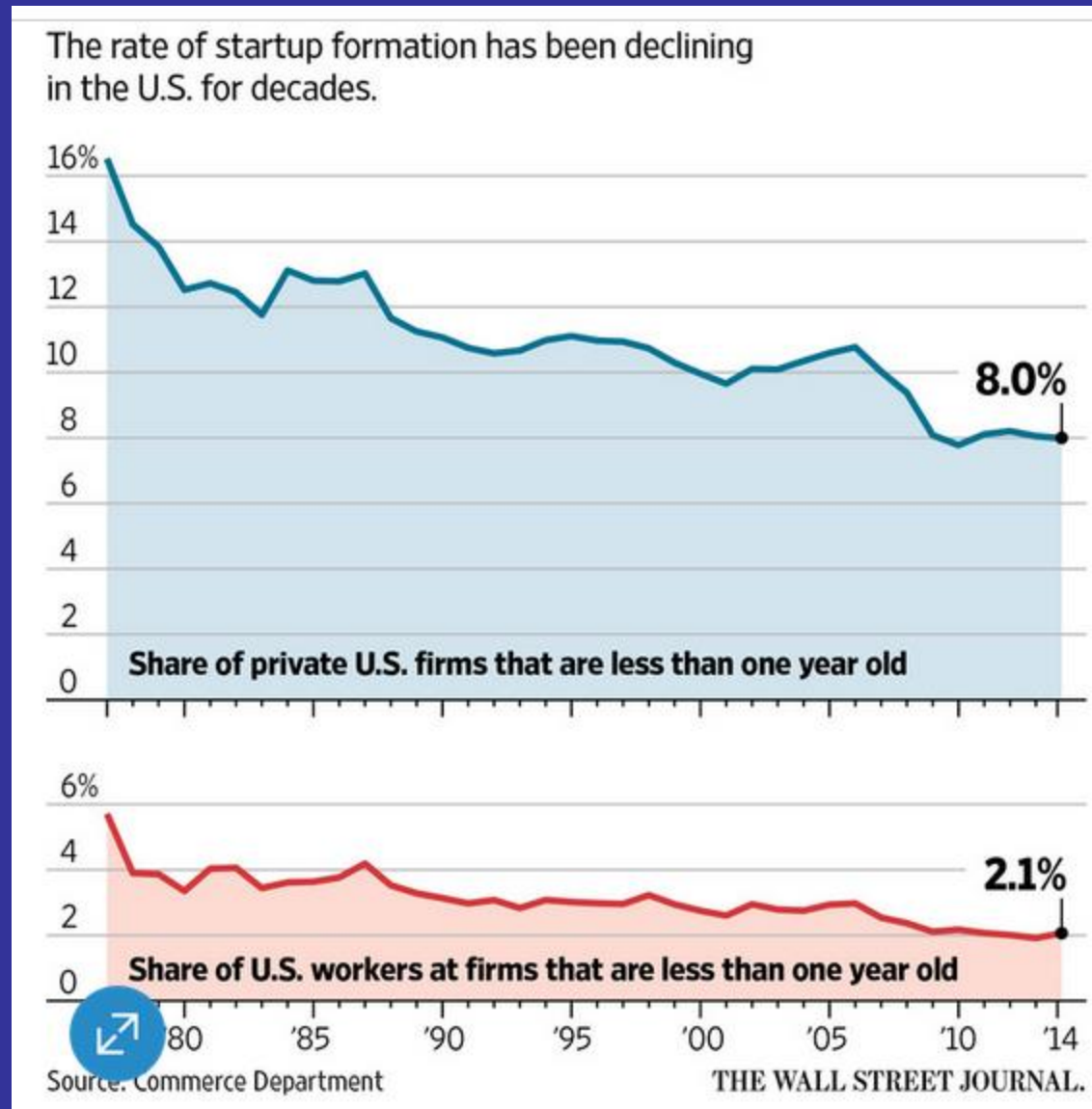
Start-ups as a portion of all U.S. firms, 1978–2014



Note: Shaded area indicates the recession of December 2007 to June 2009 as defined by the National Bureau of Economic Research.

Source: U.S. Census Bureau Business Dynamics Statistics. Chart adapted from Ian Hathaway and Robert E. Litan, "Declining Business Dynamism in the United States: A Look at States and Metros," Economic Studies at Brookings, May 2014.

# Slowdown in entrepreneurship is one reason economy remains mired in slow growth mode!



## What happens when innovation is missing!

**Dismal productivity growth - - worst performance for US economy since the 1980's when we experienced back to back recessions.**

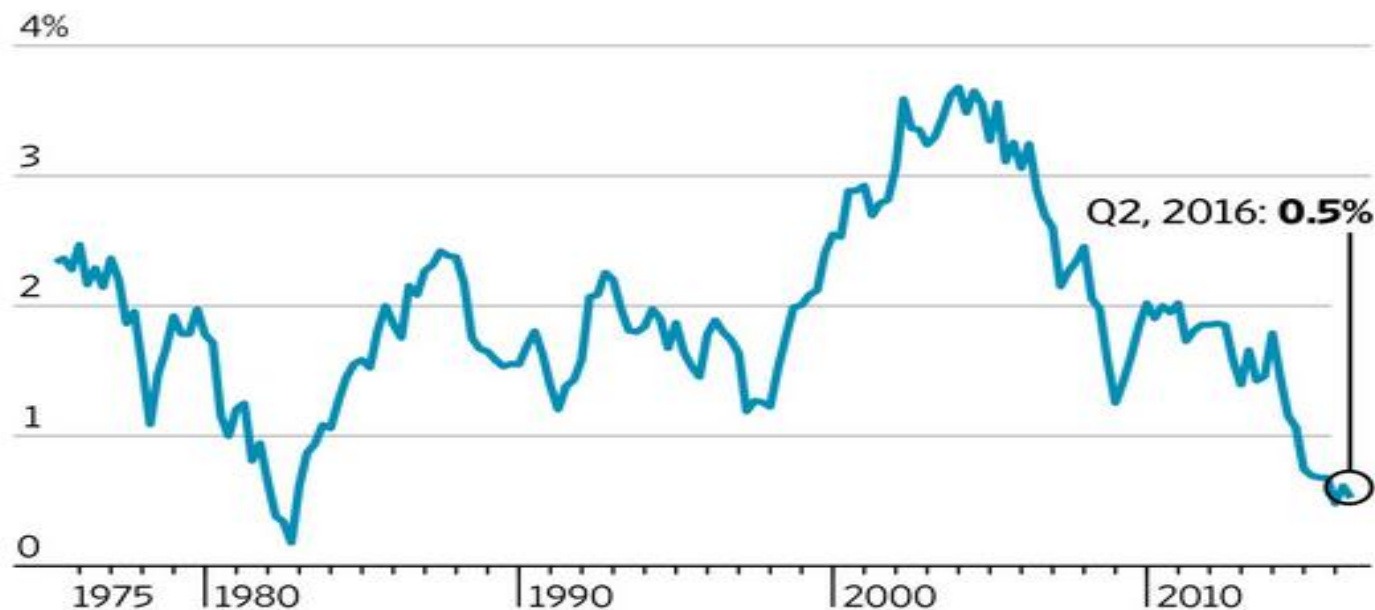
*(PS - I understand that productivity measurement is a problem as new products/services quality is difficult To measure so maybe we are underestimating real productivity?)*

### Plunging Productivity

Gains in U.S. worker productivity have slowed dramatically since the early 2000s, a trend that could restrain the economy's future growth.

#### Labor productivity (output per hour)

Percentage change from previous quarter at annual rate,  
5-year moving average



Note: Figures are seasonally adjusted

Source: Labor Department

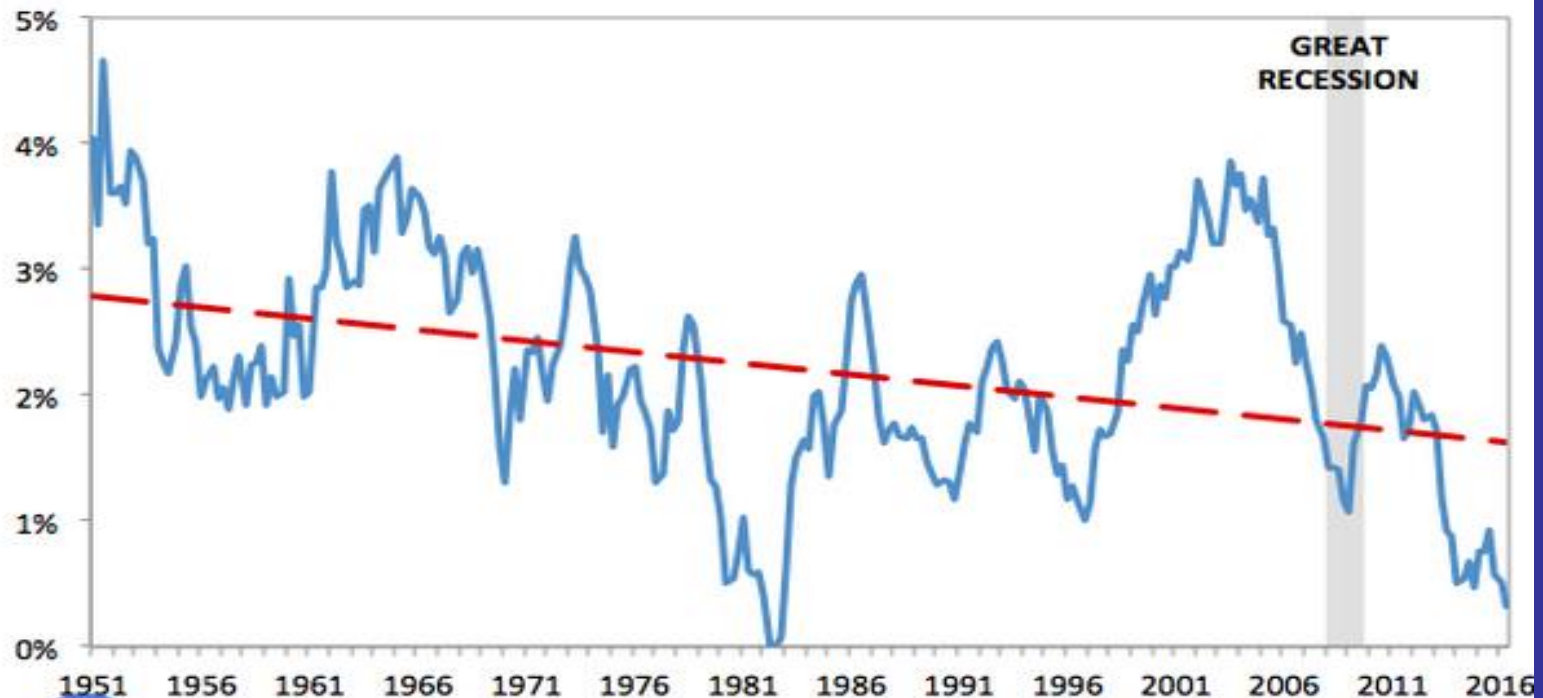
THE WALL STREET JOURNAL.

Source: WSJ (<http://www.wsj.com/articles/u-s-productivity-dropped-at-0-5-pace-in-the-second-quarter-1470746092>)

**Waning productivity is major cause of our economic problems. Weakening trend over past 60 years needs to change if wages/standard of living are to improve. According to recent study by Porter et al., competitiveness is key. Solution is infrastructure reform, tax reform, and immigration reform. Political paralysis keeps us from implementing the right solutions according to Porter.**

**FIGURE 2: U.S. PRODUCTIVITY GROWTH**

U.S. NON-FARM BUSINESS LABOR PRODUCTIVITY, 4-YEAR ROLLING AVERAGE OF ANNUALIZED QUARTERLY GROWTH, 1951–Q2 2016



Note: Shaded area indicates the recession of December 2007 to June 2009 as defined by the National Bureau of Economic Research.  
Sources: Bureau of Labor Statistics; author's calculations.

Source: Harvard Business School US Competitiveness Project

(<http://finance.yahoo.com/news/us-competitiveness-project-harvard-business-school-hbs-michael-porter-030021739.html>)

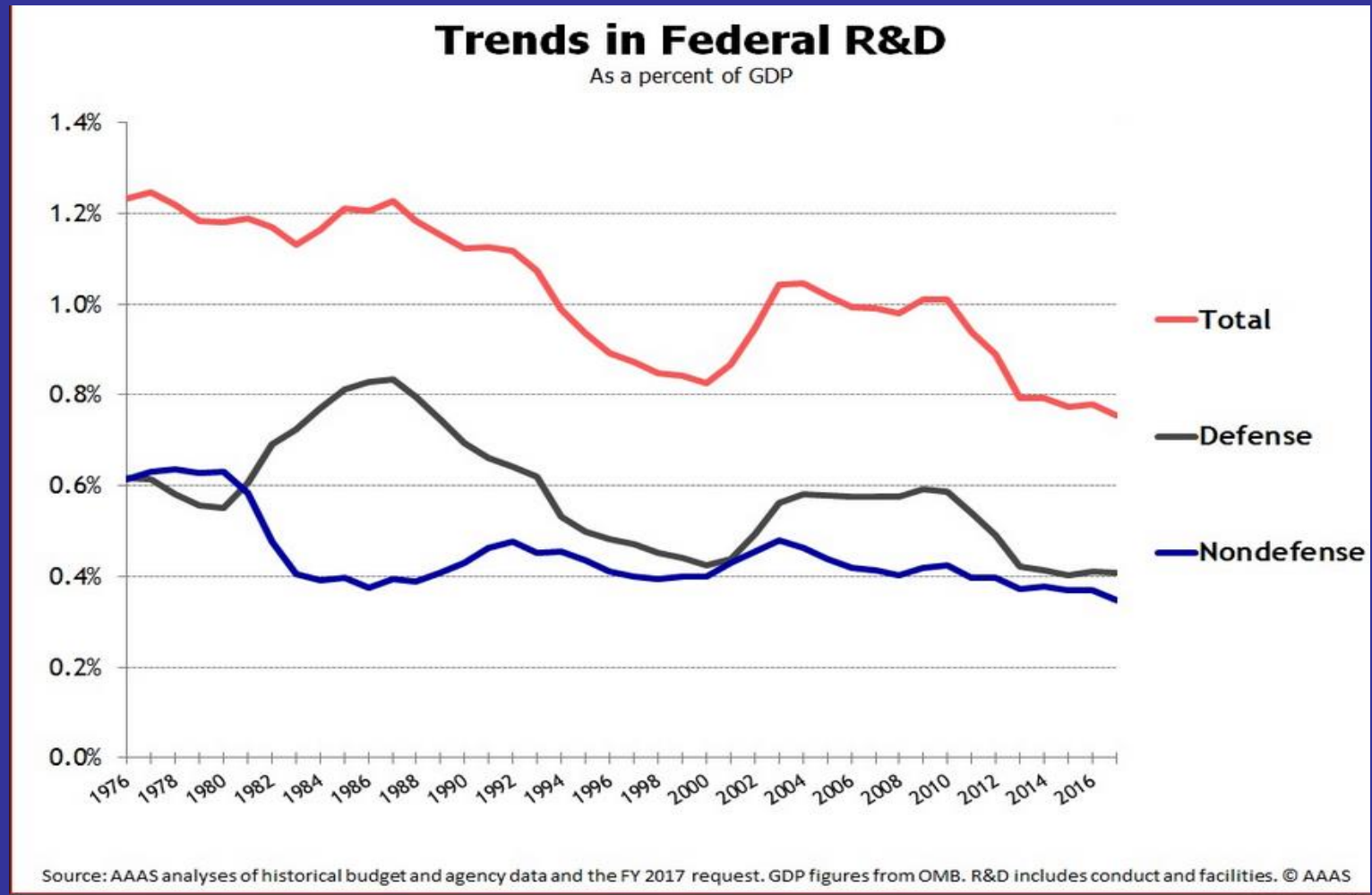


## Falling Basic R&D - - funding basic science is declining -

Currently, Federal R&D is .78% of GDP

Federal government Funds basic research while industries fund applied research – basic research is critical to development of new technology and innovation in science and engineering - critical to economic and job growth, and productivity

([http://www.wsj.com/articles/the-dividends-of-funding-basic-science-1480982516?mod=rss\\_opinion\\_main](http://www.wsj.com/articles/the-dividends-of-funding-basic-science-1480982516?mod=rss_opinion_main))



**Hidden Problem – we're out of big ideas!**

**“Dwindling gains in science, medicine and technology hold back growth; is America too risk-averse?”**

**Excellent article by Greg Ip, WSJ.**

**Converting new ideas ( jet engine, printing press, internet, medical research, computer, etc.) technology into marketable success stories usually takes decades. It's beginnings are in basic research labs across America. Unfortunately, it's not happening like it used to. Ip offers some reasons – we are becoming too risk being the main reason? Also, overregulation, less basic research funding, ...**

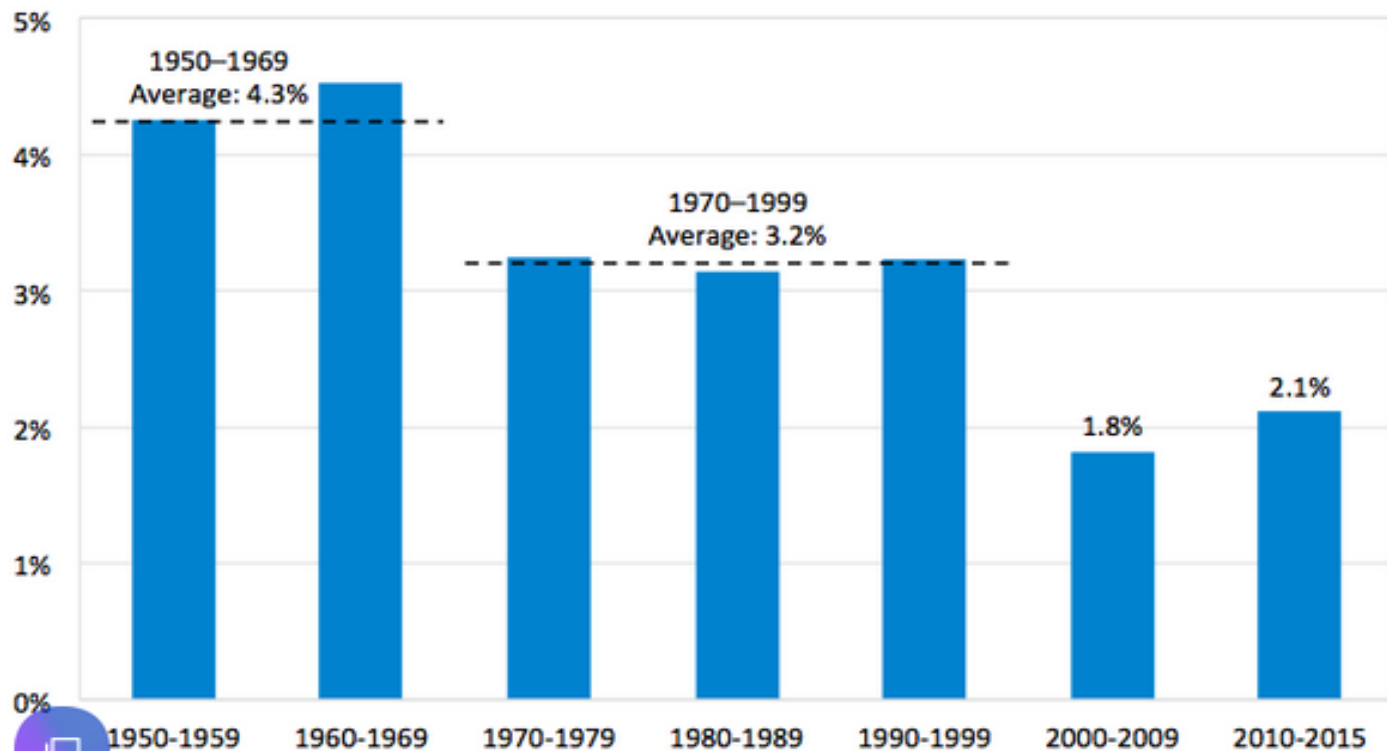
**Here is an example of our overregulated government – it took two years to replace the elevator in the Washington monument!**

**( <http://www.wsj.com/> )**

**Weak growth means weak incomes and weak housing numbers in the future unless we address our competitiveness issues.**

**FIGURE 1: SLOWDOWN IN ECONOMIC GROWTH RATE BY DECADE**

COMPOUND ANNUAL GROWTH RATE OF U.S. REAL GDP BY DECADE, 1950-2015

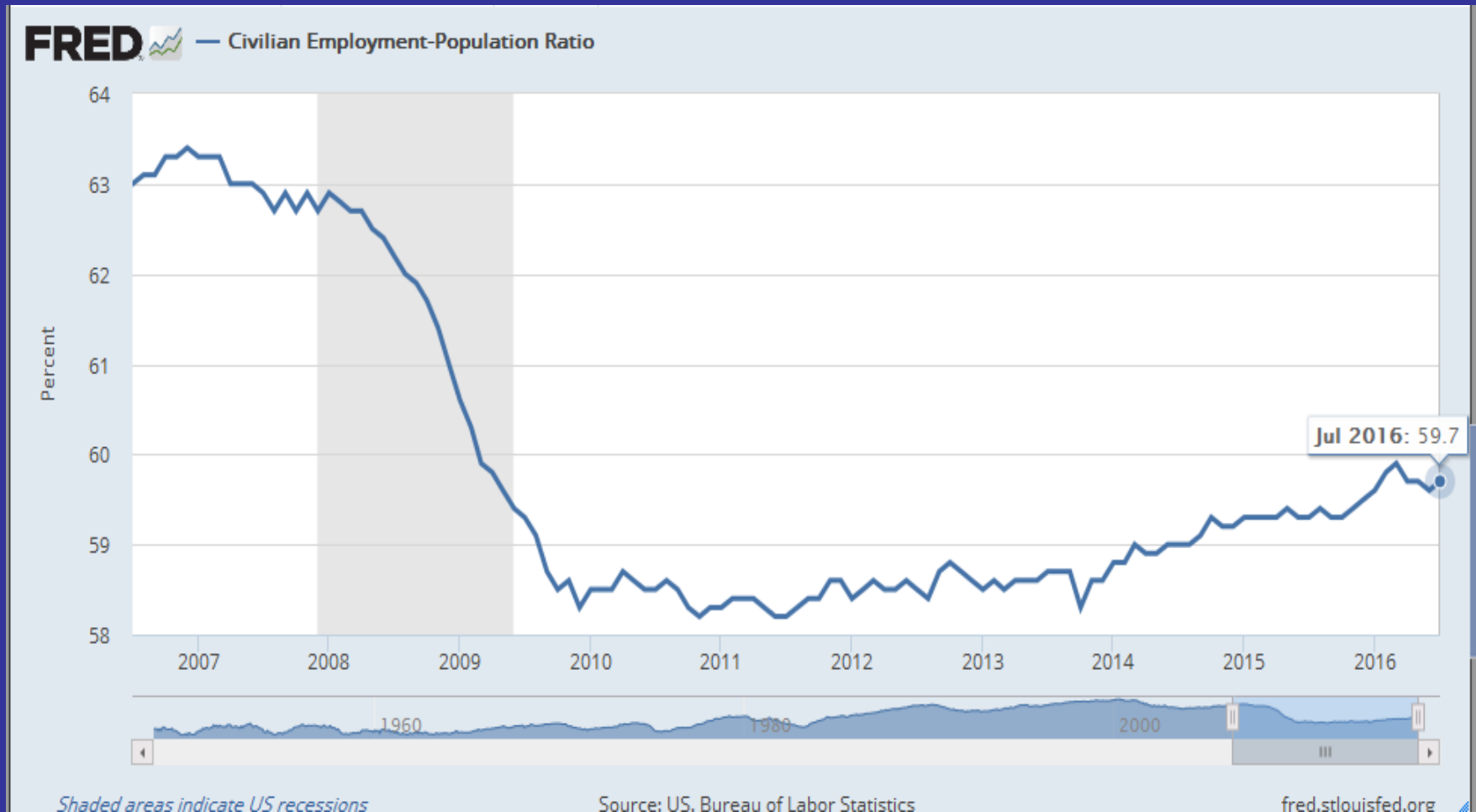


Source: Bureau of Economic Analysis; author's calculations.

Source: Harvard Business School US Competitiveness Project

**Here are a few slides on labor market conditions – problems persist, but there are solutions...**

**Not a good trend for the economy – employment population ratio keeps decreasing – my opinion – too much welfare, plus many people don't have the required job skills (half the population on some form of welfare – food stamps, Medicaid, long term disability, housing allowances, etc.)**



(<http://www.wsj.com/articles/the-idle-army-americas-unworking-men-1472769641>)

# Here's the problem – there are lots of jobs, but too many job seekers don't have the required skills!

(<http://blogs.wsj.com/economics/2016/09/07/a-new-record-for-job-openings-deepens-mystery-over-lack-of-hiring/>)

## Job Seekers

Number of unemployed workers per job opening

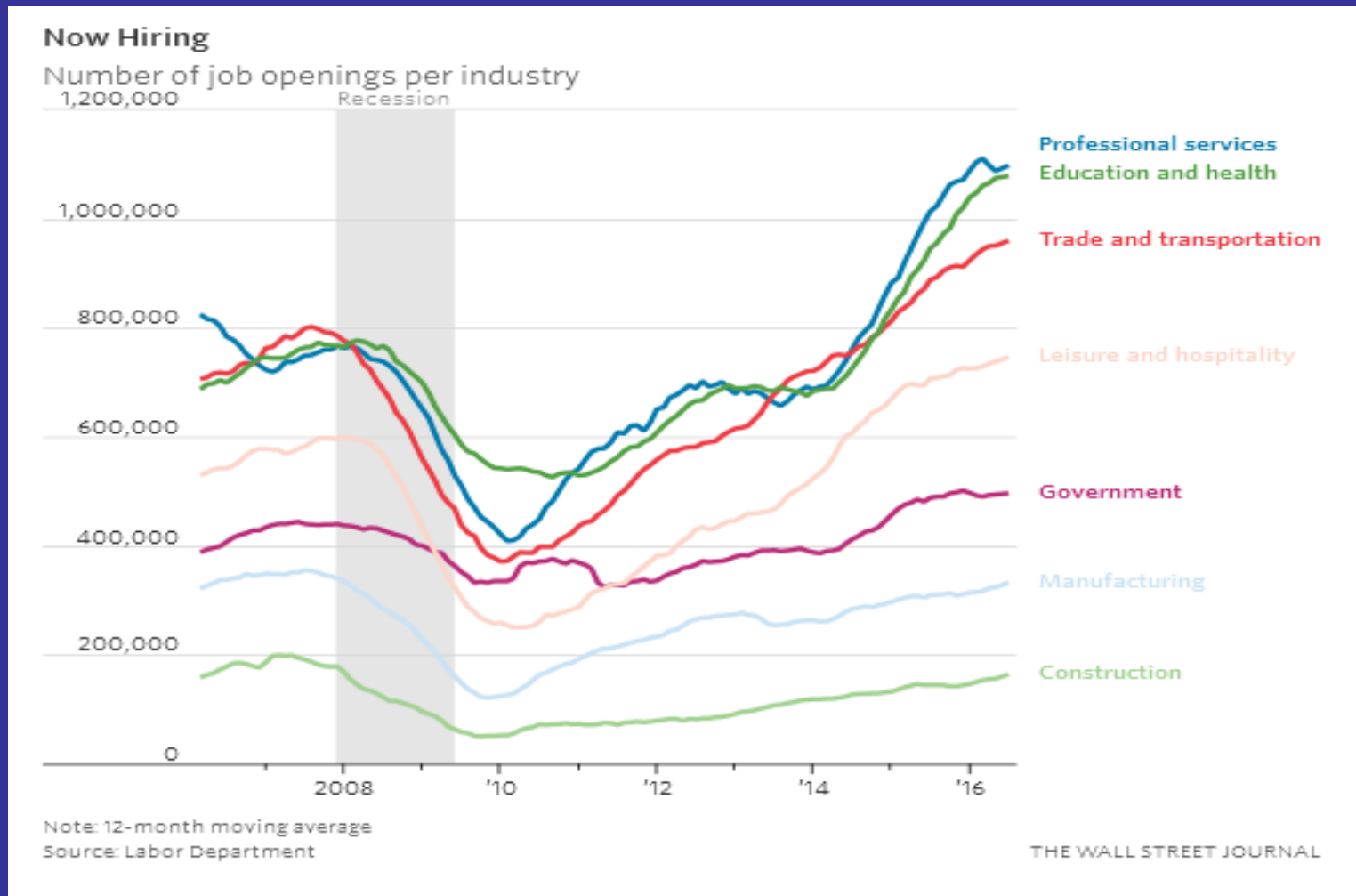


Note: Seasonally adjusted

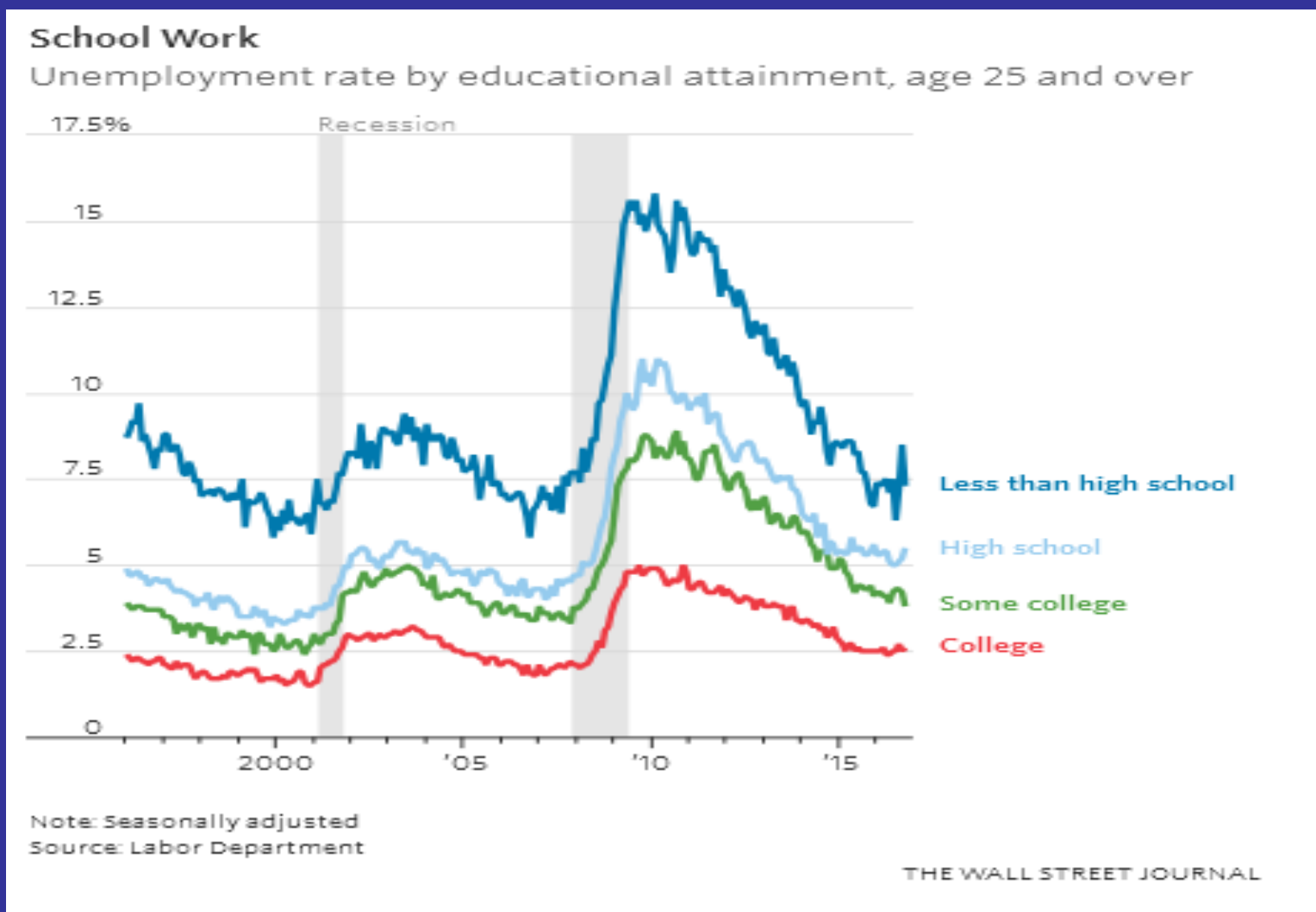
Source: Labor Department

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**Here's where the jobs are – but, again, lack of skills means many of these positions go unfilled!**



# Education will help keep you out of the unemployment line

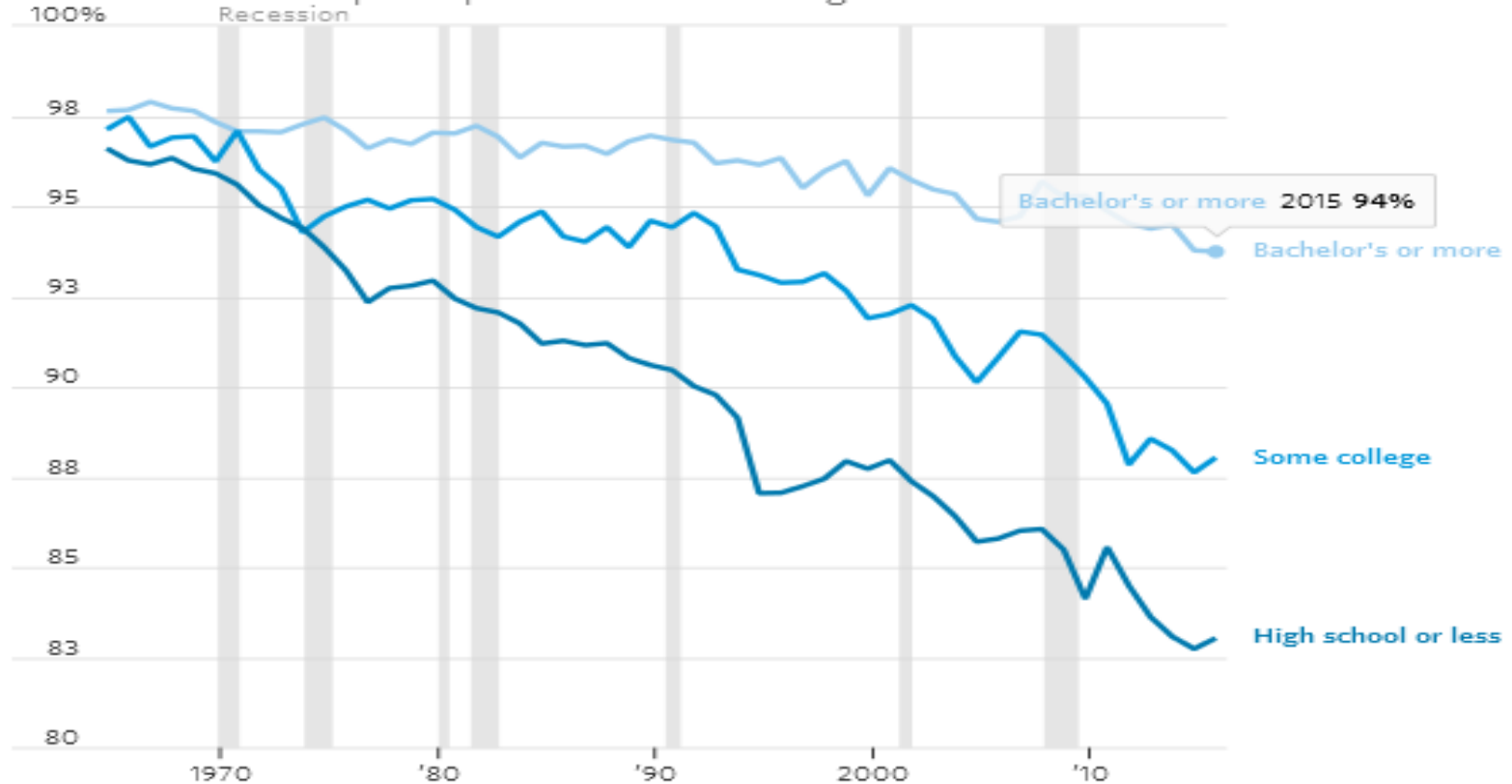




# Getting an education will get you back into the labor force

## School's Out

Civilian labor-force participation rate for men ages 25-54



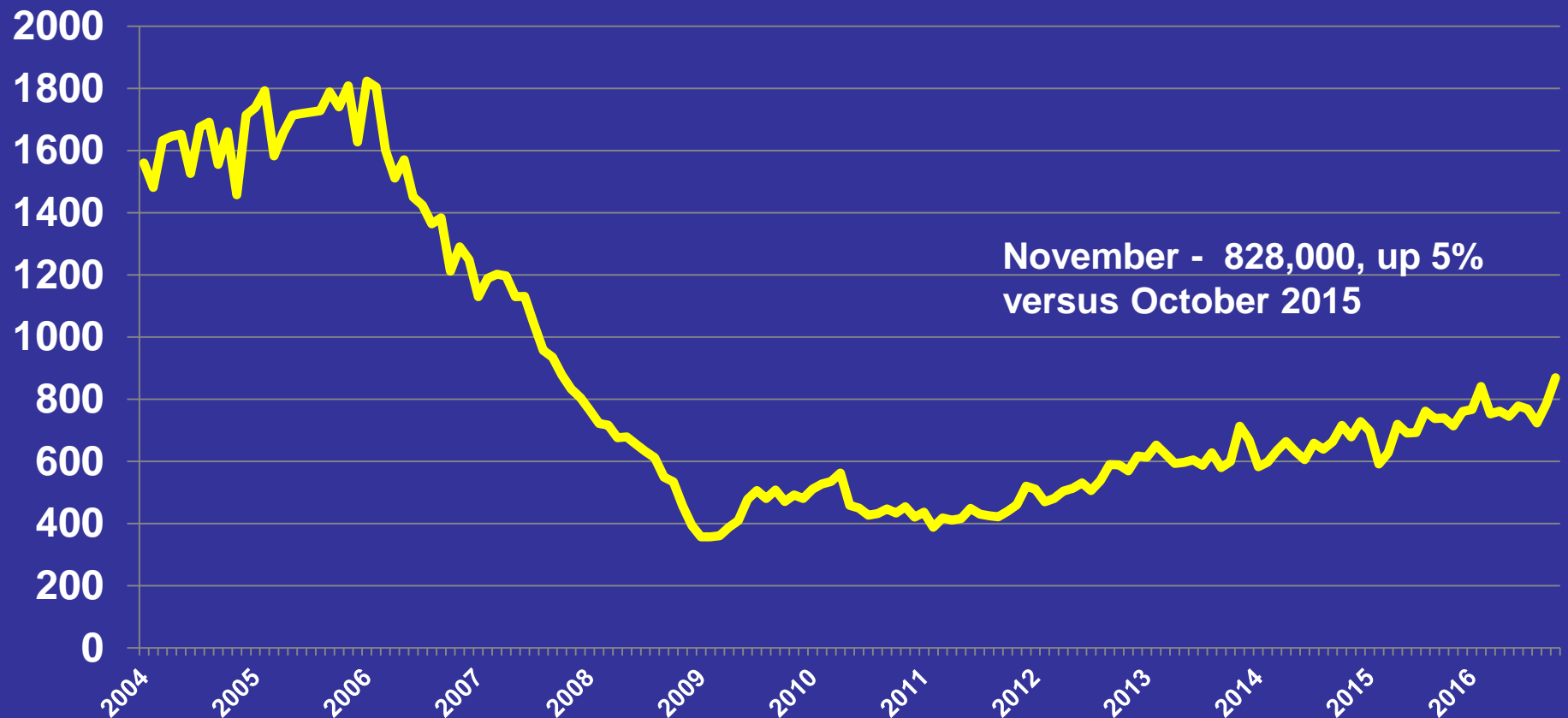
Source: Labor Department, Commerce Department, Council of Economic Advisers

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## **Additional housing comments**

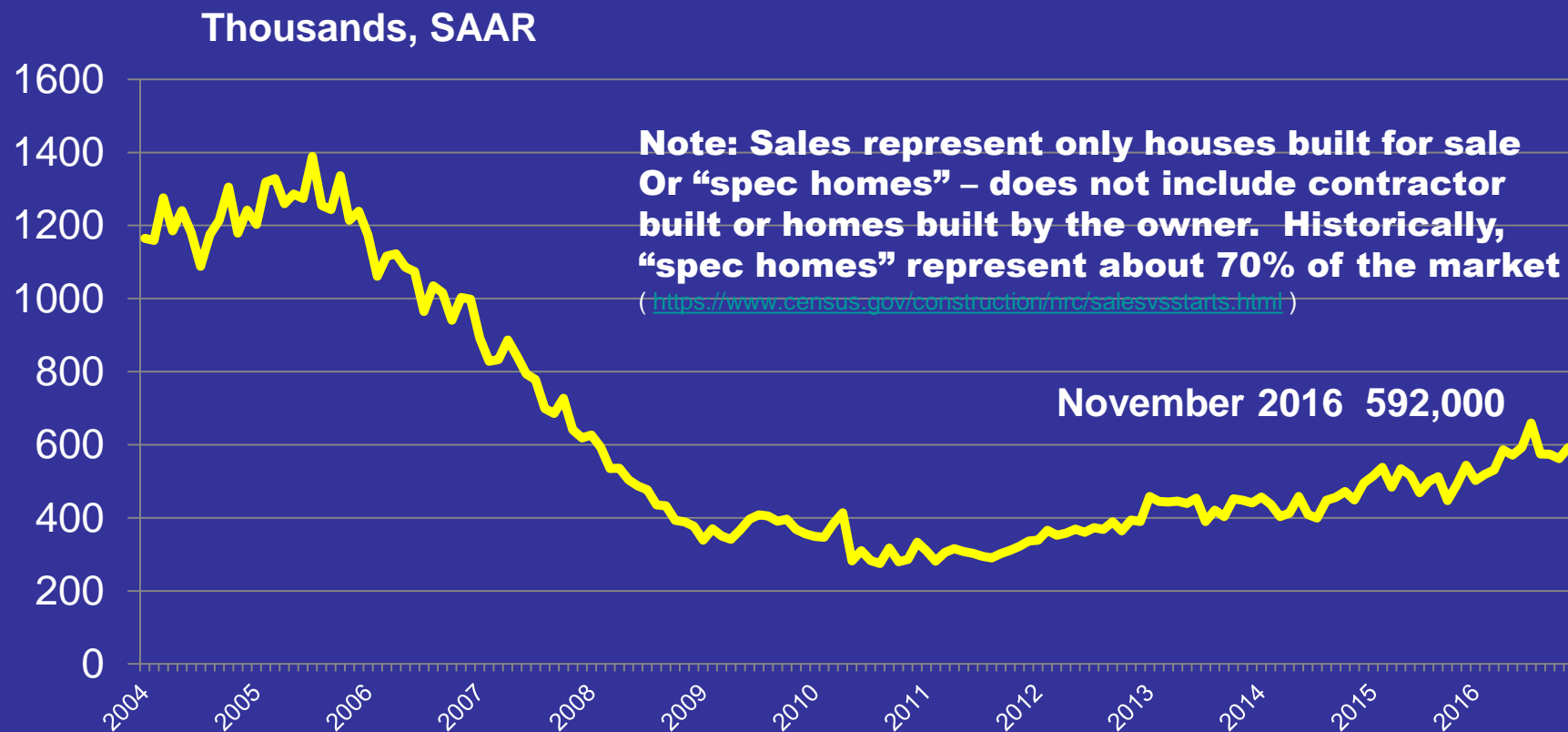
**Starts are inching forward – But, Low Interest rates can't fix housing!!! this is basically a two tiered market – healthy upper end versus weak entry level housing - - not sustainable**

Single family starts, Thousand units, SAAR



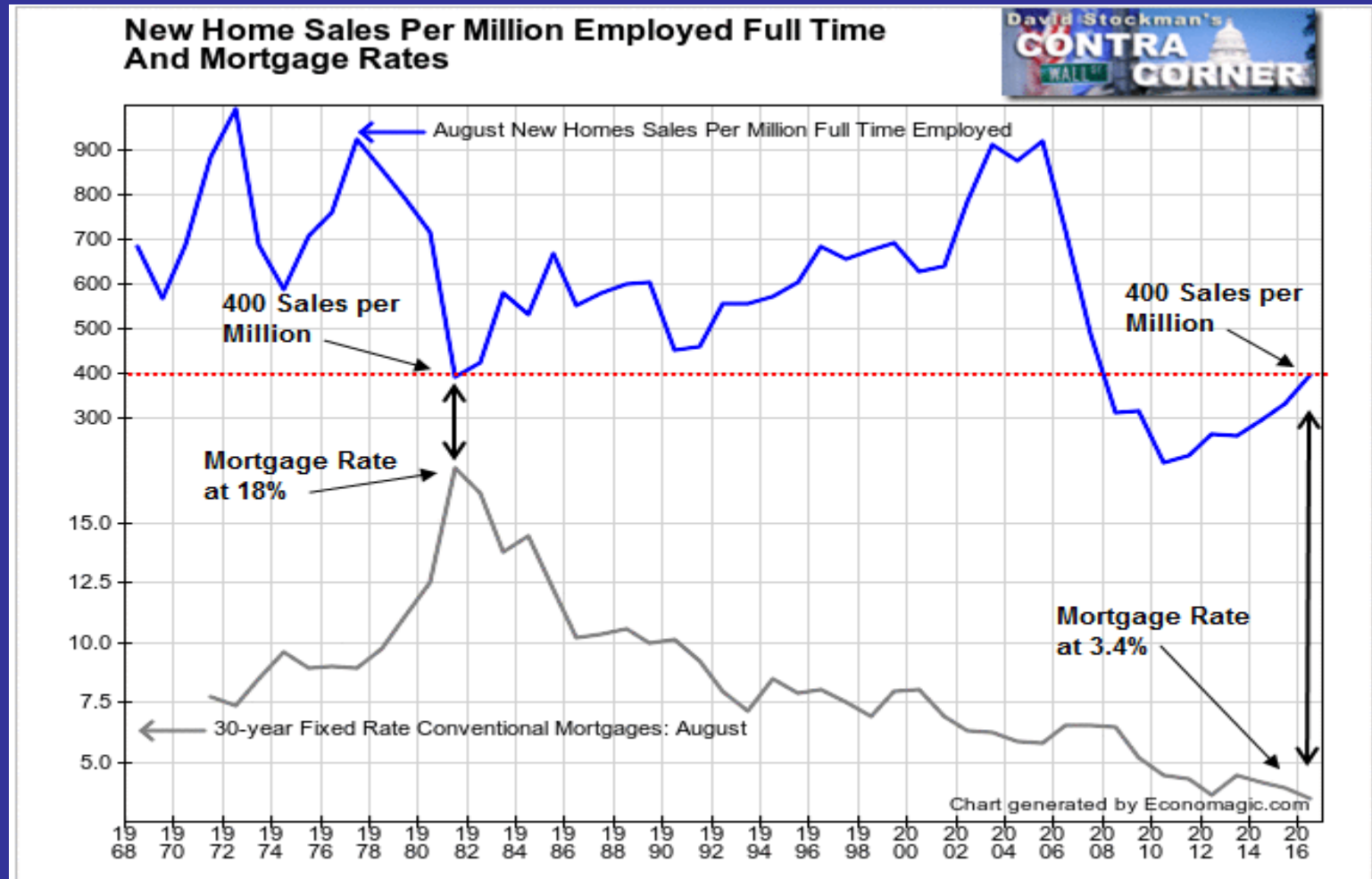
Source: Census (<http://www.census.gov/const/www/newresconstindex.html>)

**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!**



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

**Interesting chart showing new home sales versus population – despite lowest mortgage rates in history, today's new home sales per million are no better than back in 1980 when mortgage rates were almost 20%. Shows that low mortgage rates are not the answer – people need good jobs and a belief in their future – today, both are in jeopardy!**



**Resale market continues to improve** - however, tight supply (which drives prices), currently at 4 months, remains a problem. Healthy market is about 6 months supply. **Median prices are up 6.8%, annual basis - 55<sup>th</sup> consecutive monthly increase.**

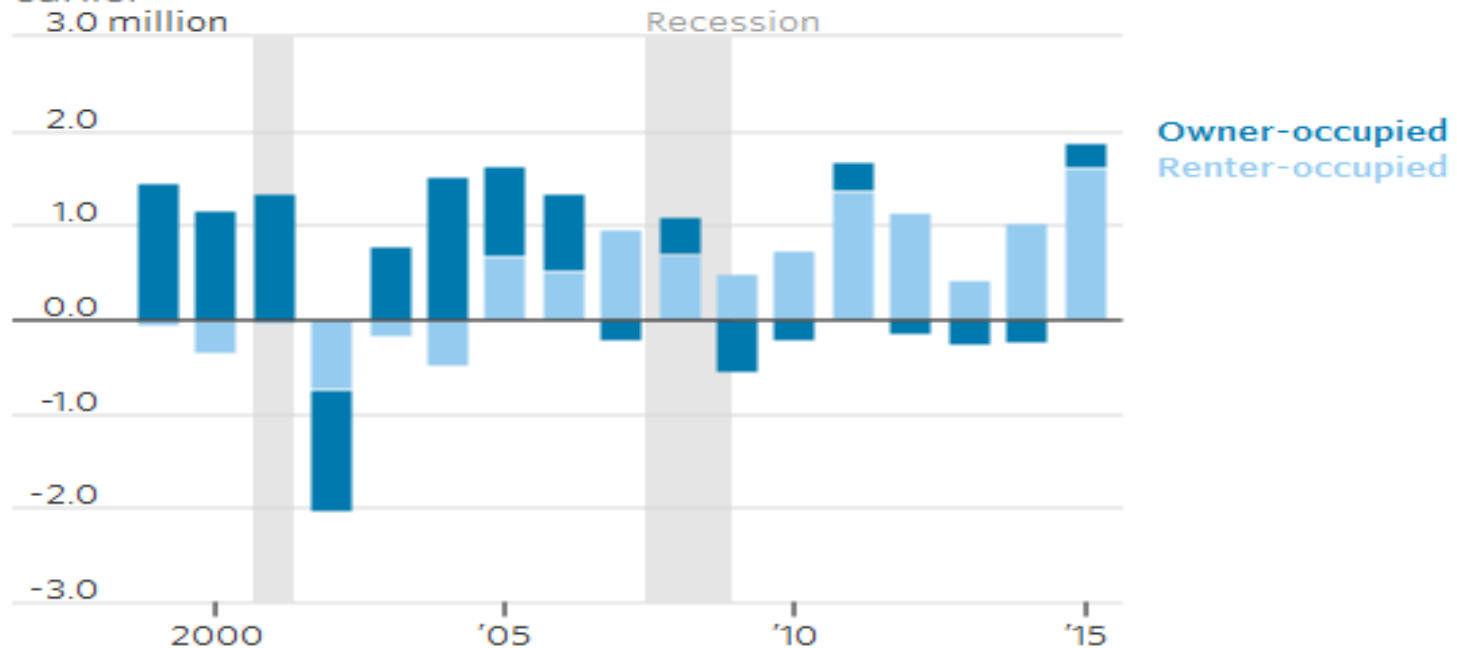
Single family (incl condos), Monthly, Thousand units, SAAR



**Household formations (HH) are starting to pick up, but since 2007 the bulk of new HH are renting!!**

### Household Formation

The number of occupied housing units, change from one year earlier



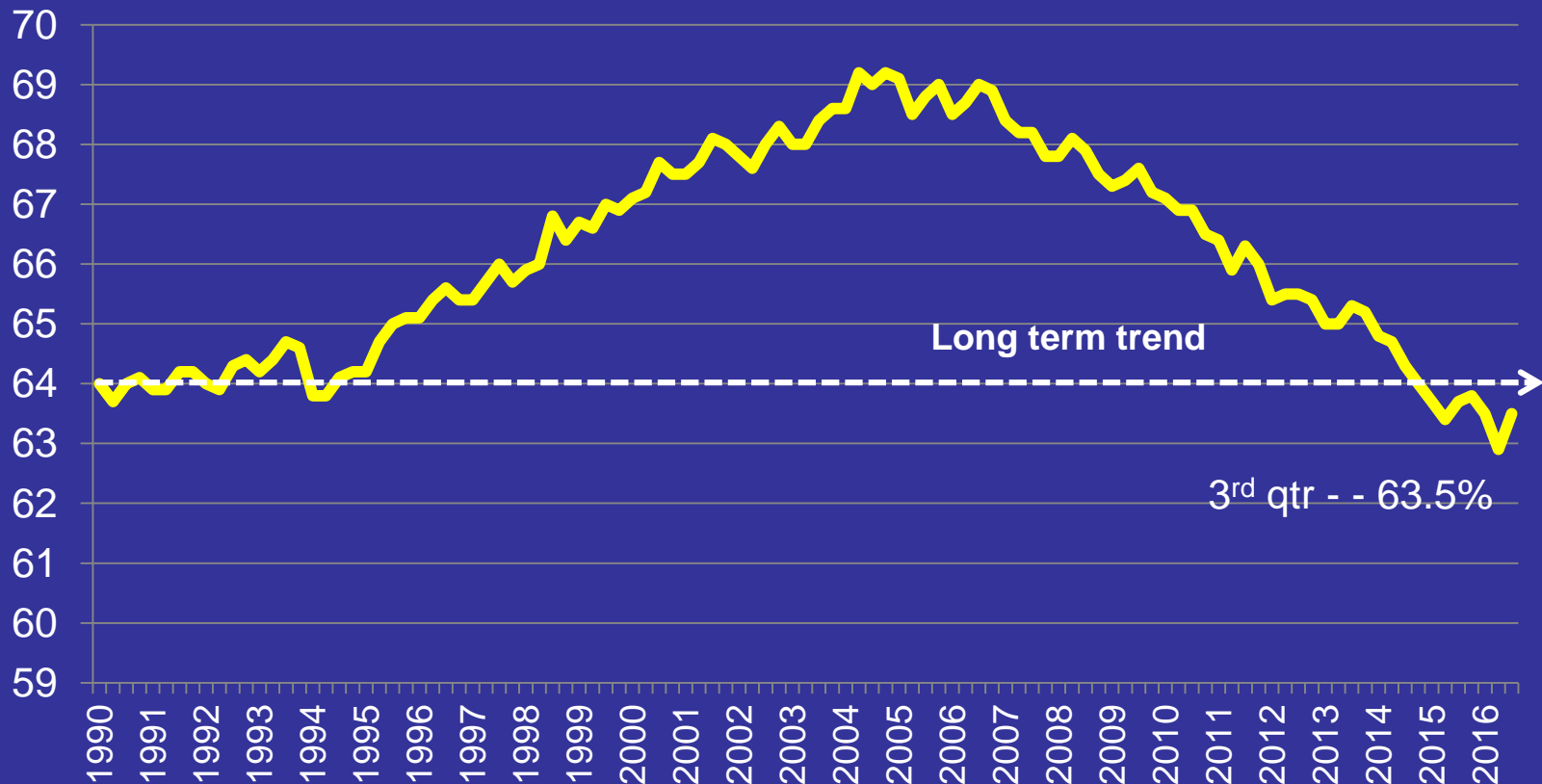
Source: Census Bureau  
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## **Household formations and shift to renting - Falling homeownership rate for millennial's - used to be 43% - now it is 33% - young people are renting**

**Recent study shows that people with college degree takes 5 years to save enough for down payment for starter home (with student debt – 10 years), no college – 16 years** (<http://www.wsj.com/articles/homeownership-elusive-for-young-adults-without-college-degrees-1463909402>)

### **Home Ownership(%)**

**Homeownership lowest in 50 years**



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



## Rental demand versus single family housing ---

Rental demand will continue to Increase for years – a recent study by the Urban Institute suggests it may continue for another decade or two

(<http://www.wsj.com/articles/new-housing-crisis-looms-as-fewer-renters-can-afford-to-own-1433698639>)

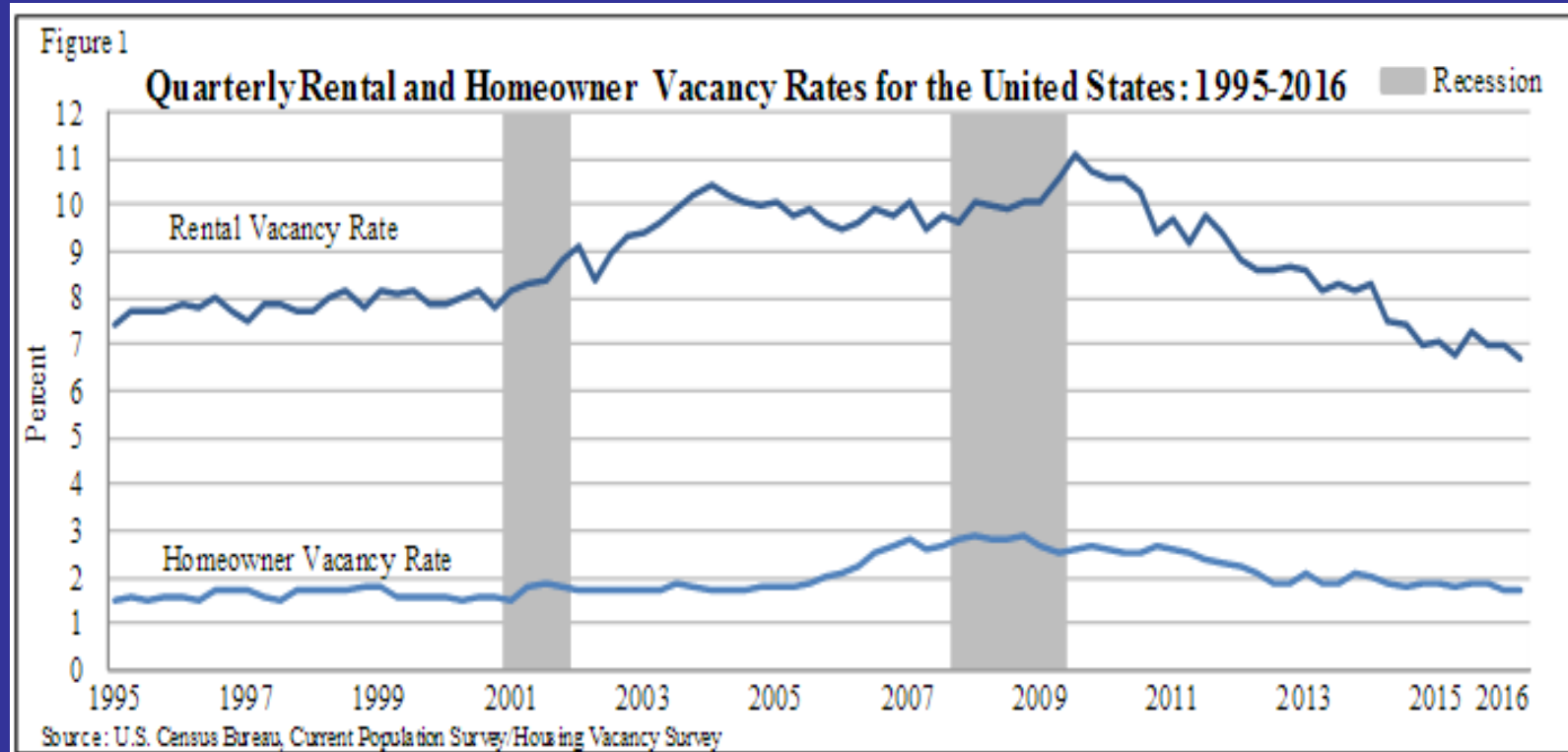
Why - - demographics; growing minority population; student debt; weak income growth; .... E.g., minorities will make up 75% of net household growth over the next 10 years, and 85% during 2020- 2030. They are less likely to own homes (lower incomes is main reason) so home ownership continues to fall toward 60% by 2030. During this time, rental demand will increase dramatically. Although this is just one study, it provides food for thought. One potential question with the study, however, is other studies show that although immigrants rent initially, but, over time, they purchase homes at a rate equal to or higher than native born Americans. Why? People come to the U.S. to improve quality of life, and for most, this means homeownership. This suggests that the U.S. has to find solutions to immigration issues like “illegal immigrants” while encouraging legal immigration. This country was founded by immigrants seeking a better life, and they are key to our future. **And, incomes for all minorities has to improve if home ownership is to return to “good old days”**

([http://www.engineeredwood.org/Data/sites/3/documents/EngWoodJournal/EWJ\\_Spring2010.pdf](http://www.engineeredwood.org/Data/sites/3/documents/EngWoodJournal/EWJ_Spring2010.pdf))

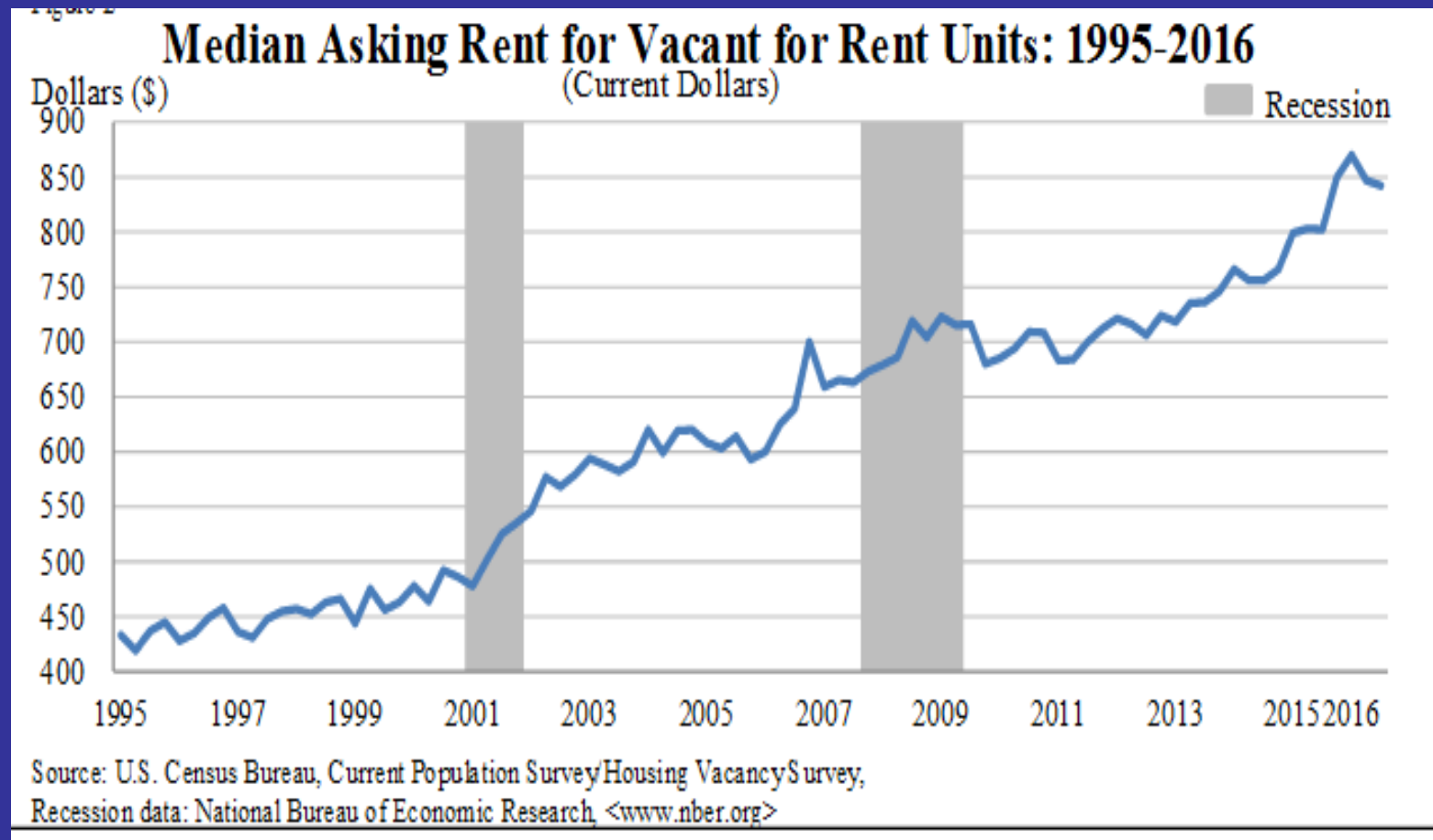
Anyway, this has potential implications for home ownership; single family construction; and demand for wood products – lots of variables and scenarios.

# Rental vacancy rates lowest in 20 years

**Falling rental vacancy rates will drive rental prices higher and this will drive multi family construction**

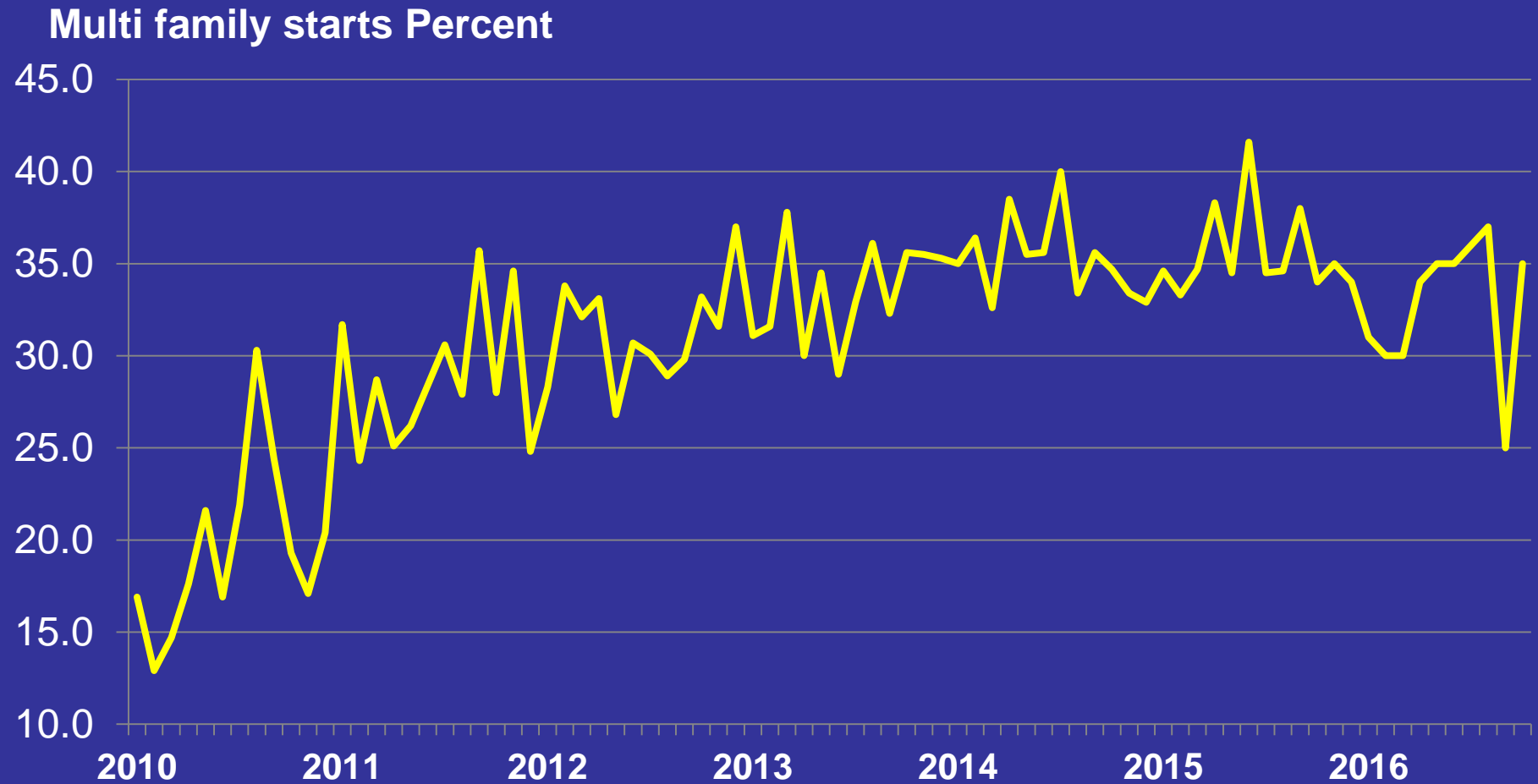


**Increasing rents are slowing housing starts -  
more difficult for renters to save for down payment for house purchase**



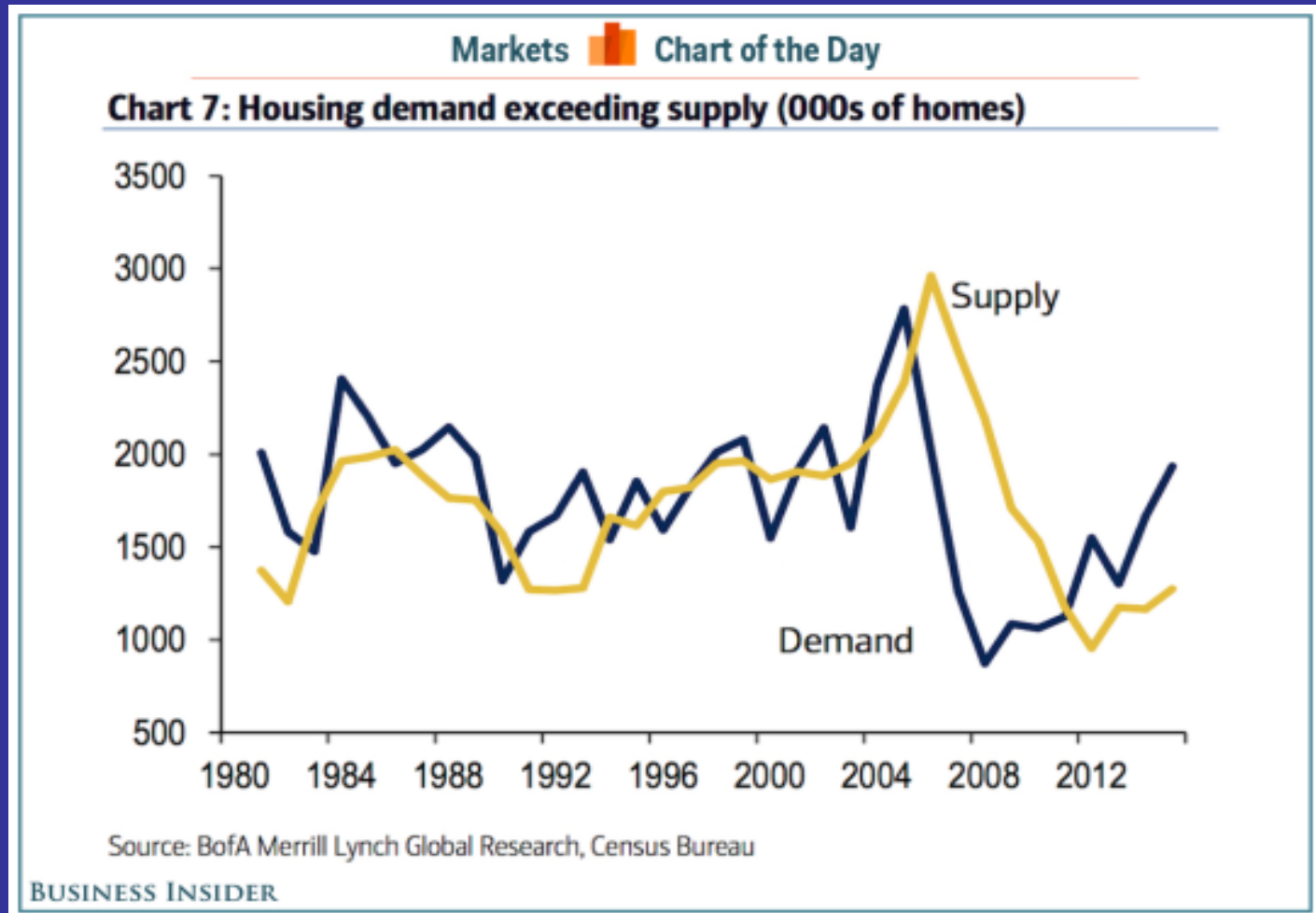
**Multi family share of housing starts – upward trend expected to continue for some time. Also, since the housing crash in 2008, **single family rentals** have now reached 13% of overall housing stock, up from 9% in 2005.**

(<http://blogs.wsj.com/economics/2015/07/20/signs-of-overheating-in-the-single-family-rental-market/>)



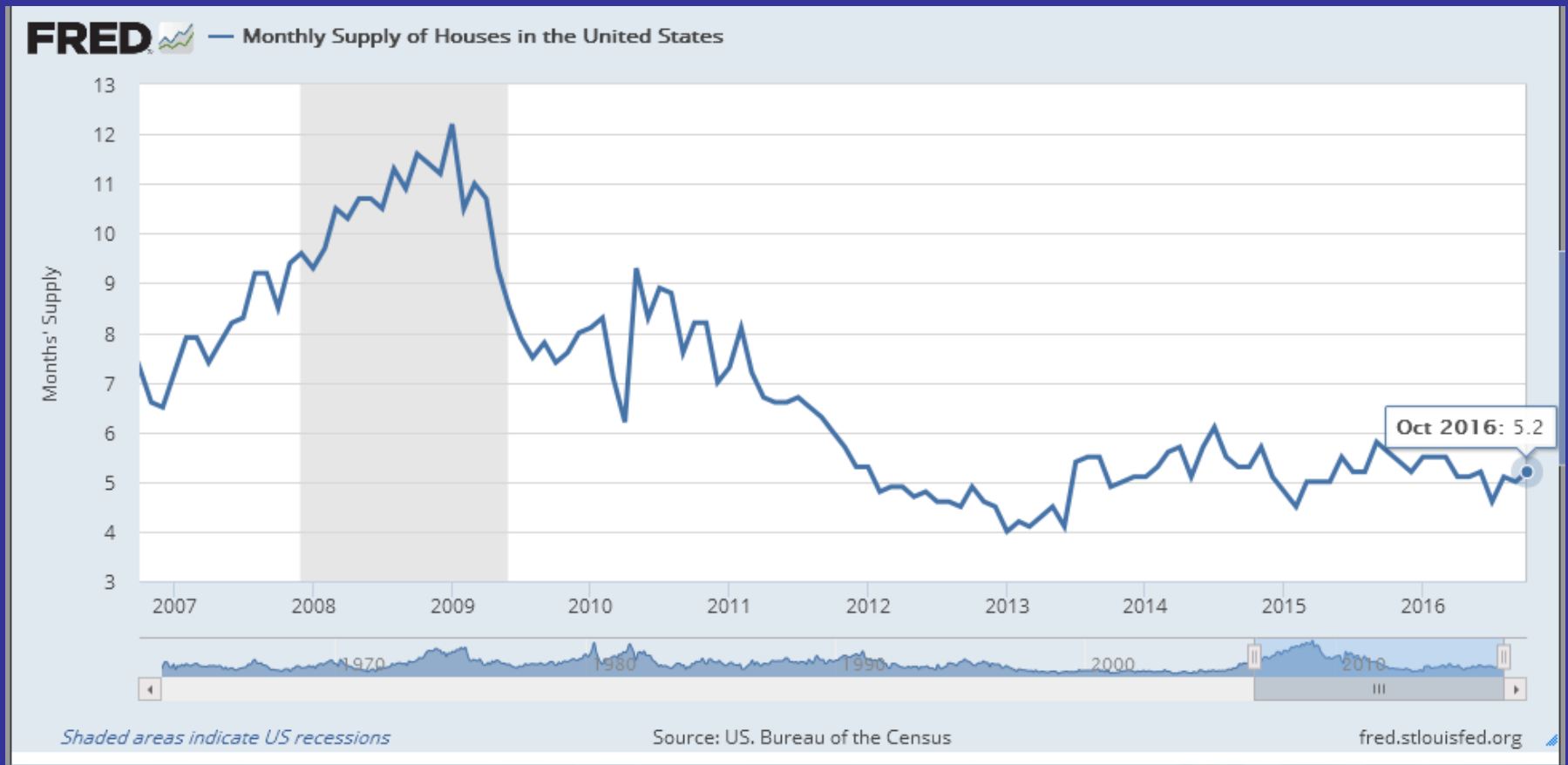
Source: Census

## Tight supply drives up prices – existing homes at 4.7 months supply – normal supply is 6 months



## Low new home inventory drives prices higher and out of reach to most 1<sup>st</sup> time buyers

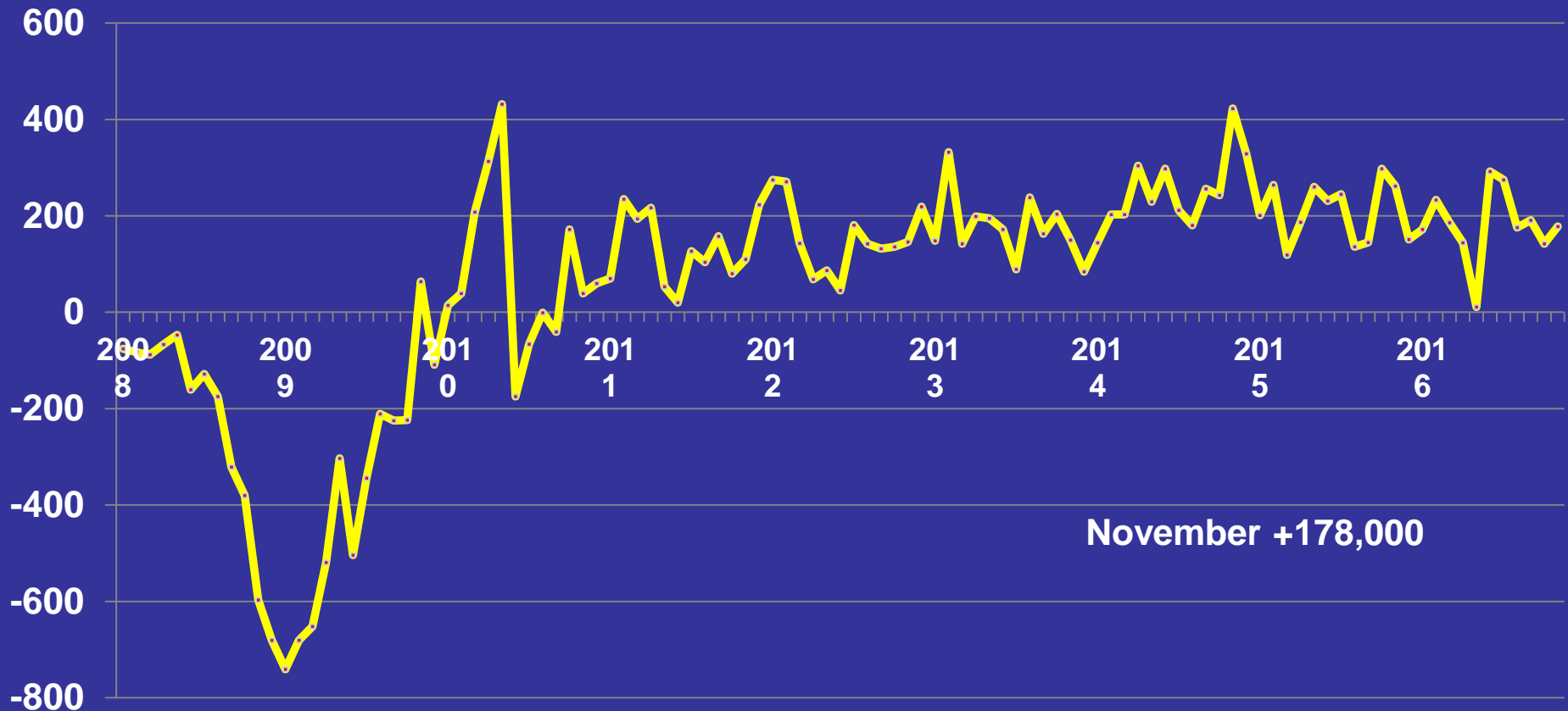
But, builders can't find enough carpenters, masons, electricians, etc. So construction costs keep escalating, which exacerbates the inventory problem – also, land shortages in parts of the country drive costs higher!



**More News on the labor front**

**Employment situation** - our biggest problem – and many of these jobs are part time with little or no benefits – not conducive to driving housing demand higher - need to encourage innovation and investment in future - that means less government

Net change in non farm payrolls – monthly, thousands

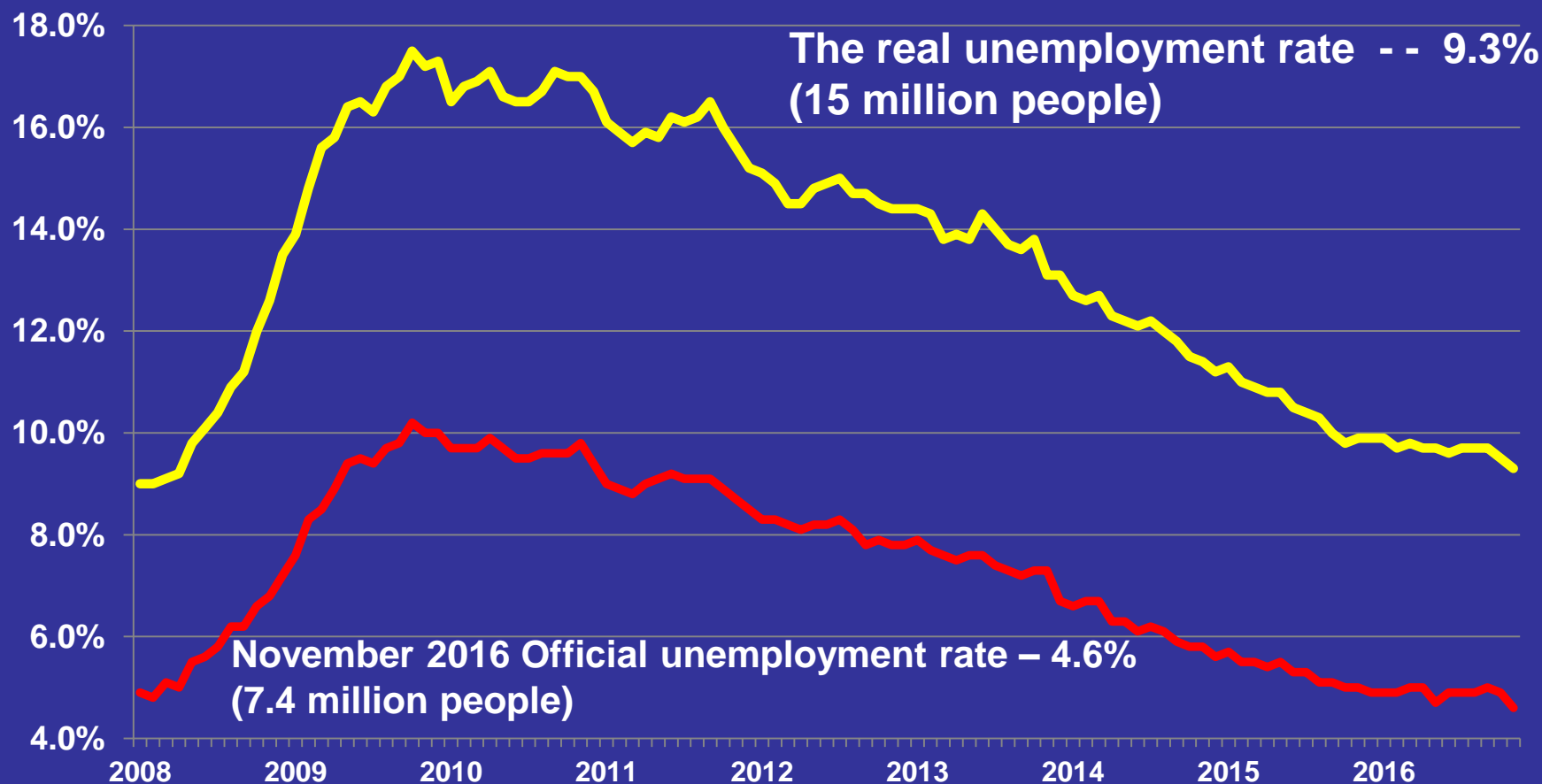


Source: U.S. BLS ([www.bls.gov](http://www.bls.gov))



## Unemployment rate keeps coming down – but, nearly 7 million remain “underemployed” – working part time, but want full time jobs

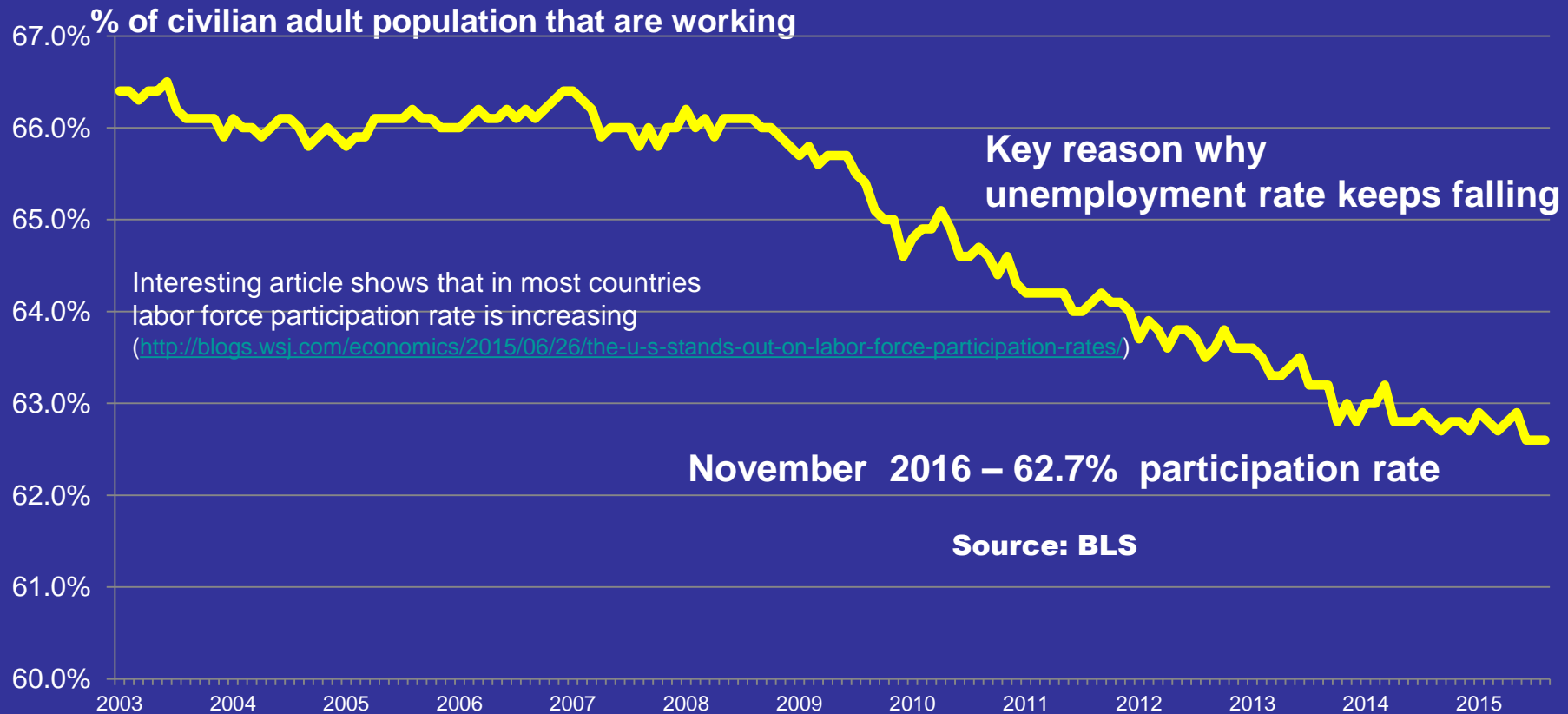
\*\*There are about 15 million people either unemployed, underemployed, or stopped looking – **Key reason why wage increases are stagnant!**



Source - - BLS: <http://www.bls.gov/news.release/pdf/empsit.pdf>; <http://data.bls.gov/cgi-bin/surveymost?ln>

**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#>)



## **Some conclusions – housing continues to improve albeit very slowly and this will not change soon for the reasons listed below:**

- (1) Economy is improving (slowly) -- **2016 growth expected to be about 2.0%**
- (2) Housing market still not healthy - 1<sup>st</sup> time buyers (33% today) are below trend (45%) - household formations are improving, but more people will continue to rent
- (3) Productivity a major problem for U.S. economy – real GDP driven by population (number of workers) and real GDP/worker or productivity. During past 7 years, productivity has grown 1.7% annually whereas the average over previous 17 years was 2.4%.
- (4) “QE” not working – bulk of “printed money” hoarded by the banks to shore up capital positions – not being loaned out to the economy - GDP languishes - we need a new and more effective approach to our competitiveness problems!
- (5) The Fed increased rates in December, finally. Low rates are not the solution to our weak economy.  
Innovation, investment, tax reform, is the solution, but that will be challenging with \$20 trillion (and counting) Federal debt and 41% of the population on some form of welfare. Many business leaders have lost confidence in where the country is headed, so they are not investing.

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