February 2017 Housing Commentary



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

February 2017 Housing Scorecard

	M/M	Y/Y
Housing Starts	Δ 3.0%	Δ 6.2%
Single-Family Starts	Δ 6.5%	Δ 3.2%
Building Permits	∇ 6.2%	Δ 4.4%
Housing Completions	Δ 5.5%	Δ 8.7%
New Single-Family House Sales	Δ 6.1%	Δ 12.8%
Existing House Sales ¹	∇ 3.7%	Δ 5.9%
Private Residential Construction Spending	Δ 1.8%	Δ 6.4%
Single-Family Construction Spending	Δ 1.2%	Δ 3.4%

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

Housing Data

	February	January	Feb. 2016
Total permits*	1,213,000	1,293,000	1,162,000
Single-family permits	832,000	807,000	733,000
Multi-family 2-4 unit permits	47,000	29,000	33,000
Multi-family \geq 5 unit permits	334,000	457,000	396,000
Total starts	1,288,000	1,251,000	1,213,000
Single-family starts	872,000	819,000	845,000
Multi-family 2-4 unit starts**	20,000	3,000	12,000
Multi-family \geq 5 unit starts	396,000	429,000	356,000
Total completions	1,114,000	1,057,000	1,057,000
Single-family completions	754,000	806,000	732,000
Multi-family 2-4 unit completions**	16,000	4,000	21,000
Multi-family \geq 5 unit completions	344,000	247,000	272,000

* 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; 03/16/17

Housing Data

	February	January	Feb. 2017
New single-family sales	592,000	558,000	525,000
Median price	\$296,200	\$308,200	\$311,300
Existing sales ^a	5,480,000	5,690,000	5,200,00
Median price	\$228,400	\$227,300	\$212,100
Private Residential Construction	\$484.7 billion	\$476.2 billion	\$455.74 billion
SF construction	\$257.5 billion	\$254.5 billion	\$248.9 billion
MF construction	\$64.5 billion	\$63.3 billion	\$58.3 billion
Improvement construction ^b	\$162.7 billion	\$158.4 billion	\$148.5 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; 03/22/17

U.S. Department of Commerce-Construction: www.census.gov/construction/nrs/pdf/newressales.pdf; 03/23/17

U.S. Department of Commerce-C30 Construction: www.census.gov/construction/c30/pdf/privsa.pdf; 04/03/17

Conclusions

Housing is gaining strength. Latest numbers show 3% increase in total starts in February. Interest rates are heading up as the labor market tightens. Hopefully, the new administration will turn things around, investment has been lagging as has productivity. Without productivity, the economy stagnates, as do incomes, standard of living, and, of course, housing activity. Without housing activity, wood product prices remain weak.

February's housing data is mostly positive – total starts are up by 3.0% (m/m), single family homes starts are up by 6.5% (m/m), permits up by 6.2% (m/m), completions up by 5.5% (m/m), but existing home sales were down by 3.7% 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

January 2017 EU Housing Scorecard

		M/M	\mathbf{Y}/\mathbf{Y}
Production in Construction ^A	EU 28	∇ 1.5% ^s	∇ 3.3 [%] s
	EU 19	▽ 2.3% ^s	∇ 6.2% ^s
	Germany	Δ 0.8%	▽ 2.5%
	France	▽ 3.7%	▽ 4.7%
	UK	∇ 0.6% ^p	Δ 4.5% ^p
	Spain	∇ 3.3% ^{ps}	▽ 10.6% ^p
Building permits (m ² floor) ^A	EU 28		
	EU 19	${f abla} 2.8\%^{(12)}$	Δ 26.7% ^{s(12)}
	Germany	∇ 8.7%	Δ 7.6%
	France	∇ 3.7% ^s	Δ 7.9% ^e
	UK		
	Spain	∇ 3.8 ^{s(12)}	$\Delta 98.9^{e(12)}$

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; 04/15/17)

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

^e estimate ^s Eurostat estimate ^P provisional $\stackrel{\sim}{\rightarrow}$ no data available ⁽¹²⁾ December data

Housing comments – February 2017

- February starts were up 3% to 1.288 (SAAR) SF at 872,000 (SAAR) up 6.5% MF was down 8% MF is typically quite volatile. YOY, total starts are up 6.2% while SF up 3.2%. 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, but 54% were renters – too many problems for young people to own!
- Resale market down 3.7% 5,480,000 (annual rate) low inventory (3.8 months) driving prices higher – prices up 8% YOY
- New home sales were up 3.7% to 555,000 SAAR, up 5.5% annual basis
- Job creation remained steady in February +227,000 unemployment to 4.7% - and the participation rate is improving!
- GDP growth was 1.9% in the 4th Qtr 1.6% for 2016. This is the slowest expansion since WWII, and until we improve productivity, sustainable growth will remain 2% at best, despite Trump's promises. If he addresses problems re: over regulation; taxes; infrastructure; education(K-12); investment; debt; then we could grow substantially faster. He has a low bar from the previous administration, so maybe he can do it. Let's hope so.

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

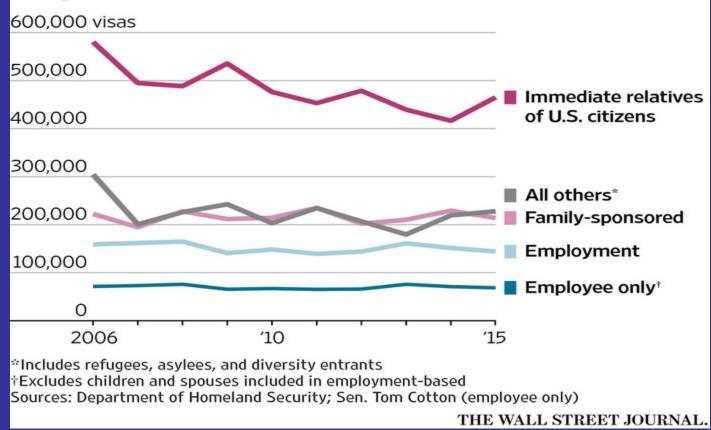
Solution – develop a smart immigration system that brings in educated, hard working people with technical skills that will support better productivity growth, and address our shrinking labor force problem too.

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. Immigration system heavily skewed to family – needs to focus on employment (skills, education, assimilation) to deal with shrinking workforce and pathetic productivity - otherwise, GDP will remain weak for decades. And, housing will remain below par for decades, too.

(https://www.wsj.com/articles/a-senate-plan-to-reduce-the-flow-of-legal-migrants-1490197378)

Family First

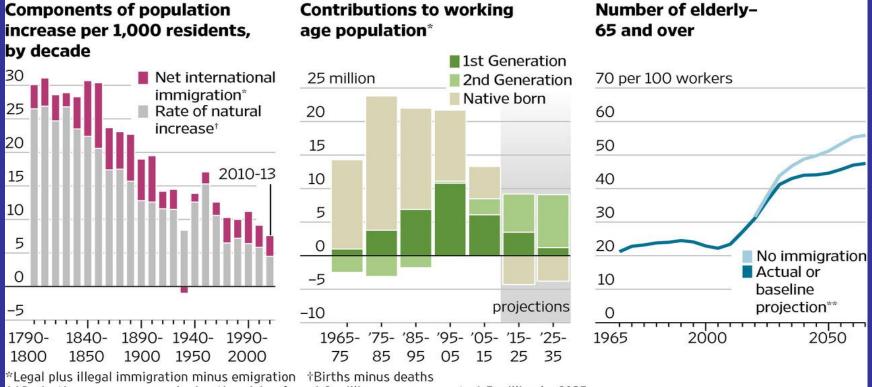
Legal immigration is dominated by relatives of citizens and prior immigrants.



Why we need immigrants – aging population, declining birth rate, and weak productivity means weak economic growth. Why? Growth = (work force) (productivity) Basic math – it's that simple. 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.



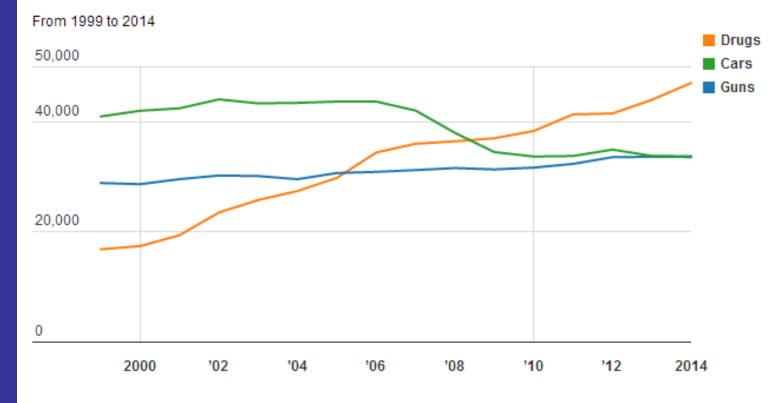
**Projections assume annual migration rising from 1.2 million per year now to 1.5 million by 2035.

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

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Fixing the economy will help solve another problem – most drug deaths come from people who have lost hope, turned to drugs, Also, productivity drops when on drugs. WV has the highest drug death rate per capita – major reason – unemployment – 2nd highest in USA. The correlation (R2) between unemployment and drug addiction is quite high. If we can fix the economy, we can "kill many birds with one stone."

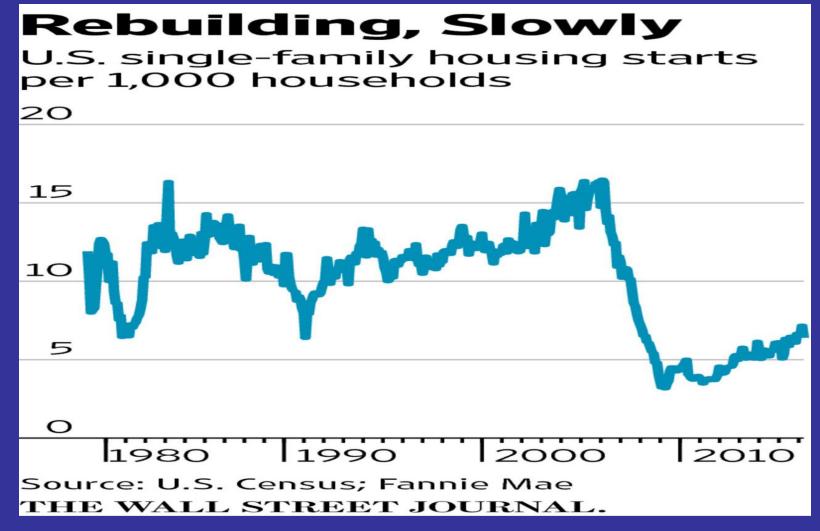
Deaths From Drug Overdoses, Car Accidents, and Gun Violence



Source: Centers for Disease Control and Prevention Get the data

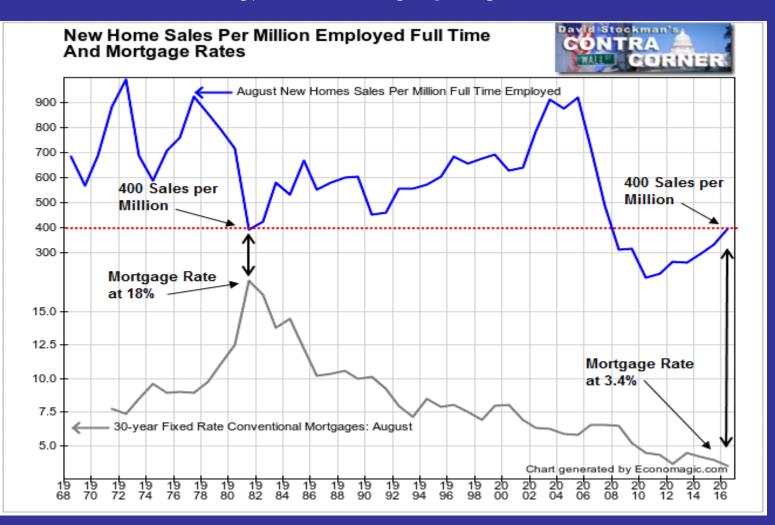
Here is an example of an overregulated economy – why our GDP growth has been pathetic for years and will continue unless we get government out of the way of innovation and job creation thus encouraging business's to invest.

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



(http://www.wsj.com/articles/u-s-home-construction-lags-behind-broad-economic-rebound-1481914669)

Same story 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%. 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 which we don't have. 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

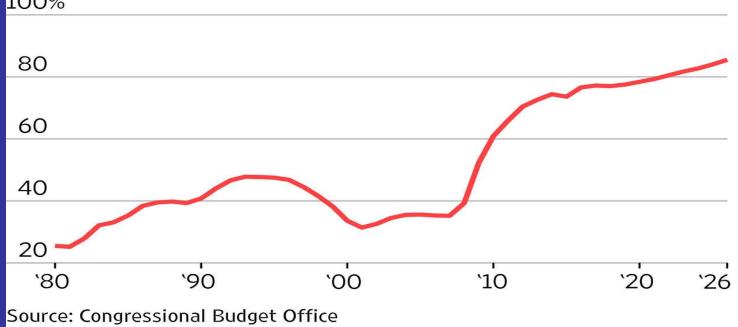
Source: Michael Porter and Jan Rivkin. "An eight-point plan to restore American competitiveness." The Economist: The World in 2013. (Nov 2012).

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/) scary picture! 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!

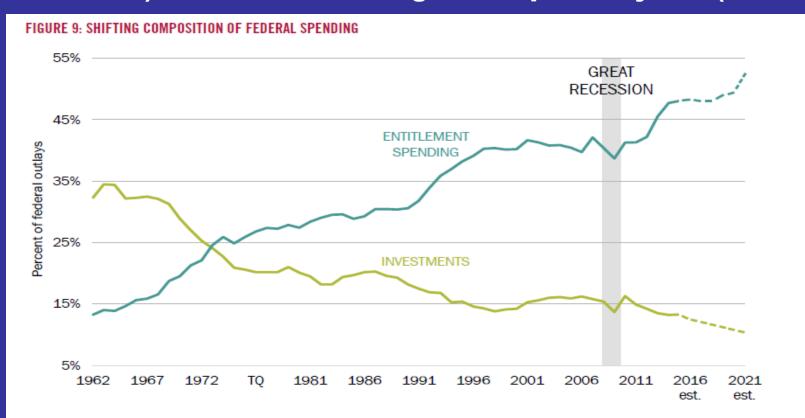
The Obama Debt Legacy

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

100%



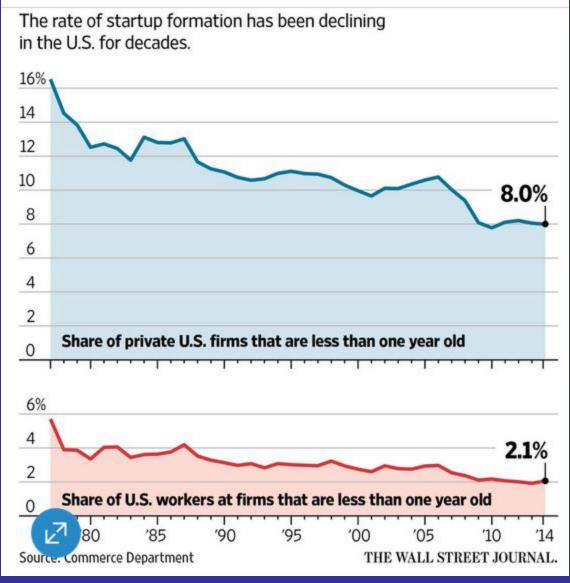
Going into debt is OK if you're investing for the future -but, we're not! For decades, we, as a nation, have been living a fantasy life. Entitlement spending is now approaching 50% of the federal budget while investment spending (critical to maintain our competitiveness) – has been declining for the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



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!



WSJ (http://www.wsj.com/articles/sputtering-startups-weigh-on-u-s-economic-growth-1477235874)

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.

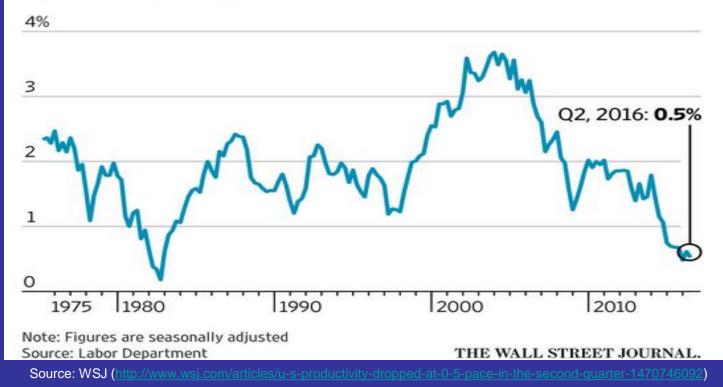
(*PS – I understand that productivity measurement is a problem as new products/services quality is difficult To measure so maybe we are underestimating real productivity?*)

Plunging Productivity

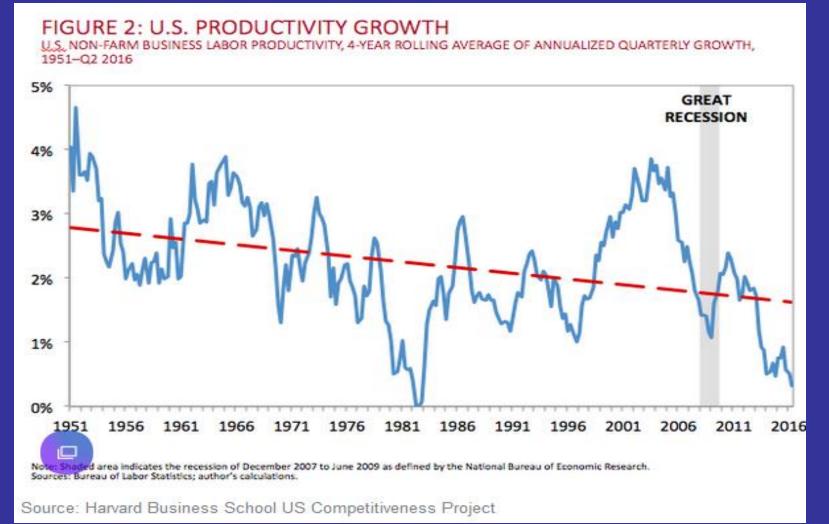
Gains in U.S. worker productivity have slowed dramatically since the early 2000s, a trend that could restrain the economy's future growth.

Labor productivity (output per hour)

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



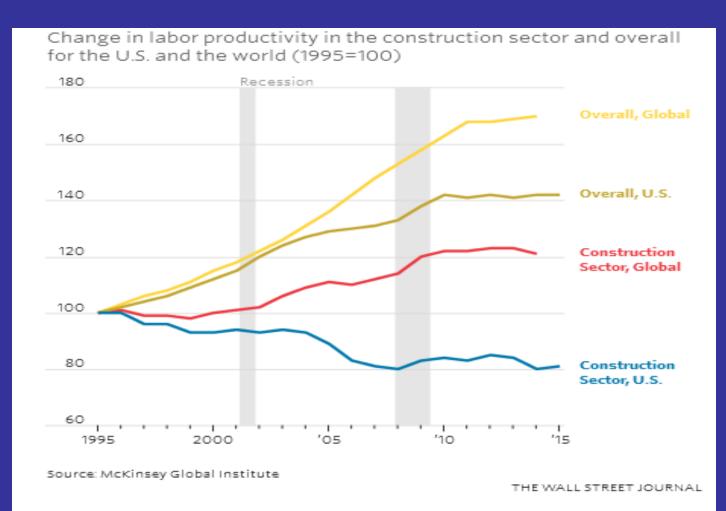
Waning productivity is major cause of our economic problems. Weakening trend over past 60 years needs to change if wages/standard of living are to improve. According to recent study by M. Porter, et.al., competitiveness is key. Solution is infrastructure reform, tax reform, and immigration reform. Political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



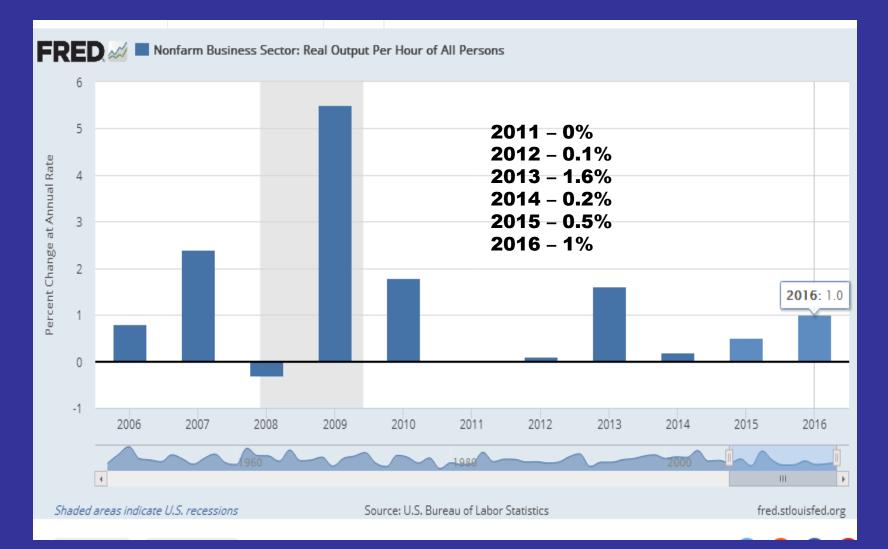
(http://finance.yahoo.com/news/us-competitiveness-project-harvard-business-school-hbs-michael-porter-030021739.html)

Since 1995, overall productivity in the U.S. has grown at a compound Rate of 1.76%, but the construction sector has seen its productivity decline at a 1.04% rate according to recent study by the McKinsey Global Institute. Fragmentation and regulatory requirements are problems.

(http://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/Reinventing-construction-through-a-productivity-revolution)



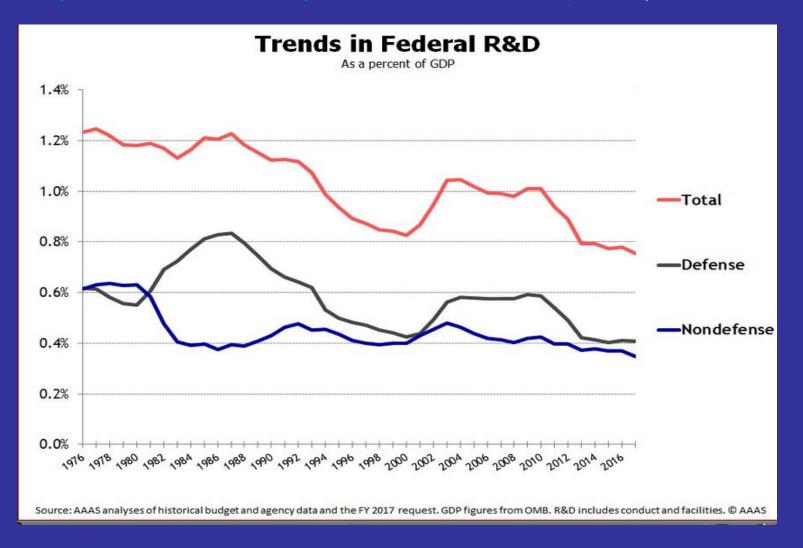
Declining Productivity is a major problem – has averaged 0.6% annually since 2011 – this plus declining work force means weak GDP and declining standard of living.



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

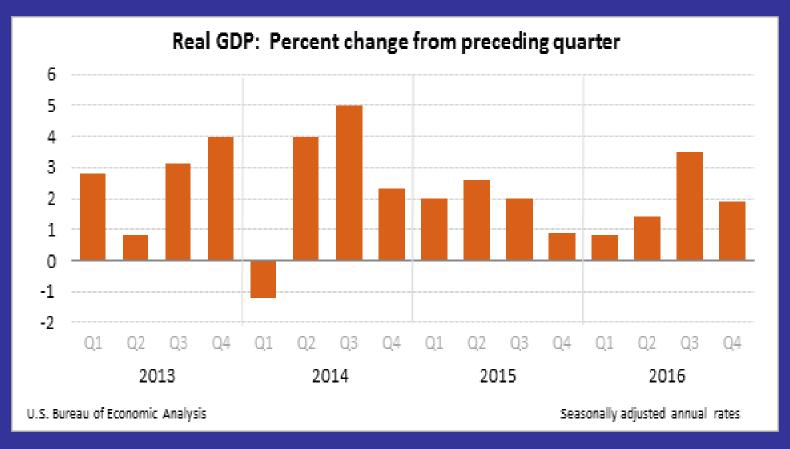
(http://www.wsj.com/articles/the-dividends-of-funding-basic-science-1480982516?mod=rss_opinion_main)



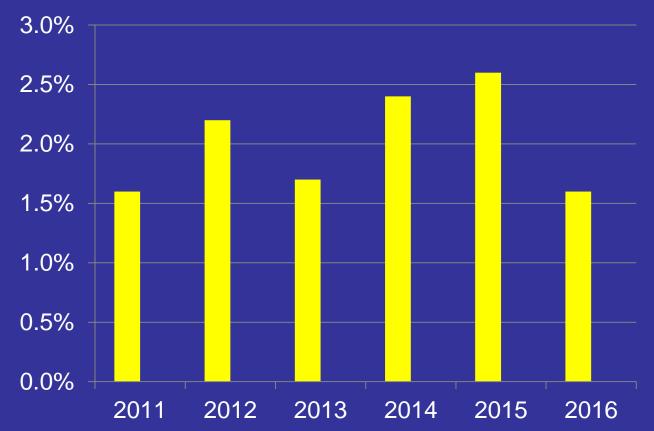
U.S. 4th Qtr 2016 Economic growth 1.9% - 1.6% for 2016

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
- 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"

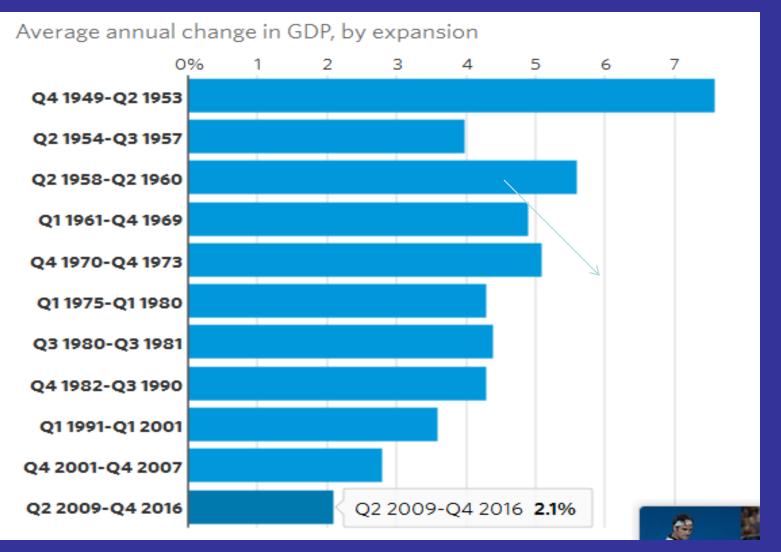


GDP has been averaging about 1.9% per year over the past 6 years – not terribly impressive!

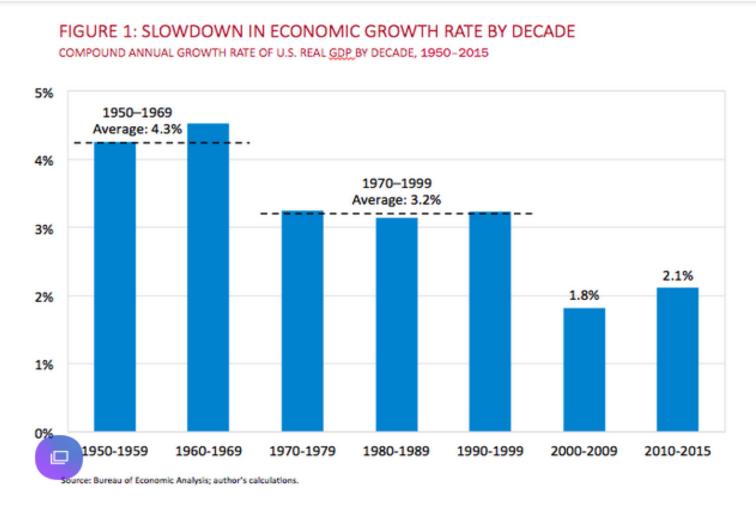


REAL GDP %

Slowest expansion since WWII – productivity is major problem



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



Source: Harvard Business School US Competitiveness Project

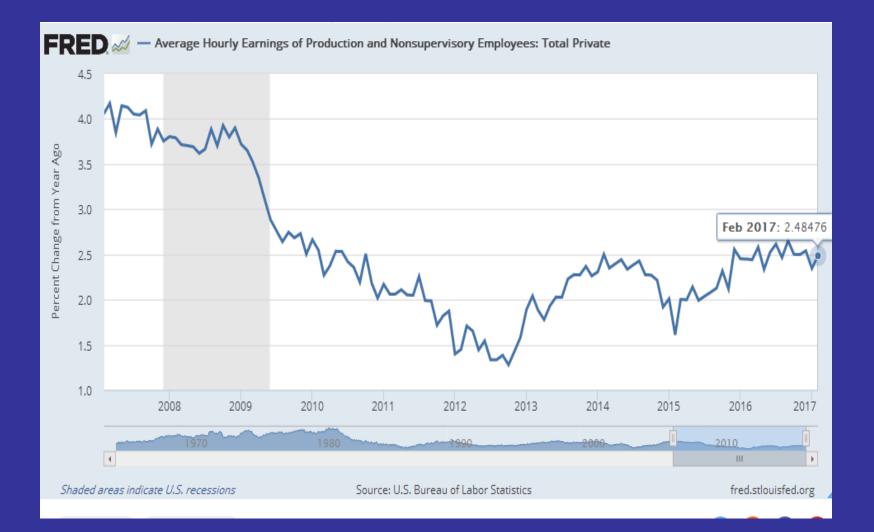
(http://finance.yahoo.com/news/us-competitiveness-project-harvard-business-school-hbs-michael-porter-030021739.html)

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

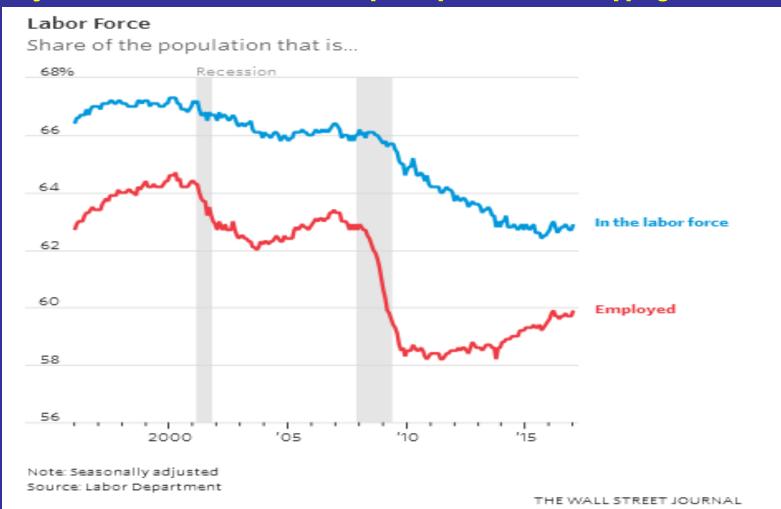
Wage and salaries are increasing, but the increases remain muted! Barely keeping pace with inflation.



Wage trend is good, but not spectacular.

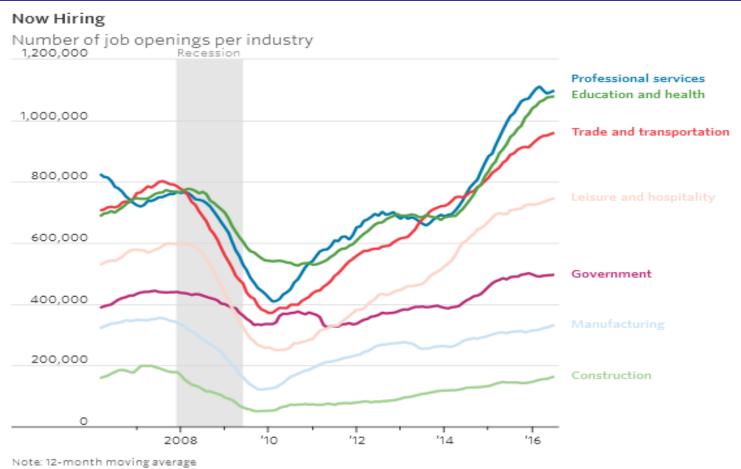


Not a good trend for the economy – employment population ratio keeps decreasing – too much welfare, plus many people don't have the required job skills (half the population on some form of welfare – food stamps, Medicaid, long term disability, housing allowances, etc.) – yes, aging work force and retiring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



(http://blogs.wsj.com/economics/2017/02/03/the-january-jobs-report-in-10-charts/)

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



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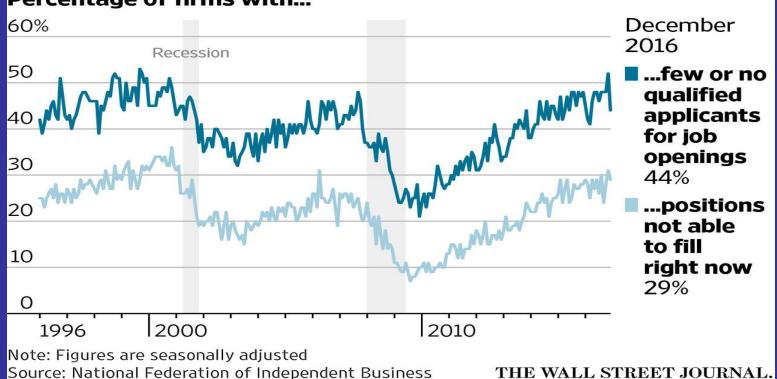
Source: Labor Department

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. This will grow the economy and allow more immigrants both skilled and refugee status to enter the USA.

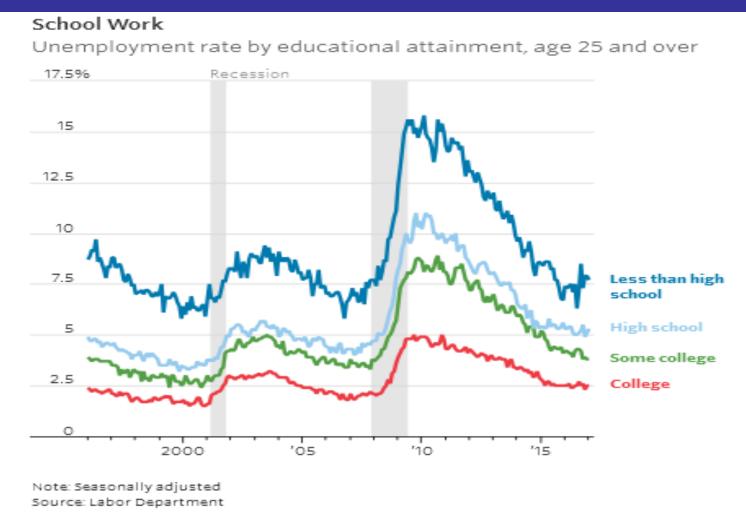
Now Hiring

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

Percentage of firms with...



Education will help keep you out of the unemployment line



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Additional housing comments

Starts are inching forward – But, *low interest rates can't fix housing!* <u>This is basically a two tiered market – healthy upper end</u> <u>versus weak entry level housing - - not sustainable</u>



Single family starts, Thousand units, SAAR

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)

Resale market continues to improve - however, tight supply (which drives prices), currently at 3.8 months, remains a problem. Healthy market is about 6 months supply. <u>Median prices are up 8%, annual basis - 59th consecutive</u> monthly increase. Here is good report from <u>NAR on 2016 totals</u> (https://www.nar.realtor/news-releases/2017/01/existing-home-sales-slide-in-december-2016-sales-best-since-2006

1st time buyers, at 33%, remain below trend of 40%.



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

Source: NAR (http://www.realtor.org/news-releases/2015/06/existing-home-sales-bounce-back-strongly-in-may-as-first-time-buyers-return)

Household formations and shift to renting - - Falling Homeownership rate for millenial's - used to be 43% - now it is 33% - young people are renting

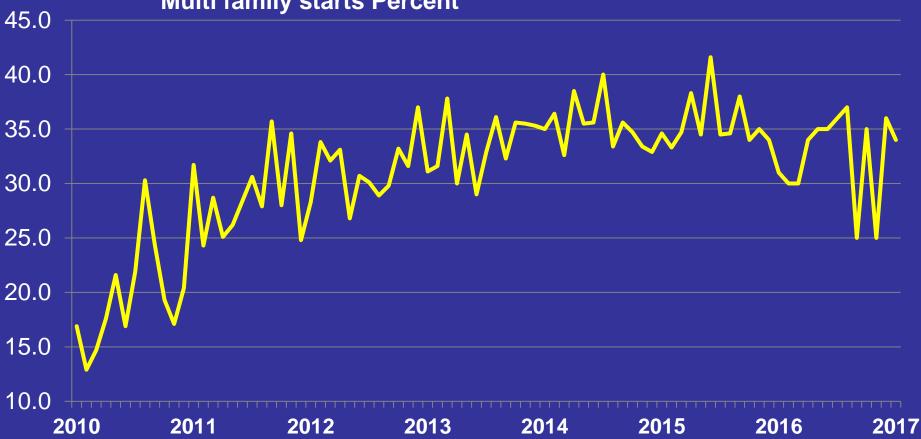
Recent study shows that people with college degree take 5 years to save enough for down payment for starter home (with student debt – 10 years), <u>no college – 16 years (http://www.wsj.com/articles/homeownership-elusive-for-young-adults-without-college-degrees-1463909402)</u>

Homeownership lowest in 50 years



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

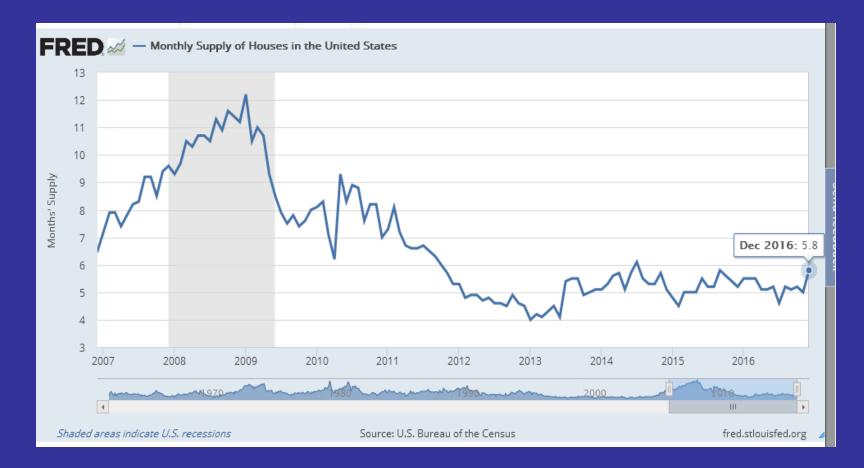
Multi family share of housing starts – upward trend expected to continue for some time. Also, since the housing crash in 2008, single family rentals have now reached 15% of overall housing stock, up from 9% in 2005 (http://blogs.wsj.com/economics/2015/07/20/signs-of-overheating-in-the-single-family-rental-market/)



Multi family starts Percent

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!

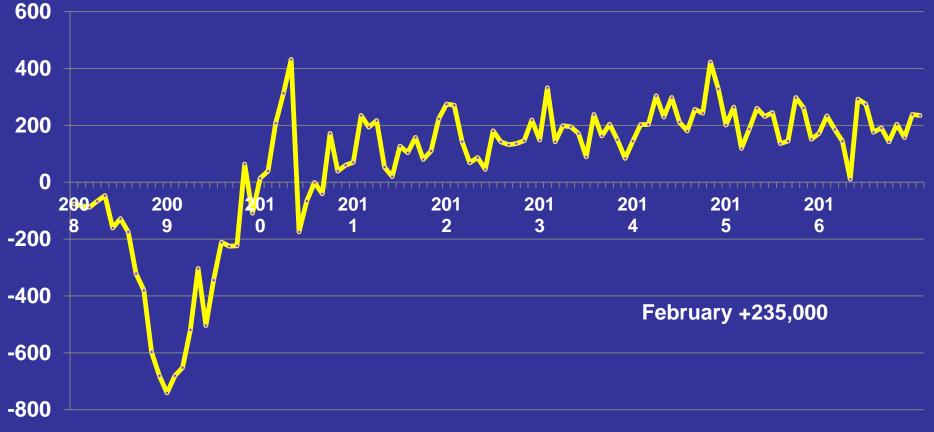


(<u>https://research.stlouisfed.org/fred2/series/MSACSR</u>)

More News on the labor front

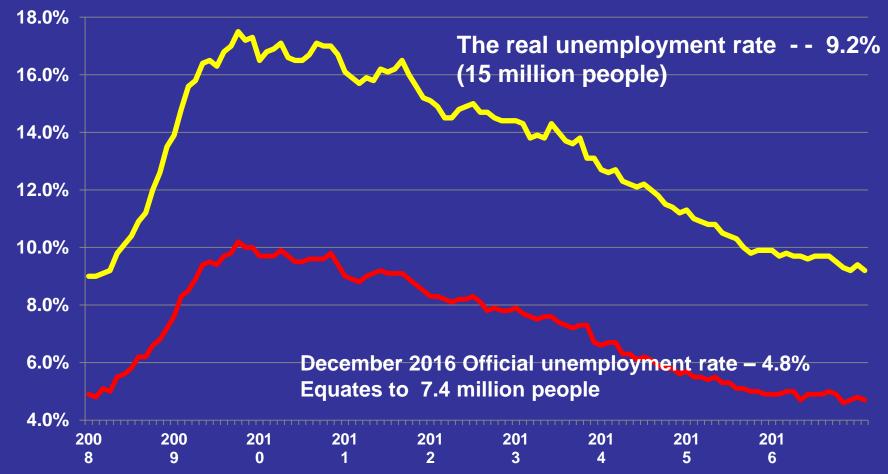
Employment situation - OUr biggest problem – stuck around 200,000, and many of these jobs are part time with little or no benefits – not conducive to driving housing demand higher - <u>need to encourage innovation and</u> <u>investment in future - that means less government</u>

Net change in non farm payrolls – monthly, thousands



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

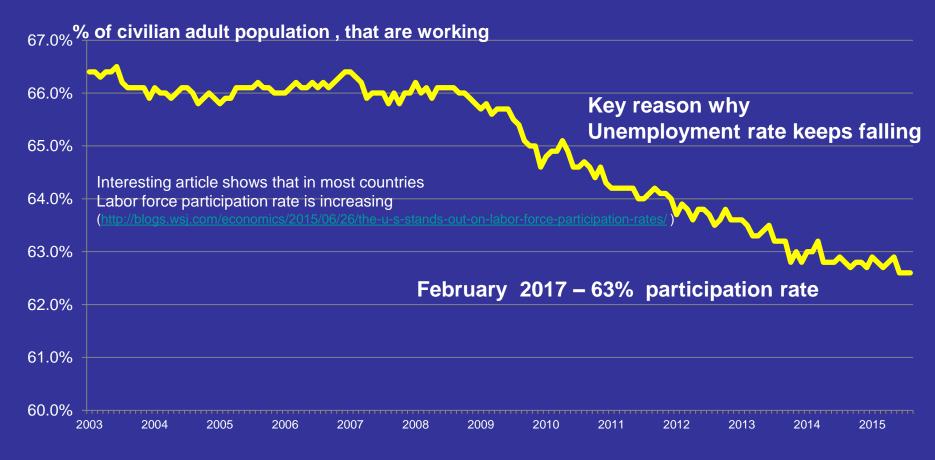
Unemployment rate keeps coming down – but, 7.5 million remain "underemployed" – working part time, but want full time jobs – another 1.7 million are "marginally attached" – 522,000 discouraged , plus 1.2 million who were not counted as unemployed because they haven't looked (for a job) in past 4 weeks – total = 15 million including official 7.5 million unemployed



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

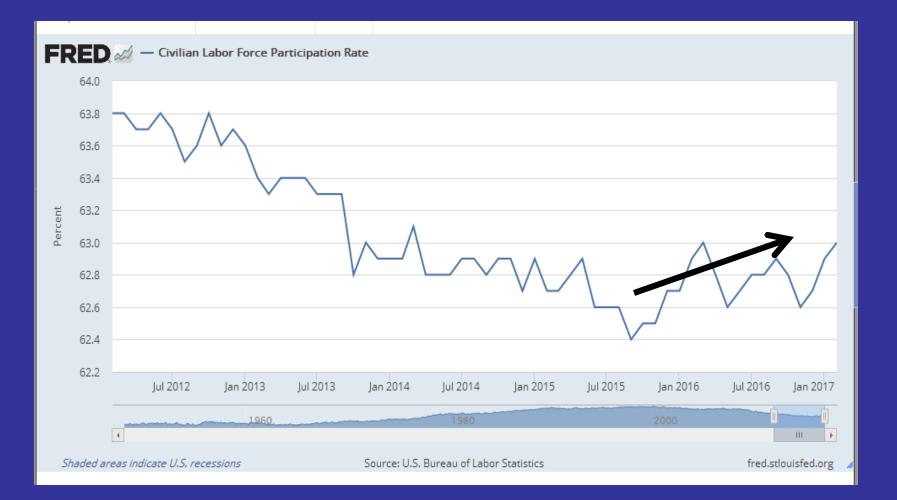
Labor force participation rate is shrinking – demographics is one reason – Another reason – bloated welfare system – 130 million people on some form of welfare (food stamps, long term disability, housing allowances, Medicaid, ...) - we'll see skilled labor shortages increase over the next decade - we're 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#)



Source: BLS

But, taking a closer look,, from July 2015 – February 2017, more people are returning to the work force. That's a good sign!



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 problems!
- (5) Weak/no leadership from Obama administration and Congress,
 - our biggest problem maybe "the Donald' will fix our problems so far, no improvement GOP Health care legislation a disaster!!!
- (6) The fed increased rates in December, finally, 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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