

January 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/>

January 2017

Housing Scorecard

	M/M		Y/Y	
Housing Starts		2.6%		10.5%
Single-Family Starts		1.9%		6.2%
Building Permits		4.6%		8.2%
Housing Completions		5.6%		0.9%
New Single-Family House Sales		3.7%		5.5%
Existing House Sales ¹		3.3%		3.8%
Private Residential Construction Spending		0.5%		5.9%
Single-Family Construction Spending		1.1%		2.3%

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

Housing Data

	January	December	Jan. 2016
Total permits*	1,285,000	1,228,000	1,188,000
Single-family permits	808,000	830,000	727,000
Multi-family 2-4 unit permits	31,000	37,000	35,000
Multi-family ≥ 5 unit permits	446,000	361,000	426,000
Total starts	1,246,000	1,279,000	1,128,000
Single-family starts	823,000	808,000	775,000
Multi-family 2-4 unit starts**	2,000	14,000	18,000
Multi-family ≥ 5 unit starts	421,000	457,000	335,000
Total completions	1,047,000	1,109,000	1,056,000
Single-family completions	800,000	767,000	691,000
Multi-family 2-4 unit completions**	3,000	0,000	17,000
Multi-family ≥ 5 unit completions	244,000	334,000	348,000

* 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; 02/16/17

Housing Data

	January	December	Jan. 2016
New single-family sales	555,000	535,000	526,000
Median price	\$312,900	\$312,900	\$291,100
Existing sales ^a	5,690,000	5,510,000	5,480,00
Median price	\$228,900	\$233,300	\$213,700
Private Residential Construction	\$476.4 billion	\$474.0 billion	\$450.0 billion
SF construction	\$253.9 billion	\$251.1 billion	\$248.1 billion
MF construction	\$63.5 billion	\$62.2 billion	\$58.3 billion
Improvement construction ^b	\$159.0 billion	\$160.7 billion	\$143.6 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; 02/22/17

U.S. Department of Commerce-Construction: www.census.gov/construction/nrs/pdf/newressales.pdf; 02/24/17

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

Conclusions

Housing remains depressed, especially when adjusting for population growth (starts per 1000), single family construction remains at the recession levels of the 1980's; home ownership is lowest in 50 years; of the 805,000 households formed in the 4th quarter, 55% were renters. Many young people - 1st time buyers - just can't afford the down payment so they remain on the sidelines.

January's housing data is mixed – total starts are down by 2.6% (m/m), single family homes starts are up by 1.9% (m/m), permits up by 4.6% (m/m), completions up by 5.6% (m/m), and existing home sales were up by 3.3% 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

December 2016

EU Housing Scorecard

		M/M	Y/Y
Production in Construction ^A	EU 28	△ 0.6% ^s	△ 3.2% ^s
	EU 19	▽ 0.2% ^s	△ 1.6% ^s
	Germany	▽ 1.7%	△ 0.4%
	France	▽ 0.9%	△ 4.4%
	UK	△ 2.2% ^p	▽ 0.3% ^p
	Spain	△ 1.8% ^{ps}	△ 5.4% ^p
Building permits (m ² floor) ^A	EU 28	.-	.-
	EU 19	△ 8.5% ⁽¹¹⁾	△ 3.9% ^{s(11)}
	Germany	△ 2.2% ⁽¹¹⁾	△ 16.2% ⁽¹¹⁾
	France	△ 0.0% ^s	△ 13.2% ^e
	UK	.-	.-
	Spain	△ 15.0% ^{s(11)}	△ 183.8% ^{e(11)}

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>;
03/08/17)

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

^e estimate ^s Eurostat estimate ^p provisional ^{.-} no data available ⁽¹¹⁾ November data

Housing comments – January 2017

- *January starts were up 2.6% to 1.246 (SAAR) - SF at 823,000 (SAAR) – up 1.9% - MF was down 8% – MF is typically quite volatile. YOY, total starts are up 10.5% while SF up 6.2%. Making progress!*
- ***Adjusting for population growth, (starts per 1000 households), SF construction remains near recession levels of early 1980's.***
- *Home ownership rate remains at 63.5% in QTR4 2016 – **lowest ownership rate in 50 years!** Financing problems; changing preferences (to renting); and rising home prices - problem for 1st time buyers. 805,000 new household formed in 4th QTR compared with 2015, but 54% were renters – too many problems for young people to own!*
- *Resale market up 3.3% - 5,690,000 (annual rate) – low inventory (3.6 months) driving prices higher – up 7% YOY*
- *New home sales were up 3.7% to 555,000 SAAR, up 5.5% annual basis*
- ***Job creation got a good bounce in January - +227,000 - unemployment up a tick to 4.8%.***
- *GDP growth was 1.9% in the 4th Qtr – same for all of 2016. This is the slowest expansion since WWII, and until we improve productivity, sustainable growth will remain 2% at best.*
Need to address problems re: over regulation; taxes; infrastructure; education(K-12); investment; debt,, then we could grow substantially faster.

Here is my suggestion on how to fix the economy – a “no brainer” .

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

We have an aging work force and our fertility rate has been falling for decades. That means 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 great 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.

Why we need immigrants – aging population, declining birth rate, and weak productivity means weak economic growth.

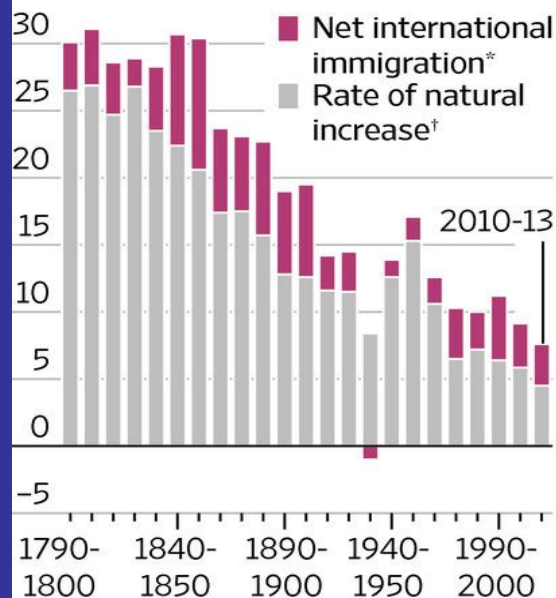
Why? Growth = (work force) (productivity).

Without a smart immigration policy, we risk following Japan's experience.

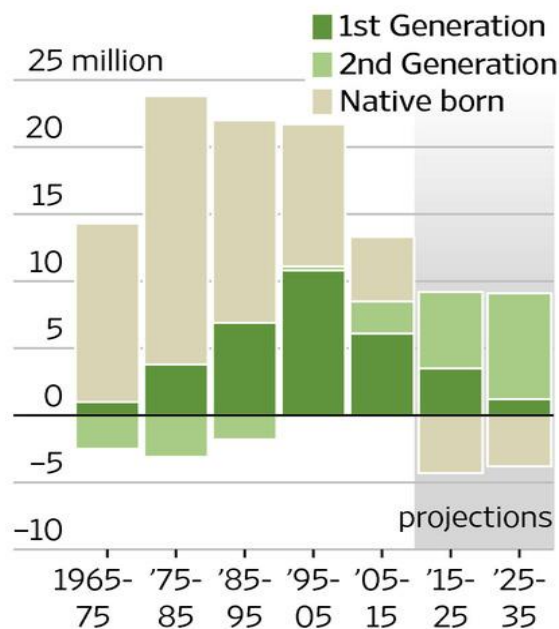
An Antidote to Aging

With the U.S. birth rate declining, curtailing immigration will slash future population growth and make entitlements more burdensome.

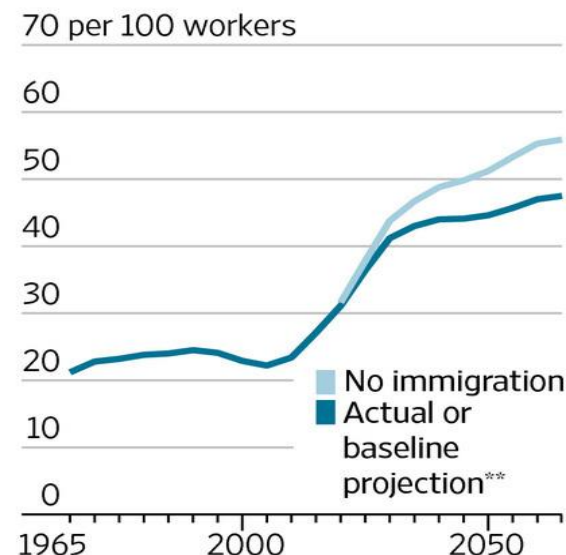
Components of population increase per 1,000 residents, by decade



Contributions to working age population*



Number of elderly-65 and over



*Legal plus illegal immigration minus emigration †Births minus deaths

**Projections assume annual migration rising from 1.2 million per year now to 1.5 million by 2035.

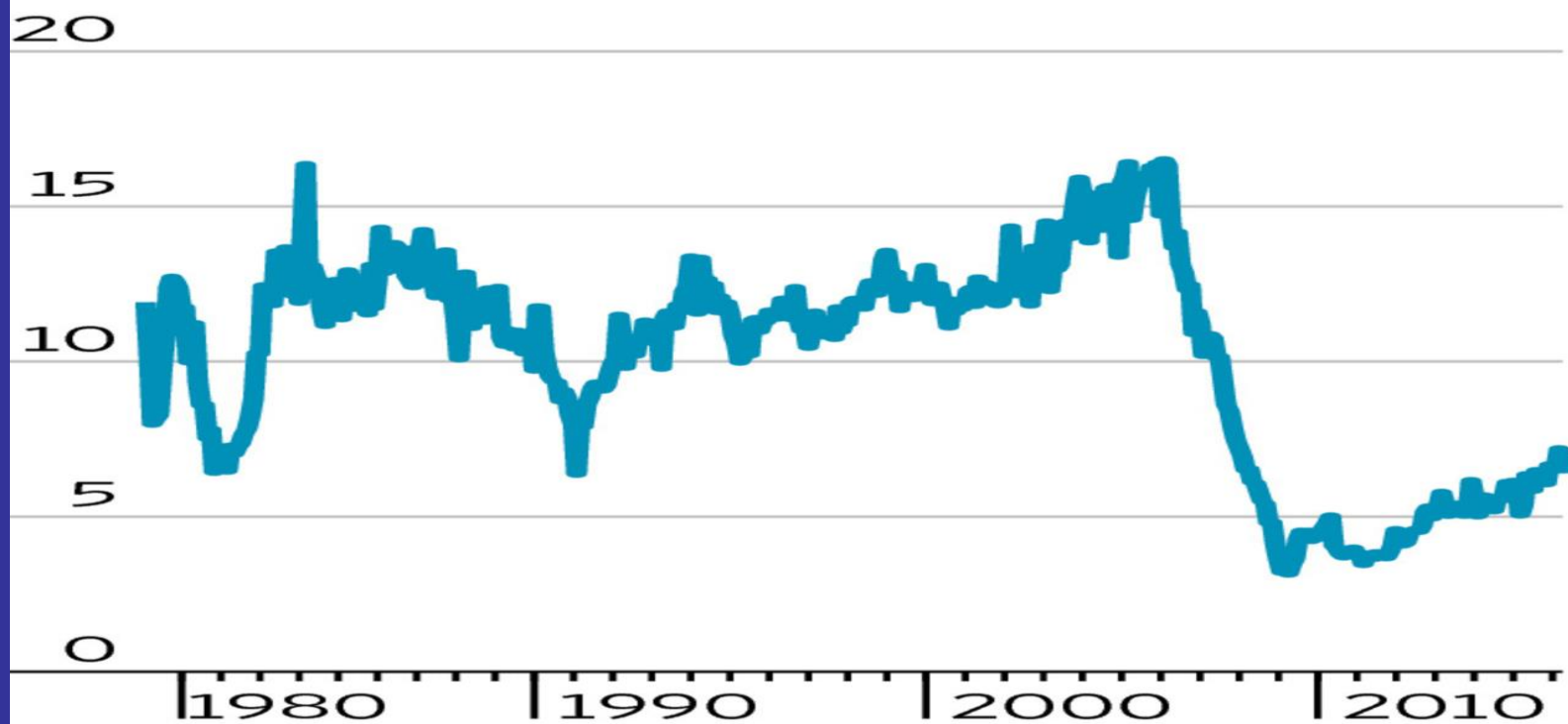
Sources: National Academies of Sciences, Engineering and Medicine; Pew Research Center

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“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 force many to renting.

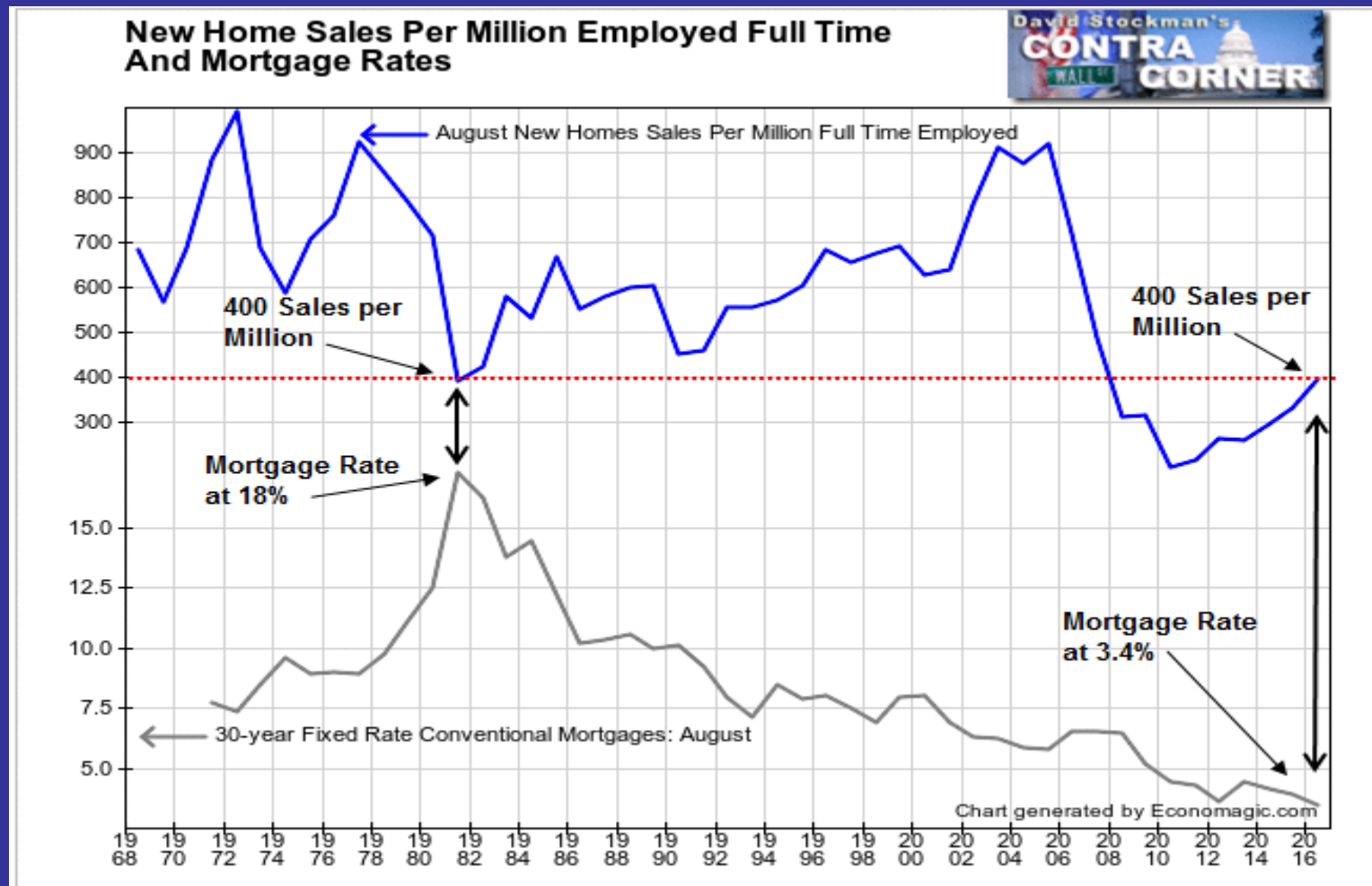
Rebuilding, Slowly

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



Source: U.S. Census; Fannie Mae
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Same story showing new home sales versus population – despite the 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%. Tells me that low mortgage rates are not the answer – people need good jobs and a belief in their future – today, both are in jeopardy!



OK – more on the economy --- from Michael Porter

**How to Fix the U.S. Economy? Start With the Broken political System – new report from M. Porter, et. al.
(we started this past November)**

Political dysfunction has become the biggest economic stumbling block for the U.S., according to a Harvard report.

Here is the hyperlink to the Porter study

(<http://www.hbs.edu/competitiveness/Documents/problems-unsolved-and-a-nation-divided.pdf>) ■

Interesting report from experts on competitiveness. Slow reading, but lots of good analysis, charts, and recommendations from some of America's leading thinkers on competitiveness.

Here are suggestions from the Porter study on how to fix America's economy – **however, to accomplish this, we need a functioning government.**

Hopefully, the new administration will begin the process of fixing the problems!

FIGURE 1: THE EIGHT-POINT PLAN FOR WASHINGTON

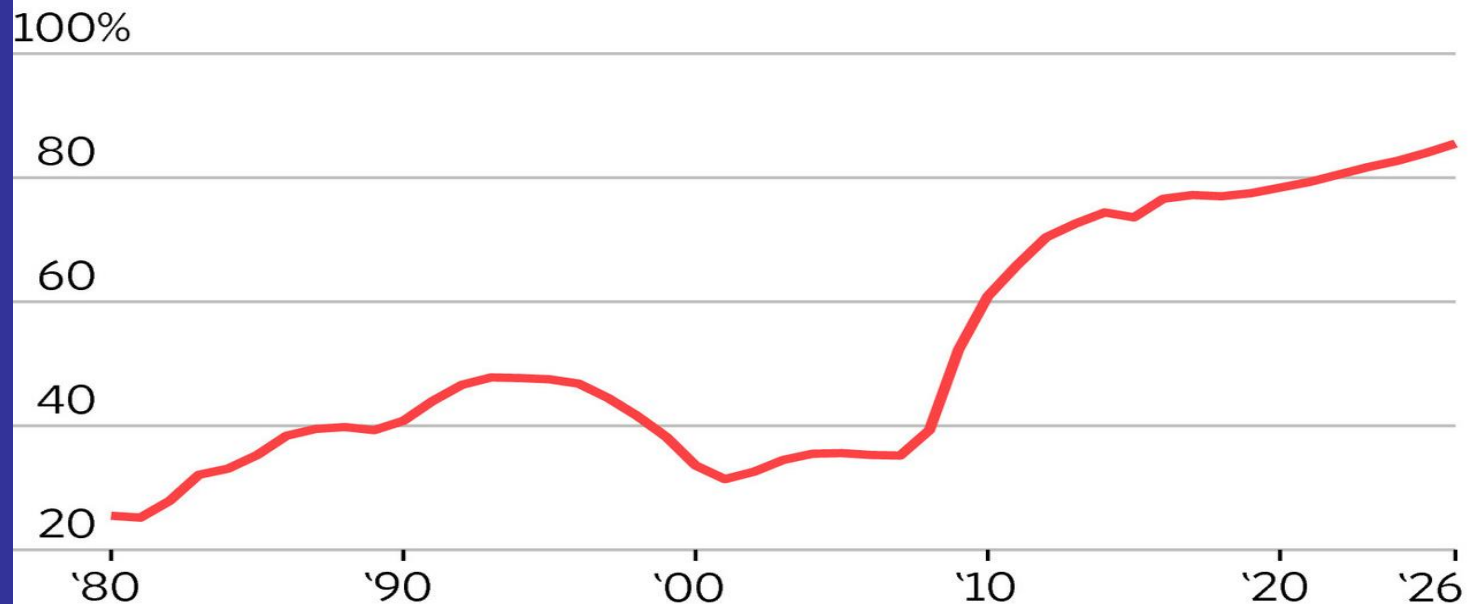
1	Simplify the corporate tax code with lower statutory rates and no loopholes
2	Move to a territorial tax system like all other leading nations
3	Ease the immigration of highly skilled individuals
4	Aggressively address distortions and abuses in the international trading system
5	Improve logistics, communications, and energy infrastructure
6	Simplify and streamline regulation
7	Create a sustainable federal budget , including reform of entitlements
8	Responsibly develop America's unconventional energy advantage

Source: Michael Porter and Jan Rivkin. "An eight-point plan to restore American competitiveness." The Economist: The World in 2013. (Nov 2012).

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

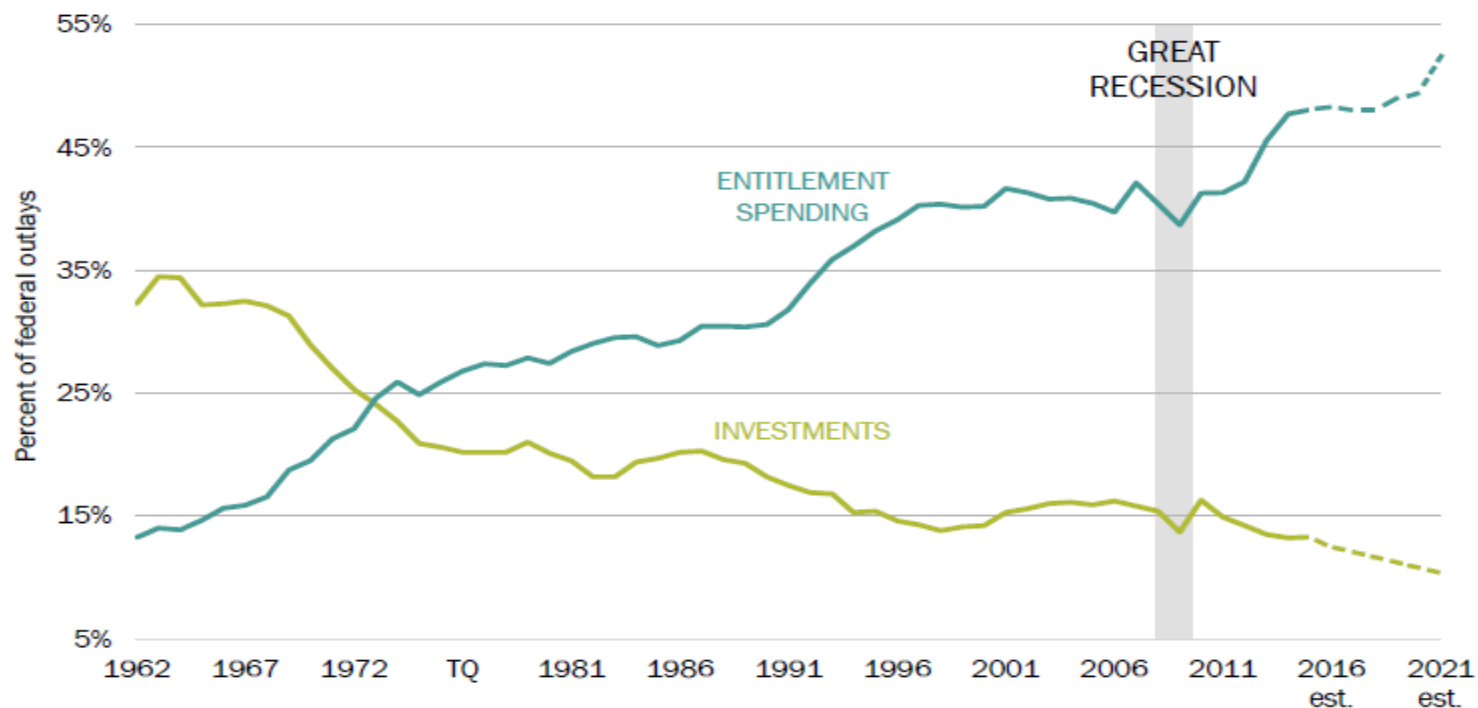
Federal debt held by the public as a share of the economy, 1980-2026 (2016-2026 estimated)



Source: Congressional Budget Office

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).

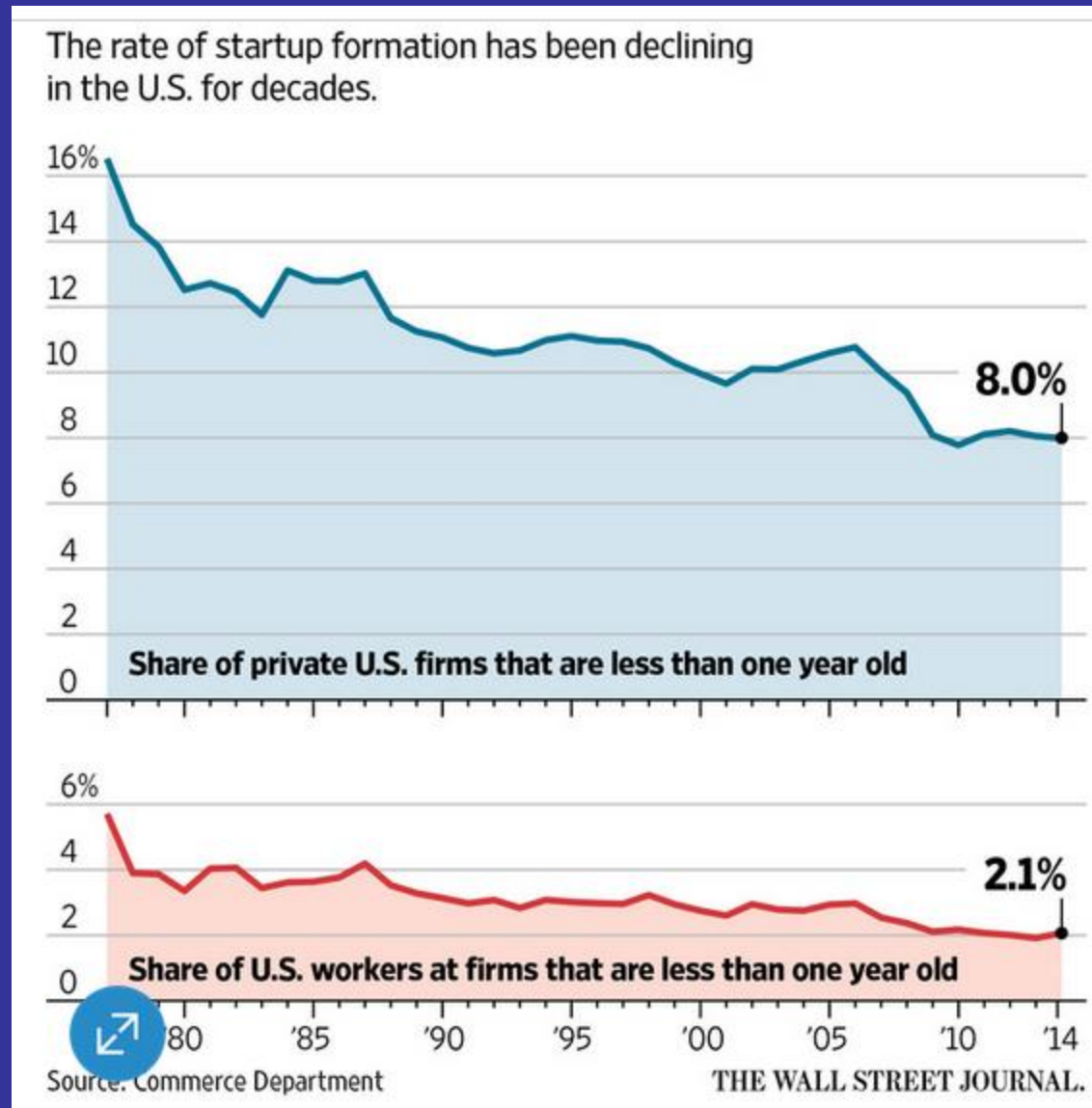
FIGURE 9: SHIFTING COMPOSITION OF FEDERAL SPENDING



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.

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.

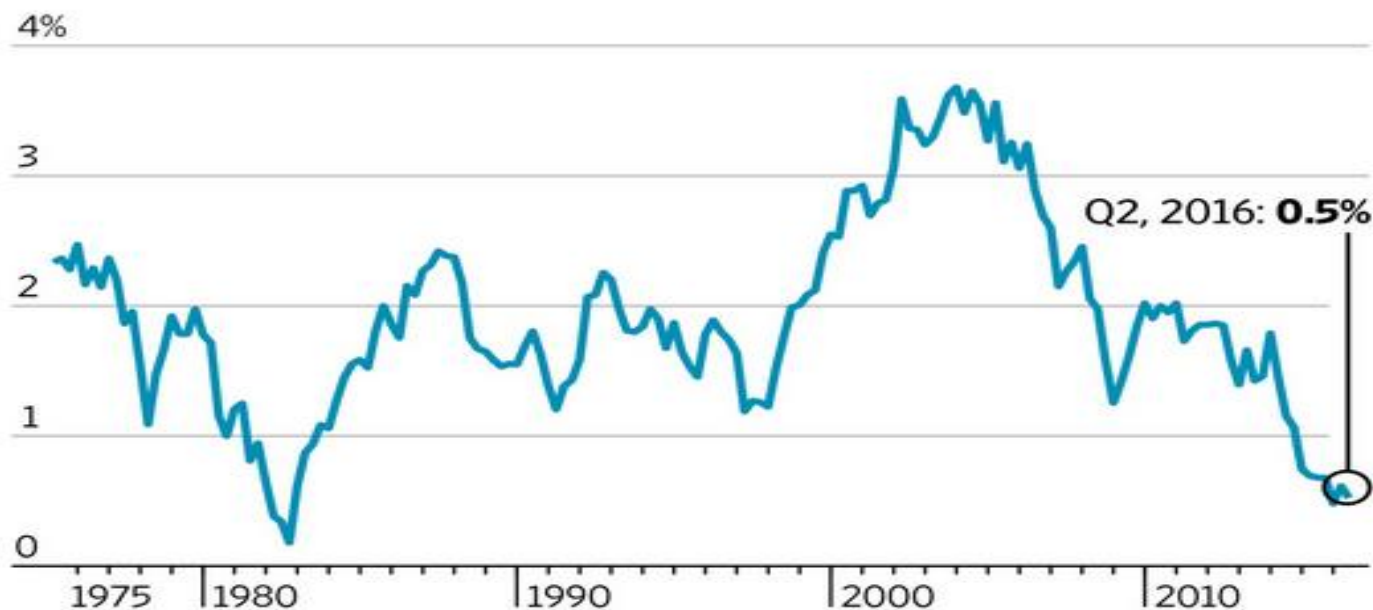
(PS - I understand that productivity measurement is a problem as new products/services quality is difficult to measure so maybe we are underestimating real productivity?)

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

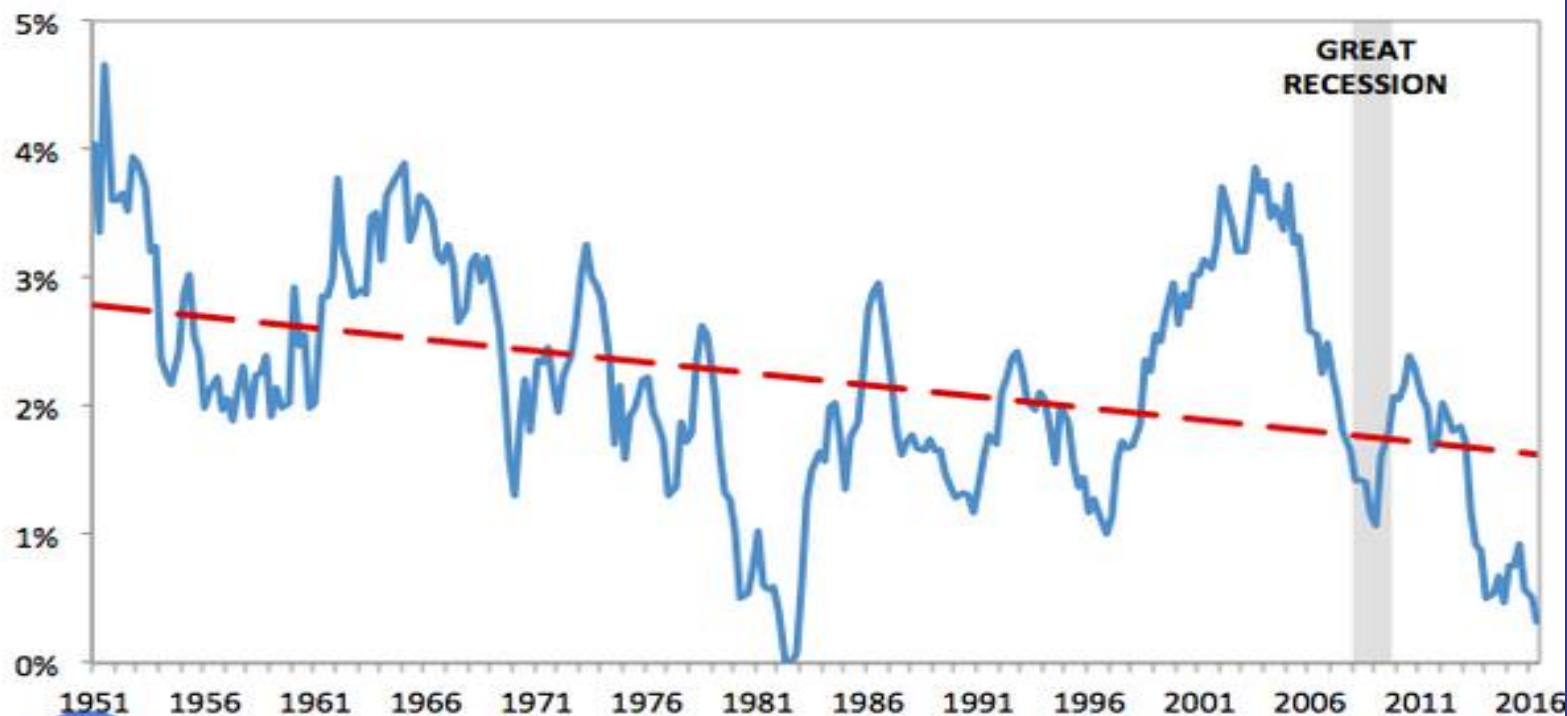
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Source: WSJ (<http://www.wsj.com/articles/u-s-productivity-dropped-at-0-5-pace-in-the-second-quarter-1470746092>)

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 M. 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



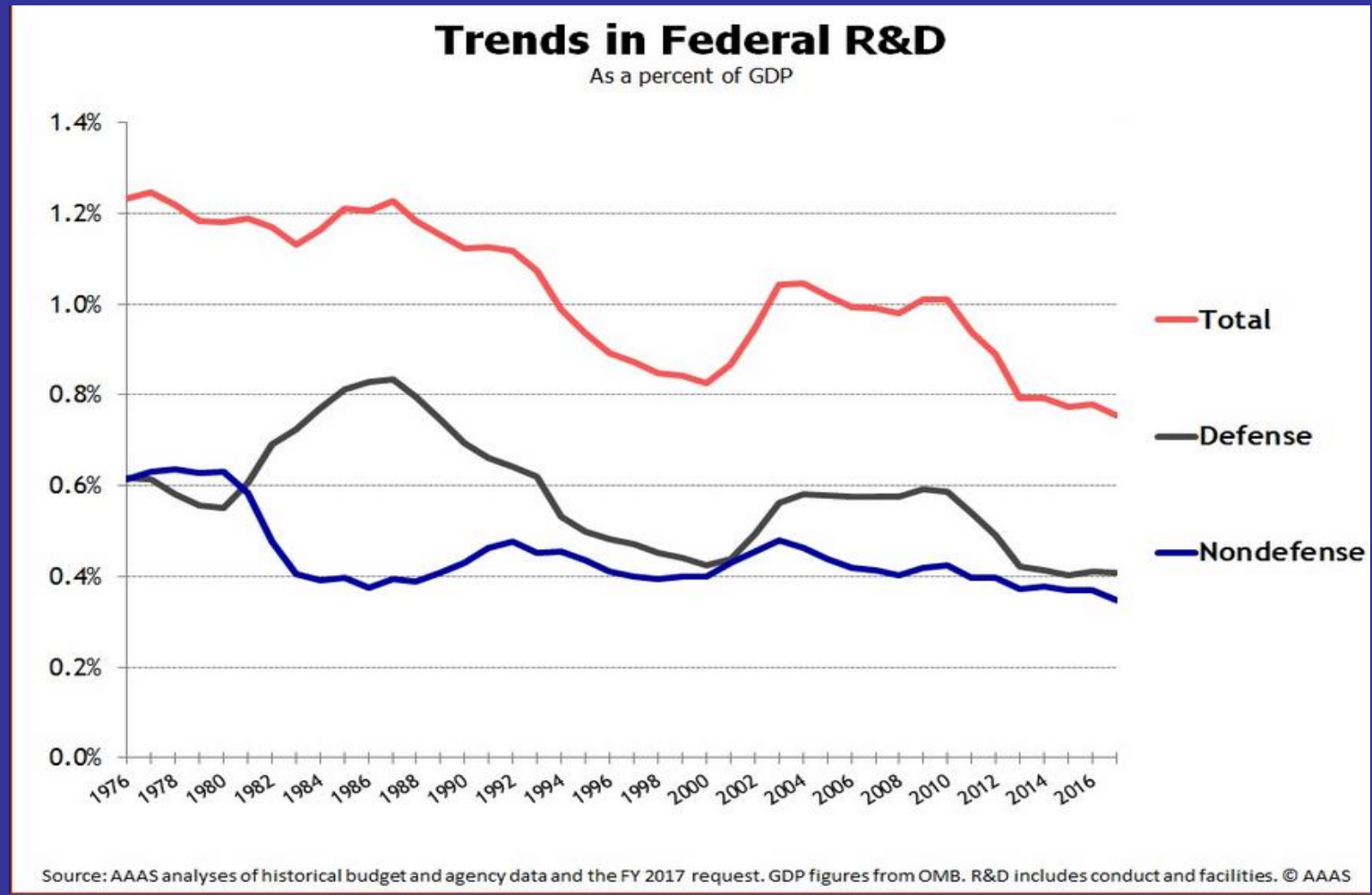
Note: Shaded area indicates the recession of December 2007 to June 2009 as defined by the National Bureau of Economic Research.
Sources: Bureau of Labor Statistics; author's calculations.

Source: Harvard Business School US Competitiveness Project

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

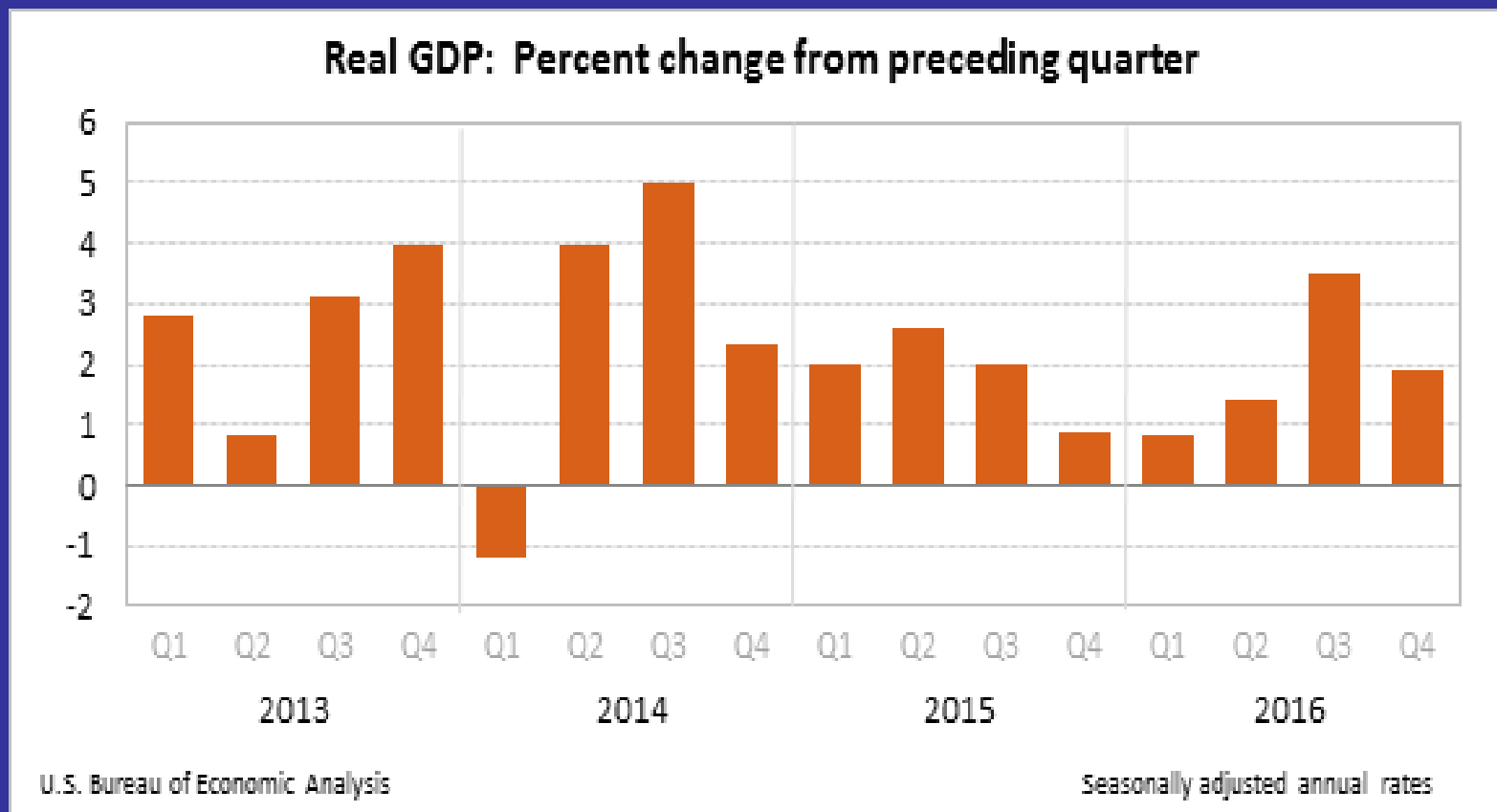
Falling basic R&D - - funding basic science is declining – big problem that needs fixing

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)

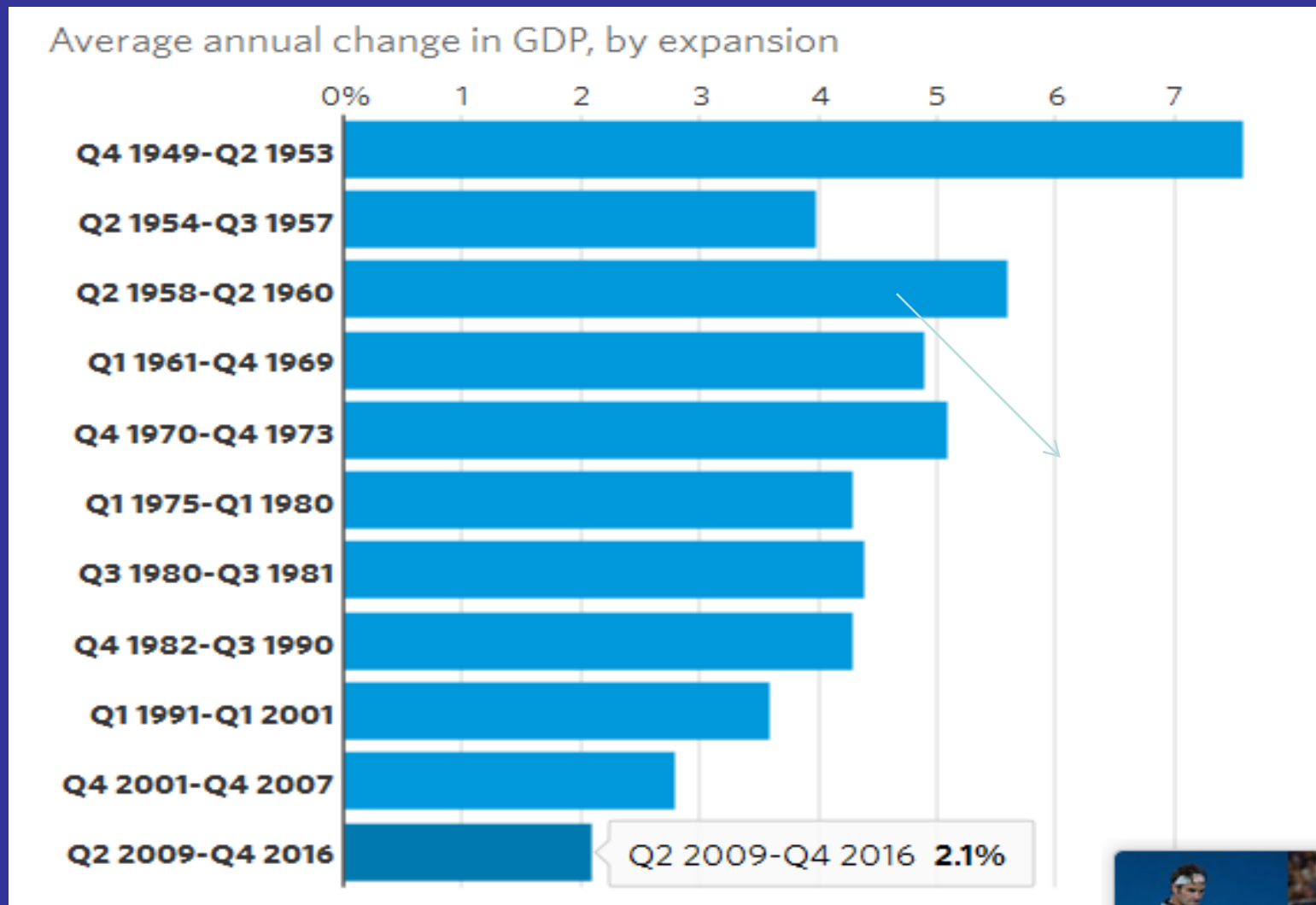


U.S. 4th Qtr 2016 Economic growth 1.9% - same rate for entire 2016 **The slowest expansion since WWII.**

- (1) Slowing world economy (weaker China , European, and South American growth)**
- (2) Stronger dollar will reduce exports and increase imports – negative impact on manufacturing jobs which is key to income growth in USA**
- (3) Political stalemate/weak leadership, terrorism, currency wars, growing national debt, ...**
- (4) Weak income growth and continuing high “real unemployment”**



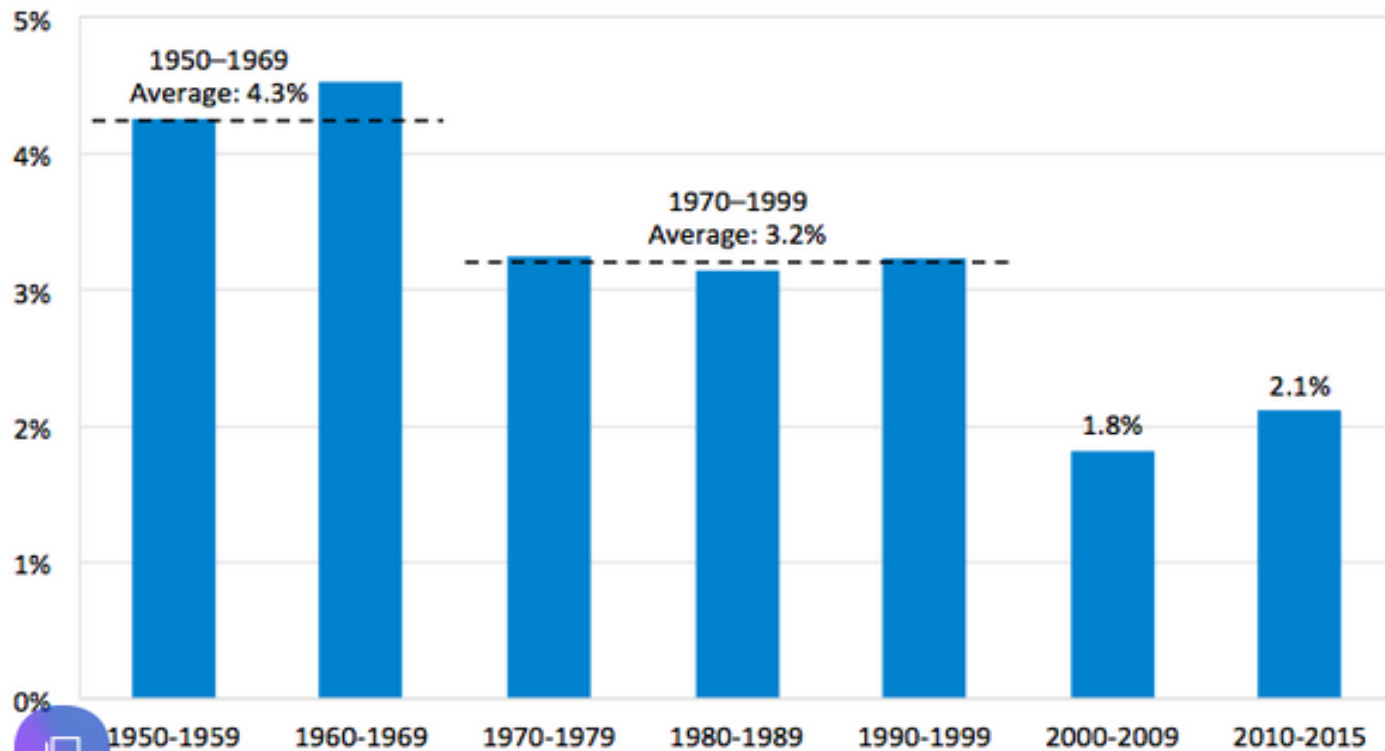
Slowest expansion since WW11 – productivity is major problem



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



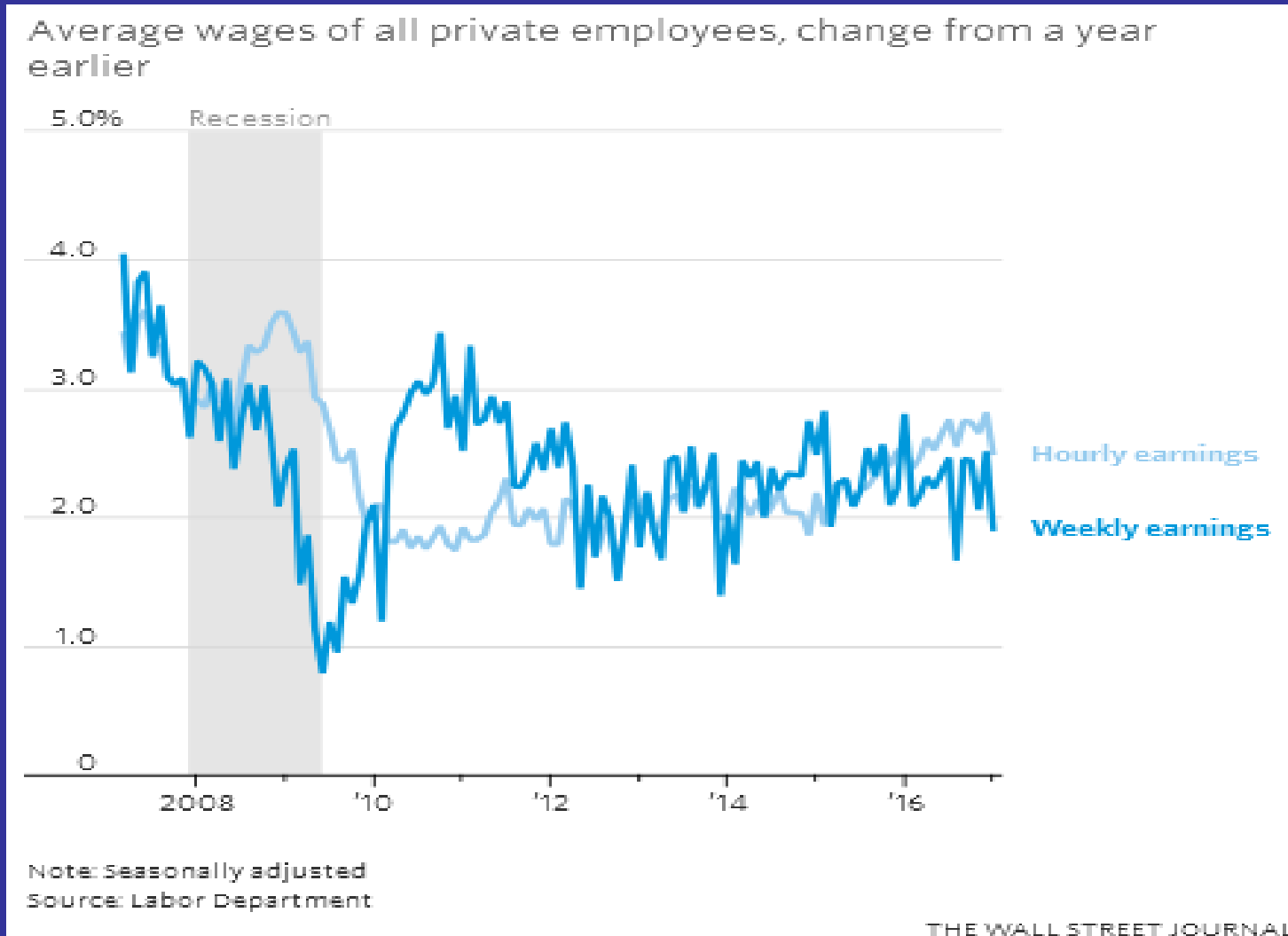
Source: Bureau of Economic Analysis; author's calculations.

Source: Harvard Business School US Competitiveness Project

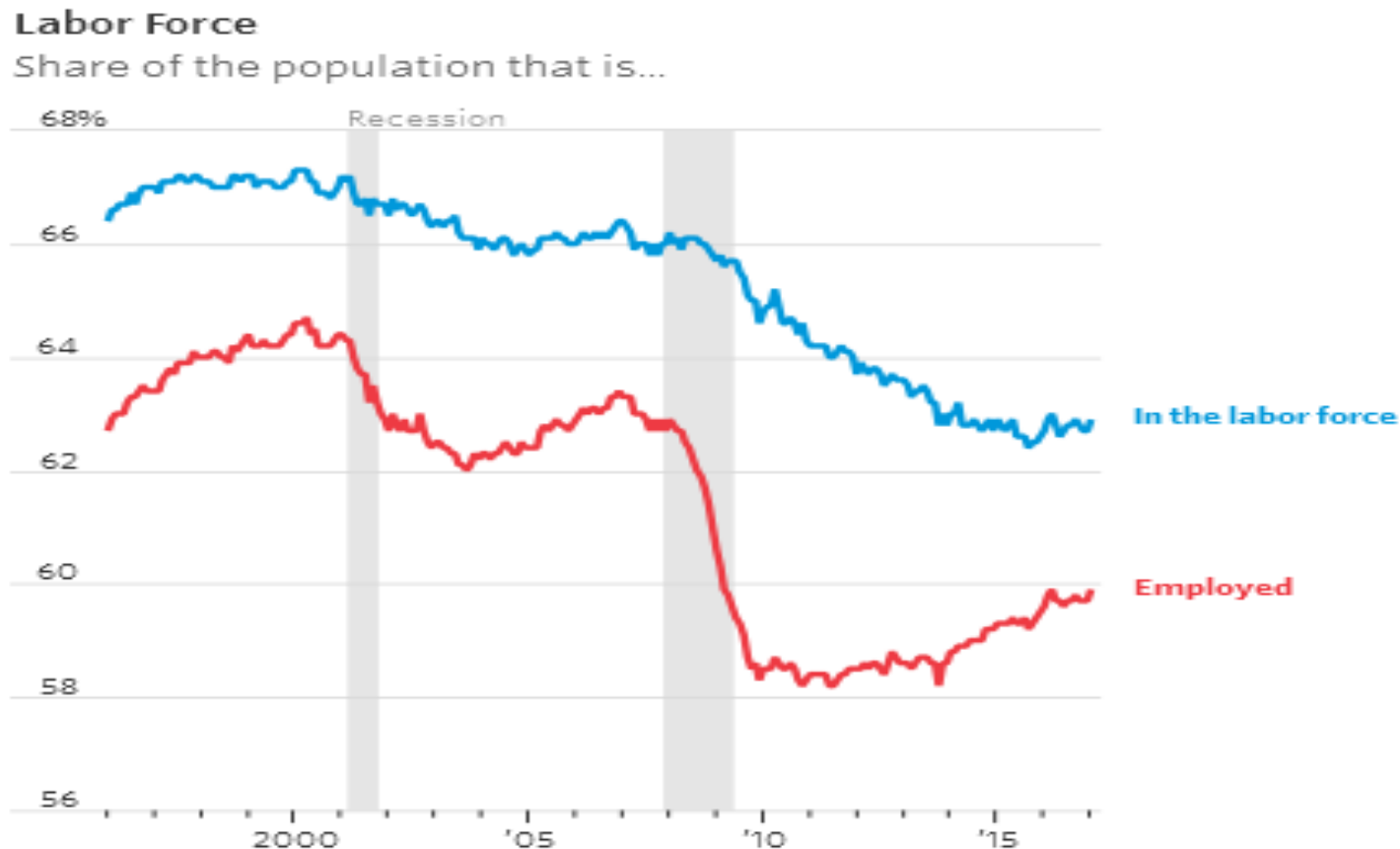
(<http://finance.yahoo.com/news/us-competitiveness-project-harvard-business-school-hbs-michael-porter-030021739.html>)

Labor Market Data

Wage increases remain muted despite tightening labor market



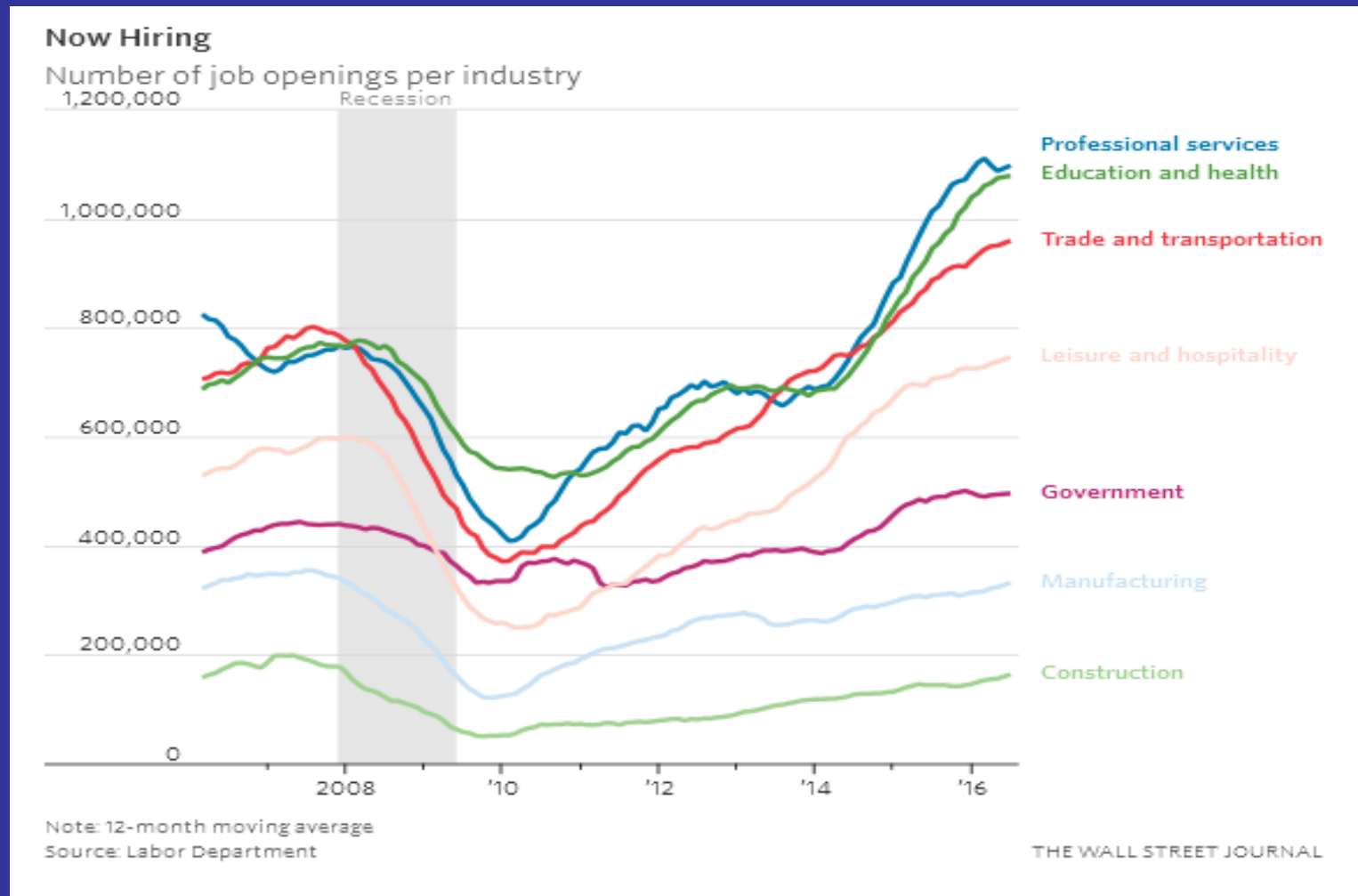
Not a good trend for the economy – employment population ratio keeps decreasing – my opinion – too much welfare, plus many people don't have the required job skills (half the population on some form of welfare – food stamps, Medicaid, long term disability, housing allowances, etc.) – yes, aging work force and retiring baby boomers is another reason the participation rate is dropping



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!

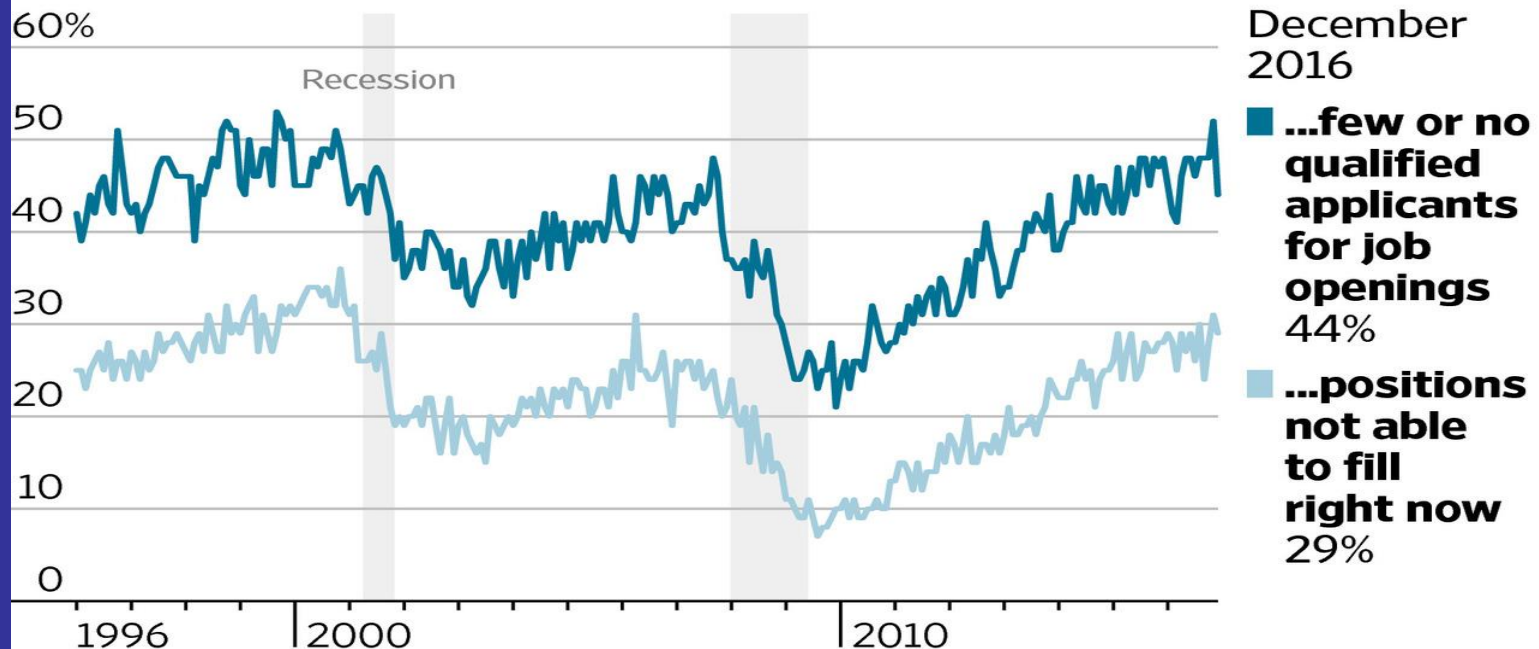


Lack of skills is a problem we need to fix – one solution is a better focused immigration policy – e.g., Canada's focus is immigrants with skills, education, and less emphasis on refugees despite the latest pontificating by Trudeau. Allowing refugees is important and the humanitarian thing to do – however, we need a better mix.

Now Hiring

As the labor market tightens, small businesses are having a harder time finding qualified workers.

Percentage of firms with...



Note: Figures are seasonally adjusted

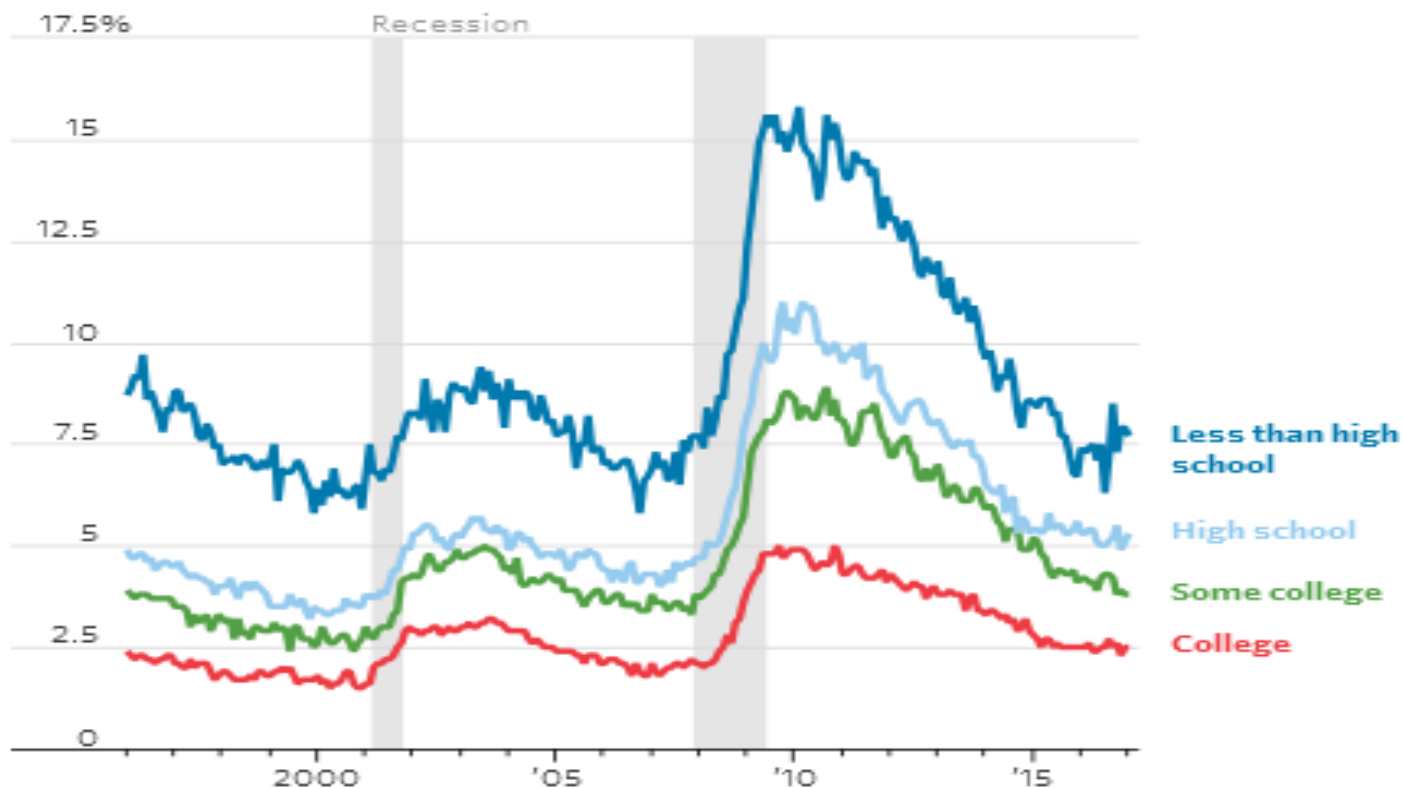
Source: National Federation of Independent Business

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Education will help keep you out of the unemployment line

School Work

Unemployment rate by educational attainment, age 25 and over



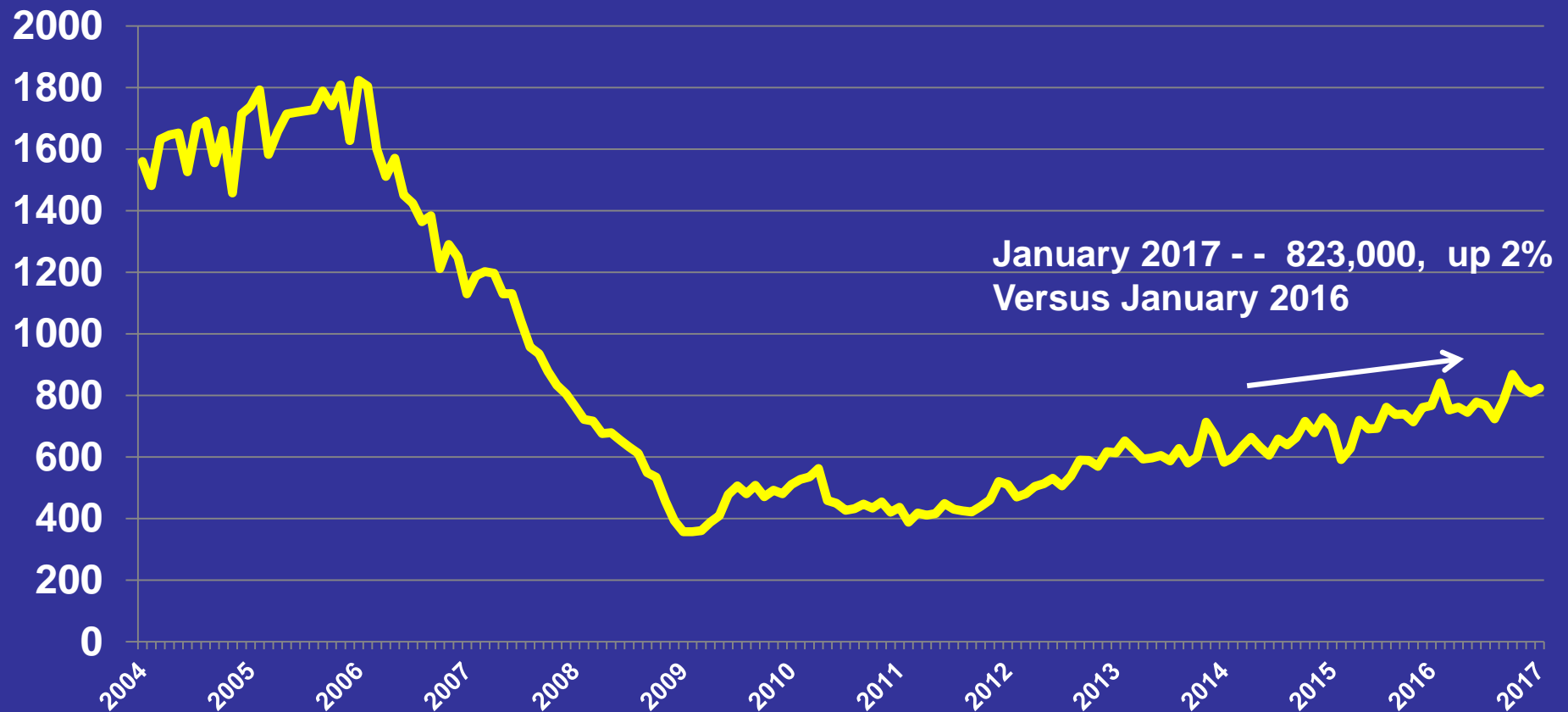
Note: Seasonally adjusted
Source: Labor Department

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Housing comments

Starts are inching forward – but, low interest rates can't fix housing!
Basically, there is a two tiered market – healthy upper end
versus weak entry level housing - - not sustainable.

Single family starts, Thousand units, SAAR



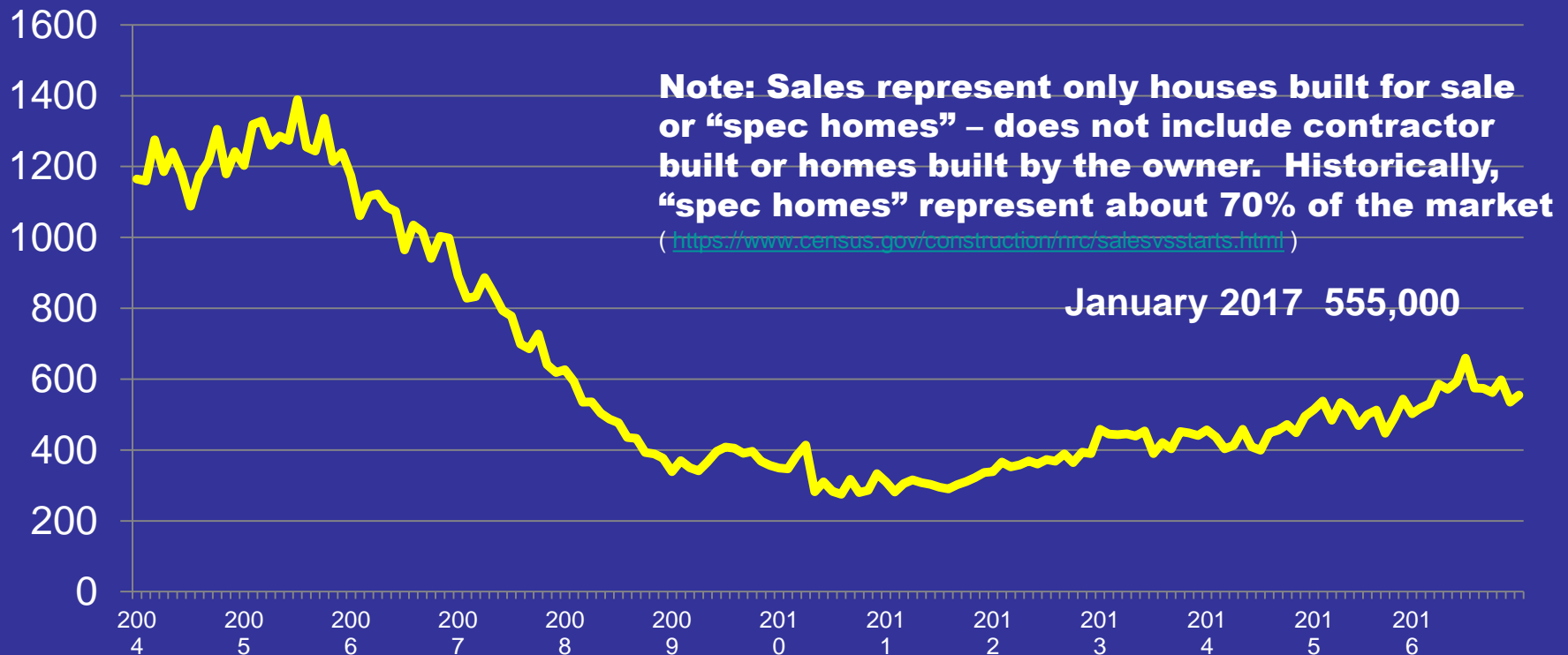
January 2017 - - 823,000, up 2%
Versus January 2016

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!

**up 5.5% year over year!
We're making progress, but still
a relatively weak market**

Thousands, SAAR



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

Resale market continues to improve - however, tight supply (which drives prices), currently at 3.6 months, remains a problem. Total inventory is 1.65 million, lowest on record. Healthy market is about 6months supply. **Median prices are up 4%, annual basis - 57th consecutive monthly increase.** **Here is good report from NAR on 2016 totals** (<https://www.nar.realtor/news-releases/2017/01/existing-home-sales-slide-in-december-2016-sales-best-since-2006>)
1st time buyers, at 35%, remain below trend of 40%.

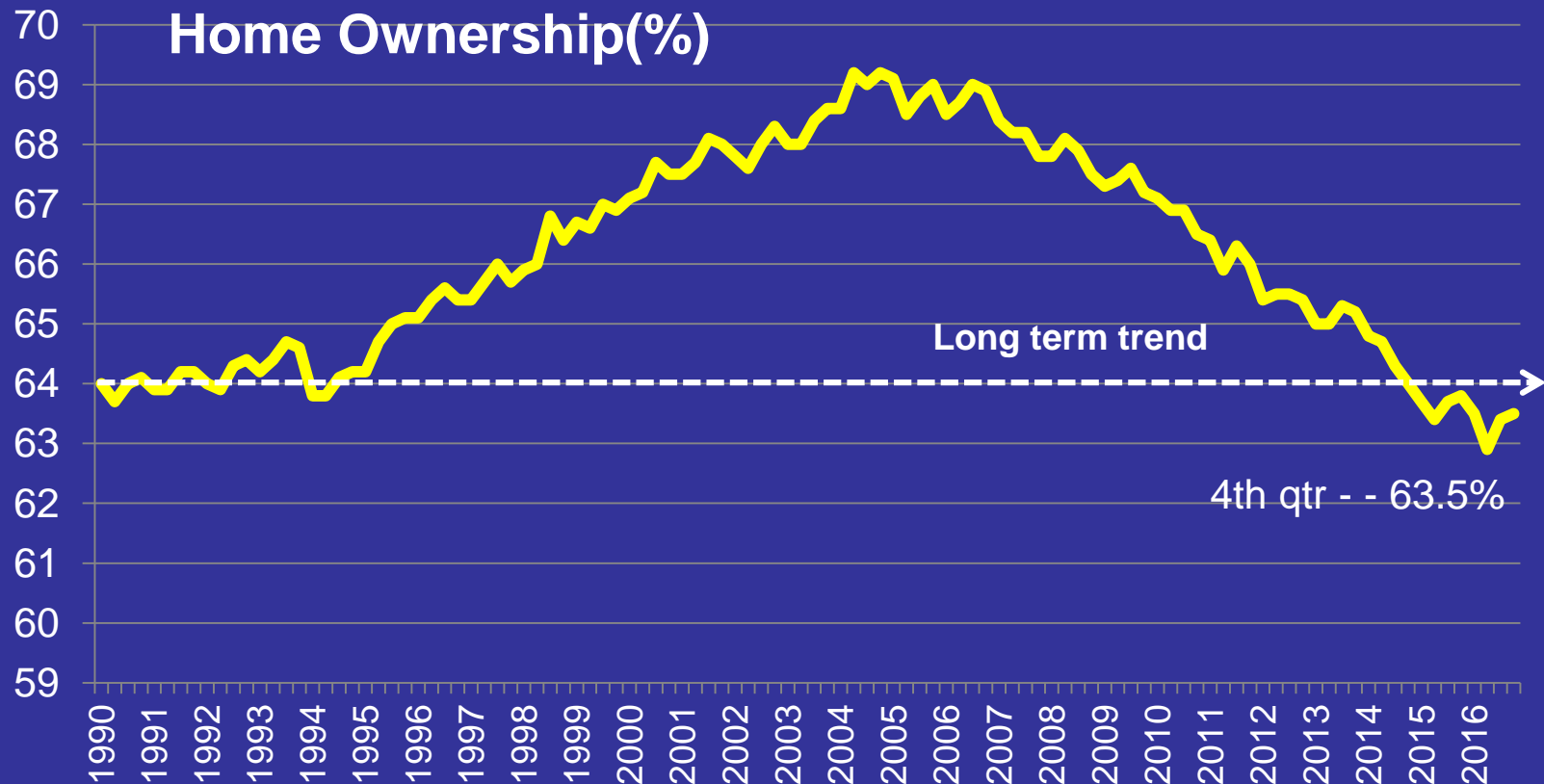
Single family (incl condos), Monthly, Thousand units, SAAR



Household formations and shift to renting - - Falling homeownership rate for millennial's - use to be 43% - now it is 33% - young people are renting

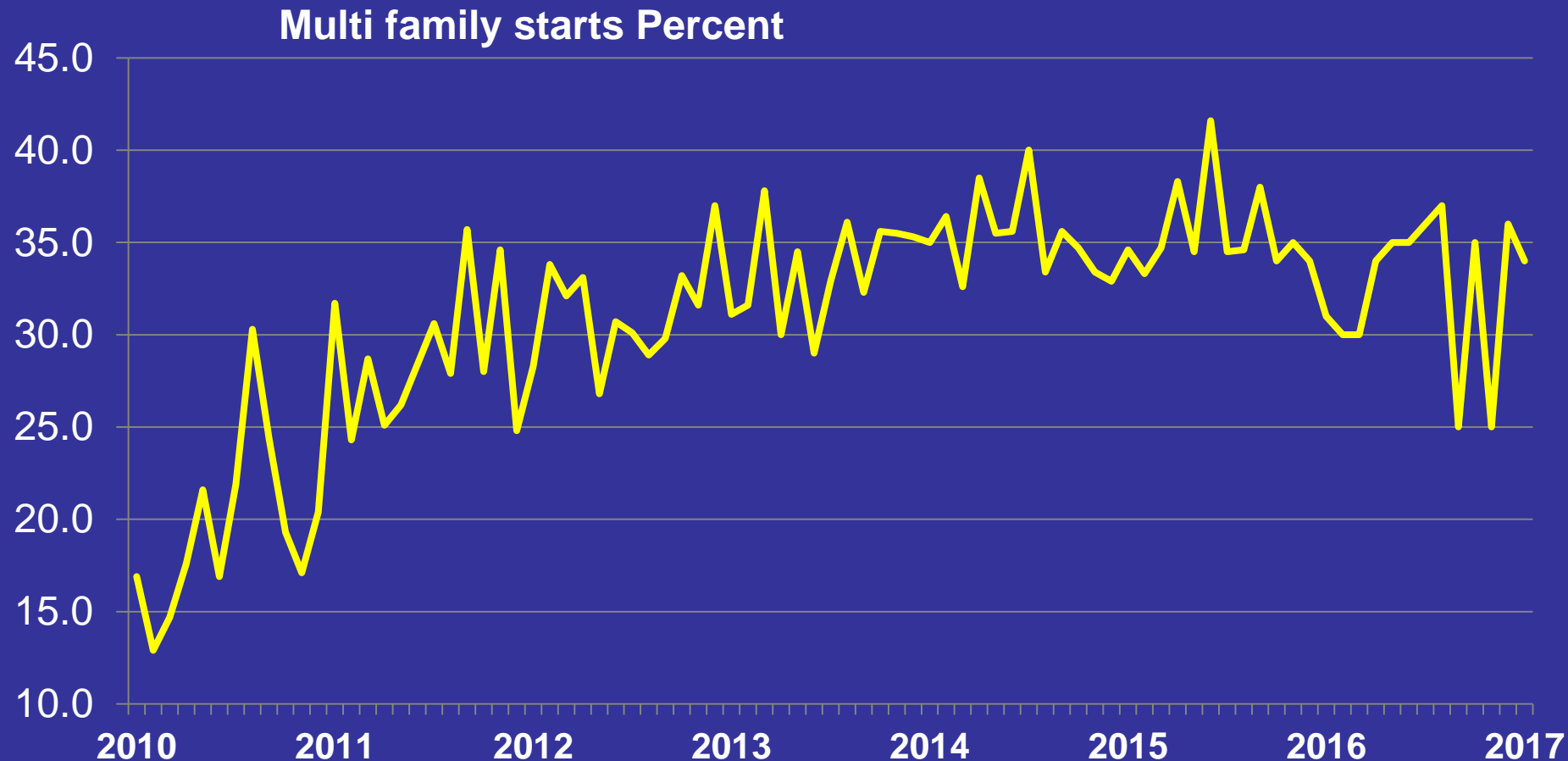
Recent study shows that people with college degree takes 5 years to save enough for down payment for starter home (with student debt – 10 years), no college – 16 years (<http://www.wsj.com/articles/homeownership-elusive-for-young-adults-without-college-degrees-1463909402>)

Homeownership lowest in 50 years



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

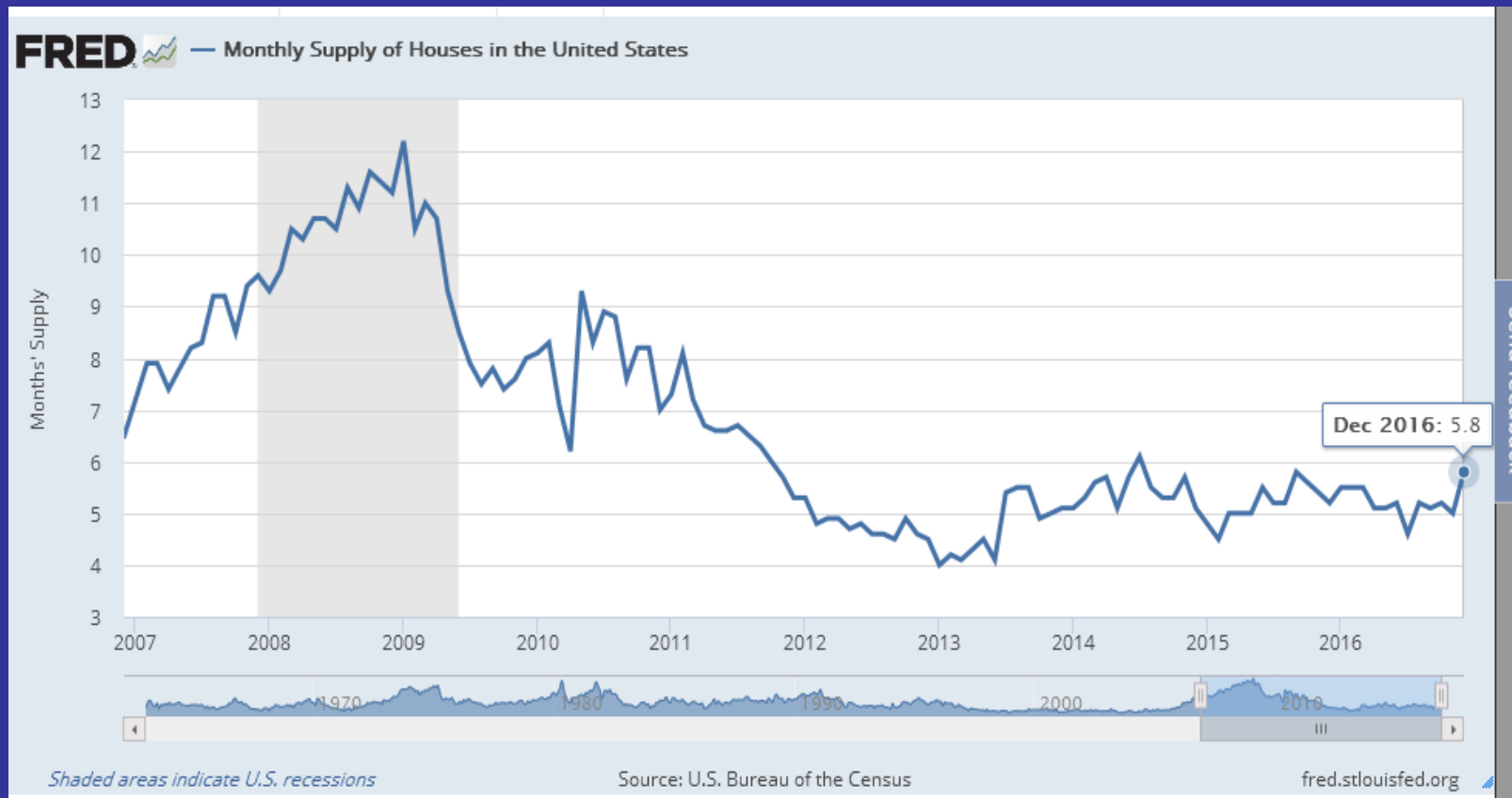
Multi family share of housing starts – upward trend expected to continue for some time. Also, since the housing crash in 2008, **single family rentals have now reached 15% of overall housing stock, up from 9% in 2005** (<http://blogs.wsj.com/economics/2015/07/20/signs-of-overheating-in-the-single-family-rental-market/>)



Source: Census

Low new home inventory drives prices higher And out of reach to most 1st time buyers

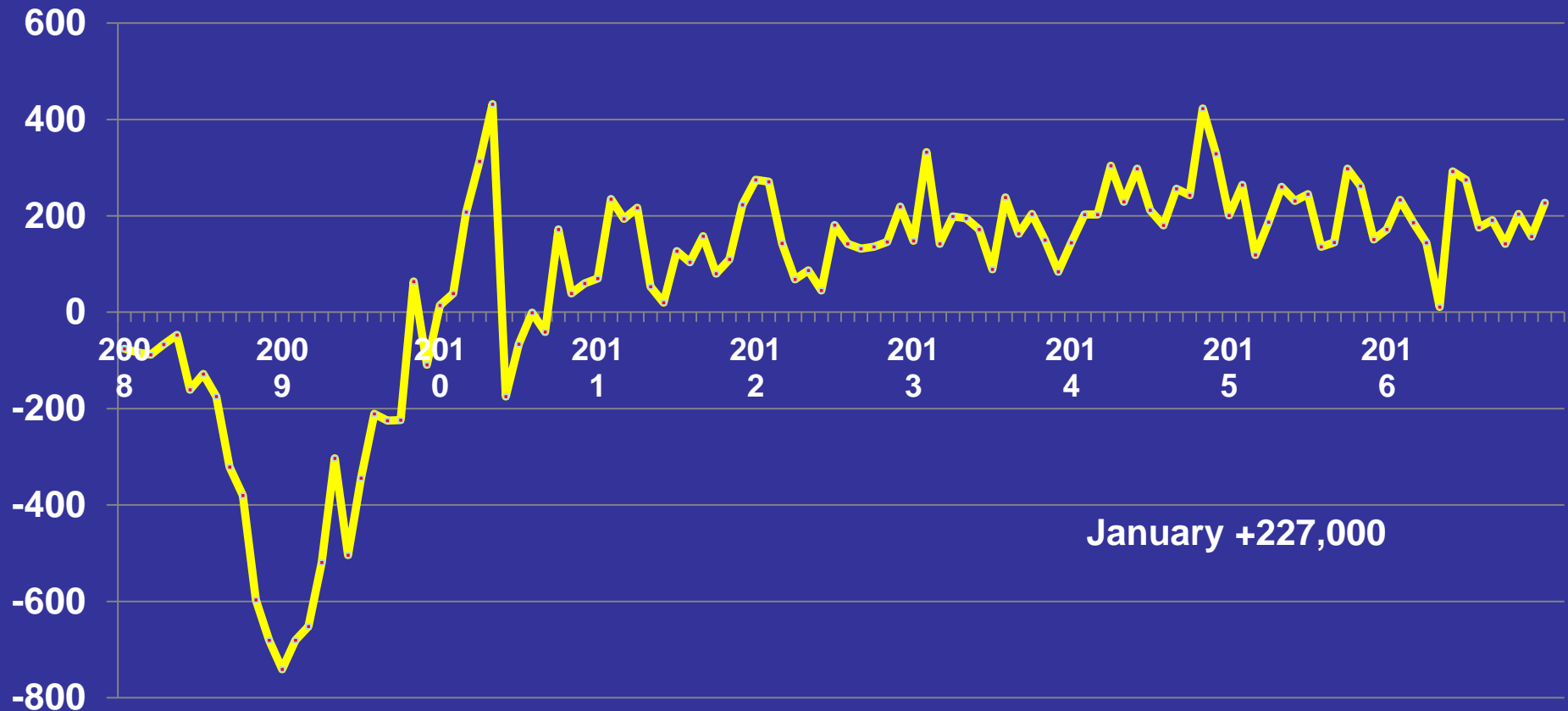
But, builders can't find enough carpenters, masons, electricians, etc.
So construction costs keep escalating = this exacerbates the inventory
Problem – also, land shortages in parts of the country drive costs higher!



More News on the labor front

Employment situation - our biggest problem – stuck below 200,000, 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

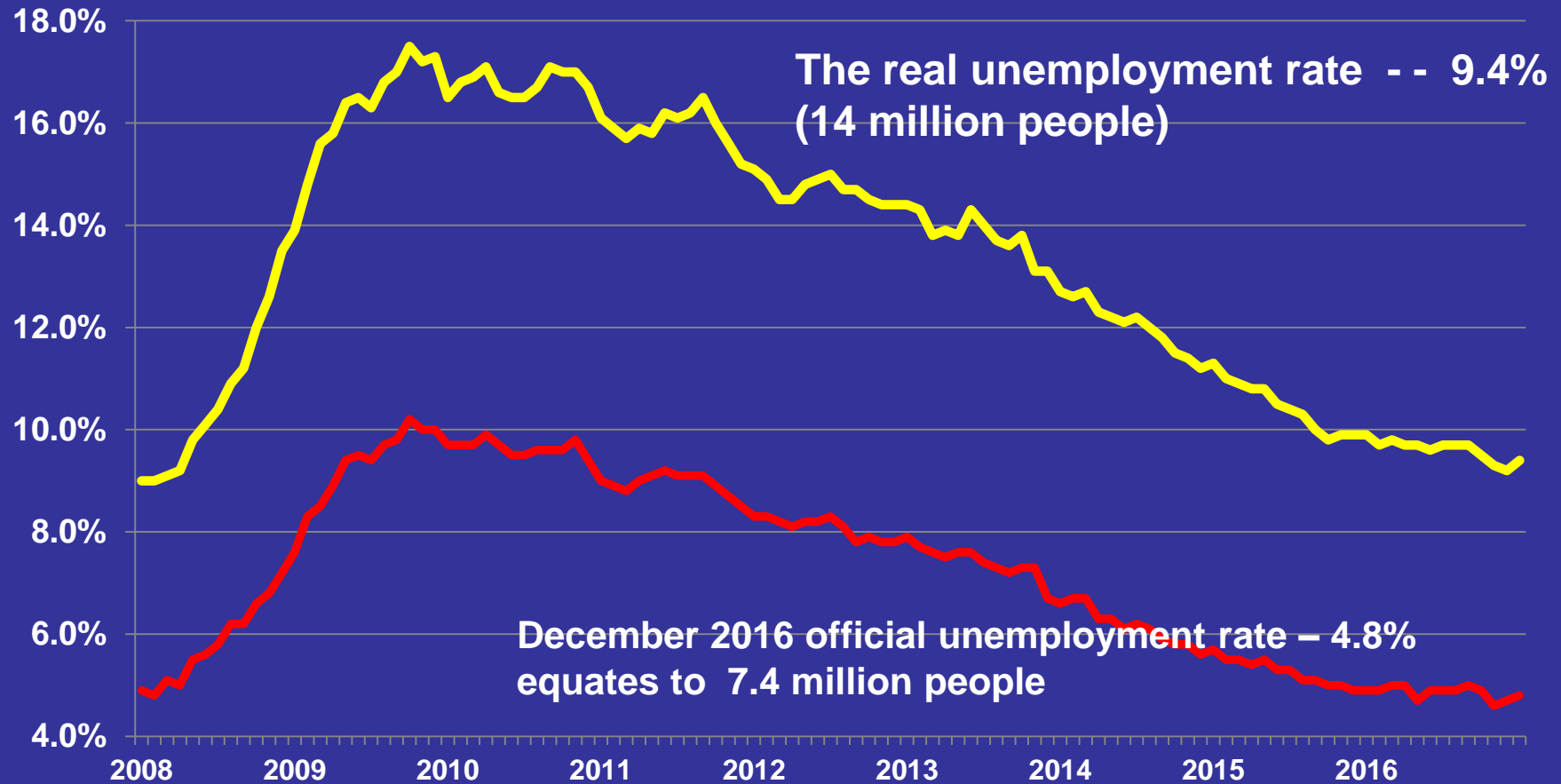
Net change in non farm payrolls – monthly, thousands



January +227,000

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

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

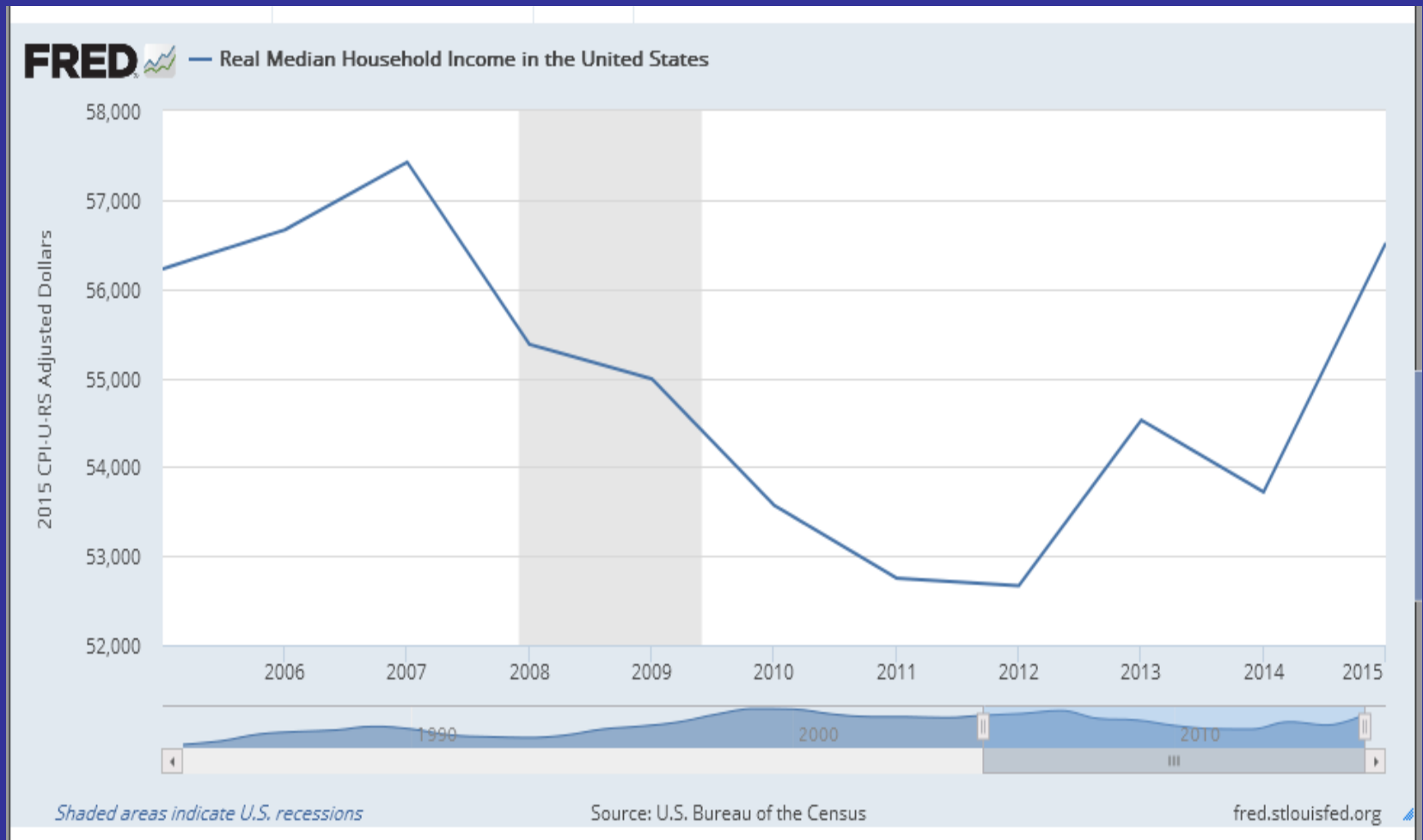


Labor force participation rate is shrinking – demographics is one reason – Another reason – bloated welfare system – 130 million people on some form of welfare (food stamps, long term disability, housing allowances, Medicaid, ...) - - we'll see skilled labor shortages **increase over the next decade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

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



But, incomes are starting to improve – good news!



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

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 was 1.9% while 2017 expected to be about the same.**
- (2) Housing market still not healthy - 1st time buyers (33% today) are below trend (42%) - 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 problem.
- (5) The fed increased rates, with several more increases expected in 2017. Low rates are not the solution to the 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. Plus, we need a smart immigration policy.

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