September 2016 Housing Commentary

WirginiaTech

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: <u>http://woodproducts.sbio.vt.edu/housing-report/</u>

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September 2016 Housing Scorecard

	M/M	Y/Y
Housing Starts	∇ 9.0%	∇ 11.9%
Single-Family Starts	Δ 8.1%	Δ 5.4%
Housing Permits	Δ 6.3%	Δ 8.5%
Housing Completions	∇ 8.4%	∇ 5.8%
New Single-Family House Sales	Δ 3.1%	Δ 29.8%
Existing House Sales ¹	Δ 3.2%	Δ 0.6%
Private Residential Construction Spending	Δ 0.5%	Δ 0.9%
Single-Family Construction Spending	Δ 0.1%	∇ 2.9%

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

Housing Data

	September	August	Sept. 2015
Total permits*	1,225,000	1,152,000	1,129,000
Single-family permits	739,000	736,000	708,000
Multi-family 2-4 unit permits	37,000	33,000	38,000
Multi-family \geq 5 unit permits	449,000	383,000	383,000
Total starts	1,047,000	1,150,000	1,189,000
Single-family starts	783,000	724,000	743,000
Multi-family 2-4 unit starts**	14,000	17,000	11,000
Multi-family \geq 5 unit starts	250,000	409,000	435,000
Total completions	951,000	1,038,000	1,010,000
Single-family completions	687,000	753,000	644,000
Multi-family 2-4 unit completions**	14,000	7,000	7,000
Multi-family \geq 5 unit completions	250,000	278,000	359,000

* 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; 10/19/16

Housing Data

	September	August	Sept. 2015
New single-family sales	593,000	575,000	457,000
Median price	\$313,500	\$293,800	\$307,600
Existing sales ^a	5,470,000	5,300,000	5,440,00
Median price	\$234,200	\$239,900	\$221,700
Private Residential Construction	\$453.7 billion	\$451.3 billion	\$449.7 billion
SF construction	\$236.5 billion	\$236.3 billion	\$243.7 billion
MF construction	\$62.1 billion	\$60.8 billion	\$56.9 billion
Improvement construction ^b	\$155.0 billion	\$154.2 billion	\$149.1 billion

 $^{a}\,NAR^{\circledast}$

^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; 10/20/16

U.S. Department of Commerce-Construction: www.census.gov/construction/nrs/pdf/newressales.pdf; 10/26/16

U.S. Department of Commerce-C30 Construction: www.census.gov/construction/c30/pdf/privsa.pdf; 11/01/16

Conclusions

Housing remains relatively weak (historical speaking) with homeownership rate falling to lowest rate in 50 years. It appears that "free money" cannot overcome the abundance of low-paying jobs, rising home prices, changing preferences (to renting), poor income growth, and tight credit for first time buyers. The political gridlock and global uncertainty, terrorism, and economic slowdowns (China, Brazil) are not helping either, mostly by preventing businesses to invest.

June's housing data is a mixed bag – total starts are down by 9.0% (m/m), single family homes starts are up by 8.1%, permits up by 6.3%, completions down by 8.4% (m/m), and existing home sales were up by 3.2% 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 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; and
- 5) slowing world economy; and
- 6) global uncertainty

August 2016 EU Housing Scorecard

		M/M	Y/Y
Production in Construction ^A	EU 28	∇ 1.3% ^s	▽ 0.5% ^s
	EU 19	∇ 0.9% ^s	∇ 0.9% ^s
	Germany	∇ 0.1%	Δ 1.2%
	France	Δ 0.7%	Δ 6.4%
	UK	∇ 1.3% ^p	∇ 2.5% ^p
	Spain	∇ 3.0% ^{ps}	∇ 4.3% ^p
Building permits (m ² floor) ^A	EU 28		
	EU 19	∇ 5.6% ⁽⁰⁷⁾	Δ 5.2% ^{s(07)}
	Germany	Δ 1.4%	Δ 4.1%
	France	▽ 11.8% ^s	∆ 25.2% ^e
	UK		
	Spain	Δ 1.4 ^{s(07)}	Δ 51.0 ^{e(07)}

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; 11/14/16)

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

Housing comments – September 2016

- September starts were down 9% to 1.047 (SAAR) but, SF at 783,000 (SAAR) up 8%
- Home ownership rate fell to 62.9% in QTR2 2016 *lowest ownership rate in 50 years!* Financing problems; changing preferences (to renting); and rising home prices problem for 1st time buyers
- Resale market dropped 1% 5,330,000 (annual rate) low inventory (4.6 months) driving prices higher major impediment to sales
- Latest jobs report was disappointing +156,000 unemployment remained at 5.0% – furthermore, 51% of all workers make less than \$30,000/year – can't buy a house on that!

(https://www.ssa.gov/cgi-bin/netcomp.cgi?year=2014)

- The Fed doesn't know what to do, so they do nothing. Looking for more confirmation for tightening or reasons to wait. In their defense, they are trying to do the job the Congress and President refuse to do. We have a dysfunctional political system at a time in this country when we need strong leadership and cooperation. Neither Hillary nor "the Donald" will solve our problems. One is an egotistical buffoon while the other is totally untrustworthy. The more I learn about the Clinton Foundation, the more disgusted I become. Then, we have the email fiasco. In my opinion, neither is fit to be President of the USA. The two party system has serious problems – maybe time for a change?
- Given this political backdrop, I find it difficult to be confident regarding the housing market nor the economy.

OK – let's look at the economy ---

Want to Fix the U.S. Economy? Start With the Broken Political System – new report from M. Porter, et. al. (we can start this November)

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

Here is the link 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. we can begin to fix the problem this November – make the effort to vote!

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).

MY Comments on the economy – it continues to sputter – propped up by low interest rates, compliments of the FED -But, 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??

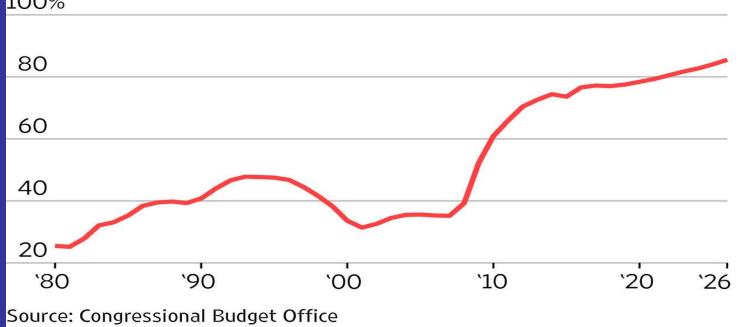
Debt - Innovation – Productivity

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/) - a scary picture! PS. Public debt now equals 75% Of GDP – we're getting very close to the 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

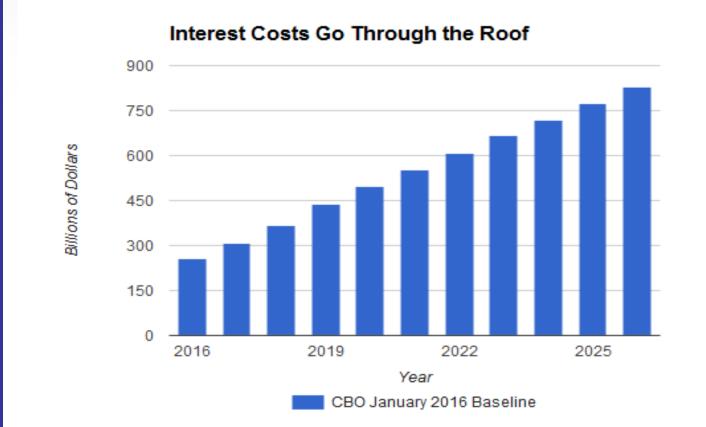
Federal debt held by the public as a share of the economy, 1980-2026 (2016-2026 estimated)

100%



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, etc. 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.

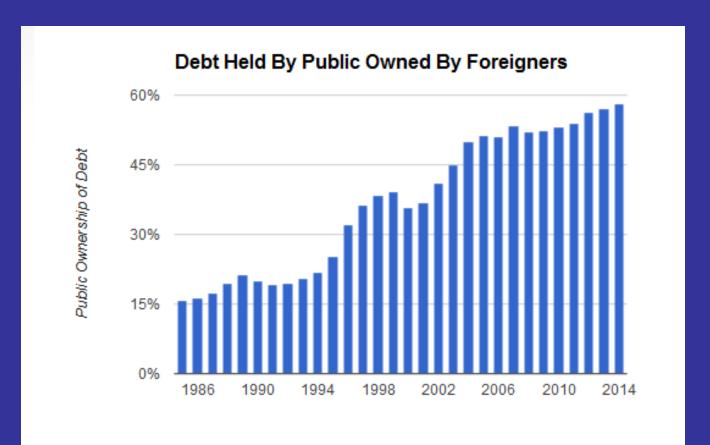
Not sure why we don't see this as a major threat to our future – probably because we don't understand the magnitude of the problem. Also, the politicians do a great job in "passing the buck" – i.e., delaying the 'day of reckoning, promising that we'll tax the rich, the banks, etc. – i.e., someone else 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. <u>We are the problem, and we are the ones who must fix the problem.</u> This November, we can begin the process by electing people who understand the issues, and offer sensible solutions. 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

Big problem when foreigners question our ability to repay our debts – they will demand higher rates, etc., and eventually, refuse to buy our debt.

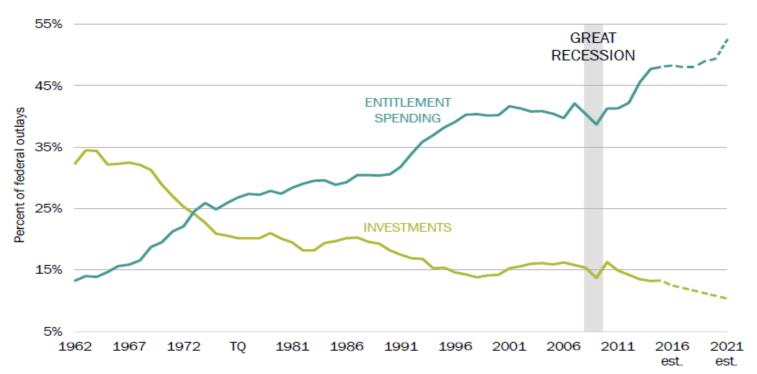
Total debt = \$20 trillion, of which \$14 trillion is public and \$6 Trillion Is intergovernmental debt (i.e., what government owes itself). Foreigners hold about \$8 trillion of our debt which is 57% of the public debt



Source: United States Treasury Department, Treasury Bulletin, Table OFS-2, December 2015.

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



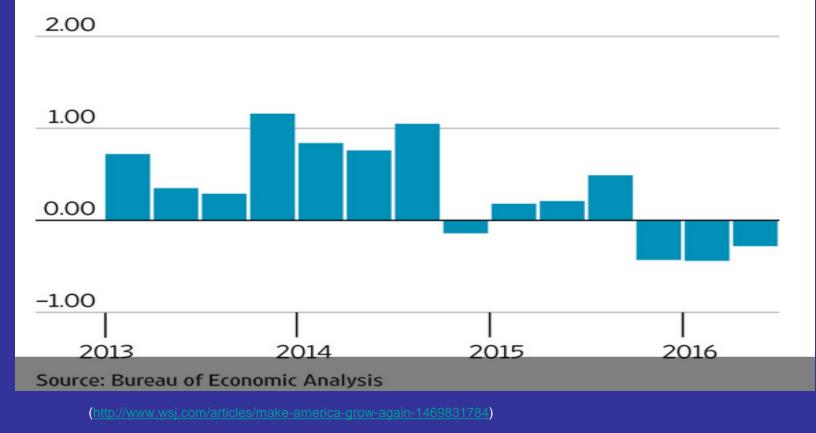
Note: Entitlement spending includes outlays for Social Security, Medicare, Medicaid, CHIP, and Affordable Care Act Subsidies. Investments includes outlays for infrastructure, R&D (both defense and non-defense), and education. 2016-2021 figures are Office of Management and Budget estimates. TQ refers 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.

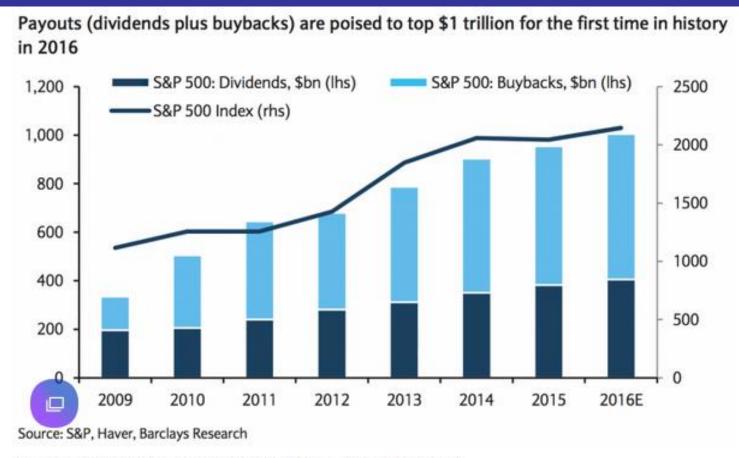
Business isn't investing either --- has been trending lower for the past several years. That's why GDP growth remains weak. That means income growth will remain weak and housing will continue to underperform, and creation of good paying jobs will remain an elusive goal.

Business Isn't Investing

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

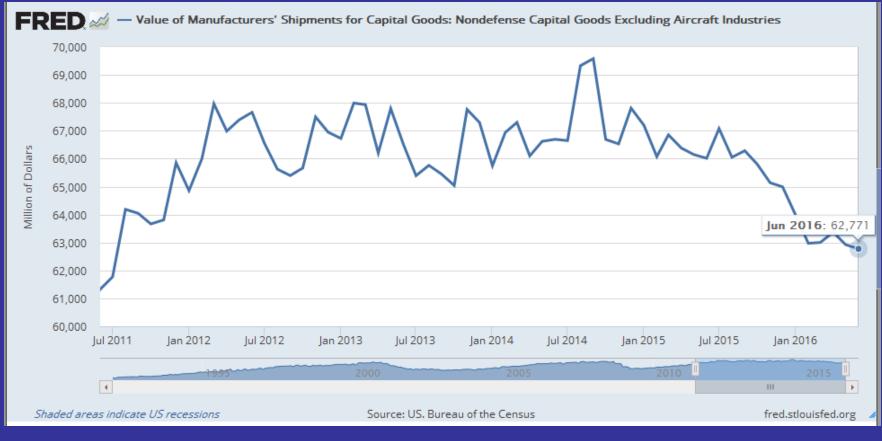


This is what businesses do when they don't see much growth. Instead of investing in plant, equipment, technology, they buy back stock and increase dividends. Good short term strategy, but does little to make the company/business more competitive.



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!



(http://www.wsj.com/articles/u-s-durable-goods-orders-fell-2-2-in-may-1466771610

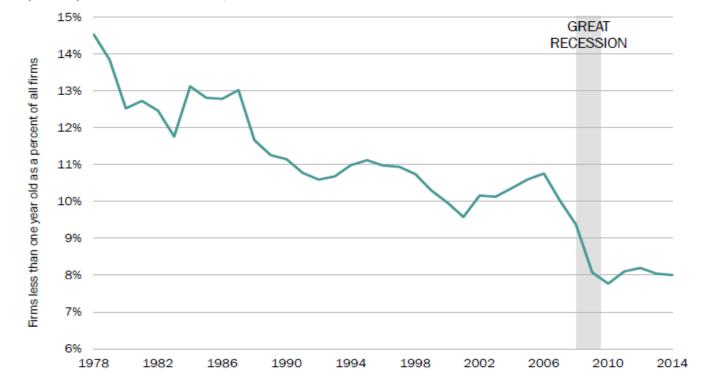
Business won't invest (and create jobs) when there is excess capacity – Capacity Utilization below 80% suggests "excess capacity" exists – we've had 2 years of falling capacity utilization – my guess the culprit is the weak economy!



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

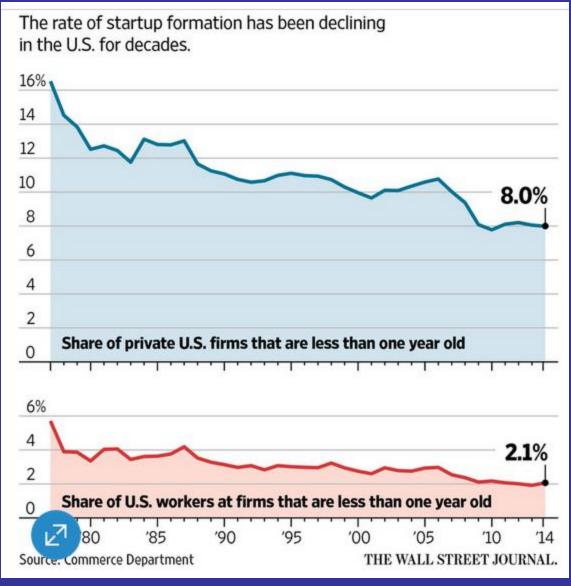
FIGURE 12: SLOWDOWN IN NEW BUSINESS FORMATION

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!



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.

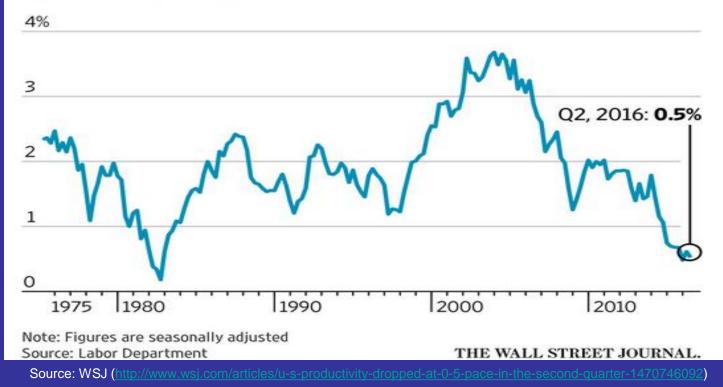
(PS – I understand that productivity measurement is a problem as new products/services quality is difficult To measure so maybe we are underestimating real productivity?)

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



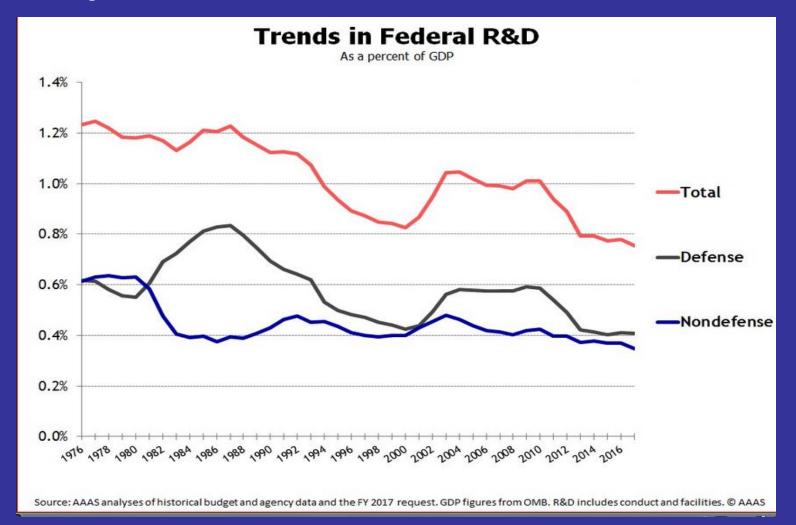
Waning productivity is major cause of our economic problems. Weakening trend over past 60 years needs to change if wages/standard of living are to improve. According to recent study by M. Porter, et al., competitiveness is key. Solution is infrastructure reform, tax reform, and immigration reform. Political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



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

Falling R&D - not a good trend!

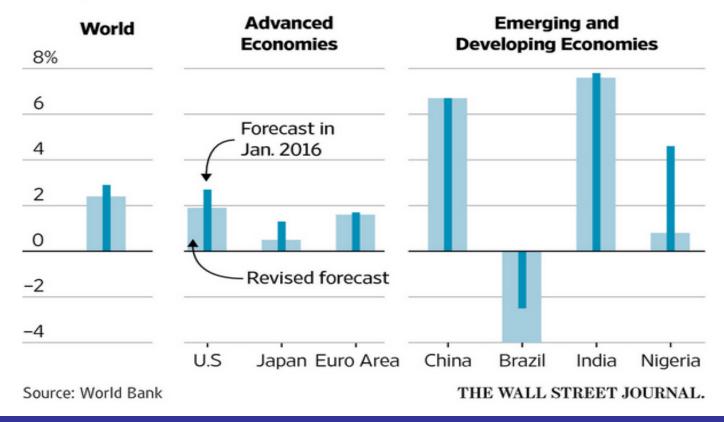
Currently, Federal R&D is .78% of GDP – non defense spending is .36% Federal government funds basic research – which is critical to development of new technology and innovation in science and engineering - critical to economic and job growth, and to increasing productivity.



World Bank downgrades growth (again) in 2016 to 2.4% as problems in developed and developing world mount

Souring Outlook

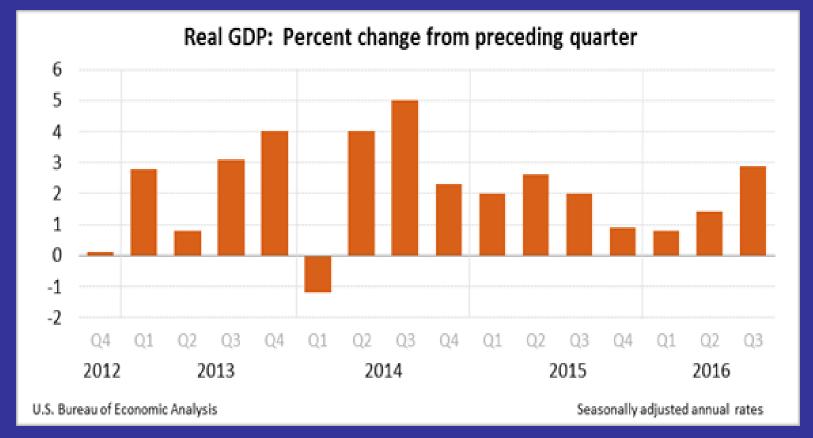
The World Bank revised down its forecasts for the global economy, warning that the weaker outlook raised the risk of a sharp slowdown ahead.



U.S. 3rd Qtr 2016 Economic growth nice surprise 2.9% - but since

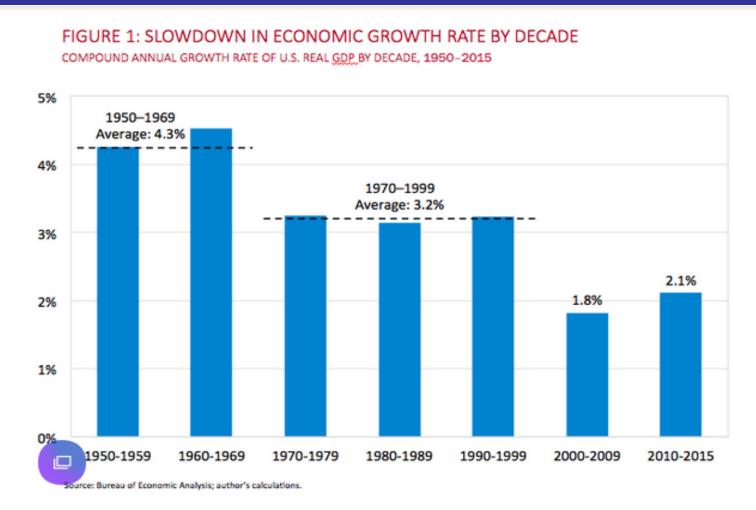
last September, the economy has averaged only meager growth!

- (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"



Source: BEA (http://www.bea.gov/newsreleases/national/gdp/gdp_glance.htm)

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

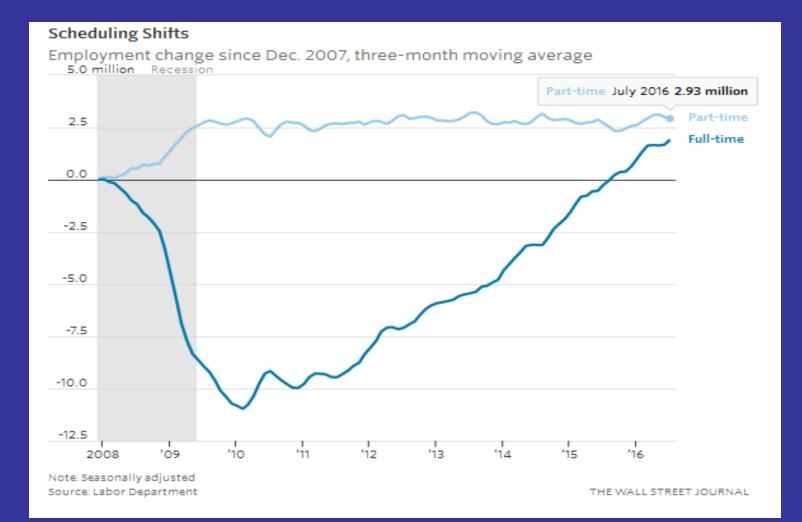


Source: Harvard Business School US Competitiveness Project

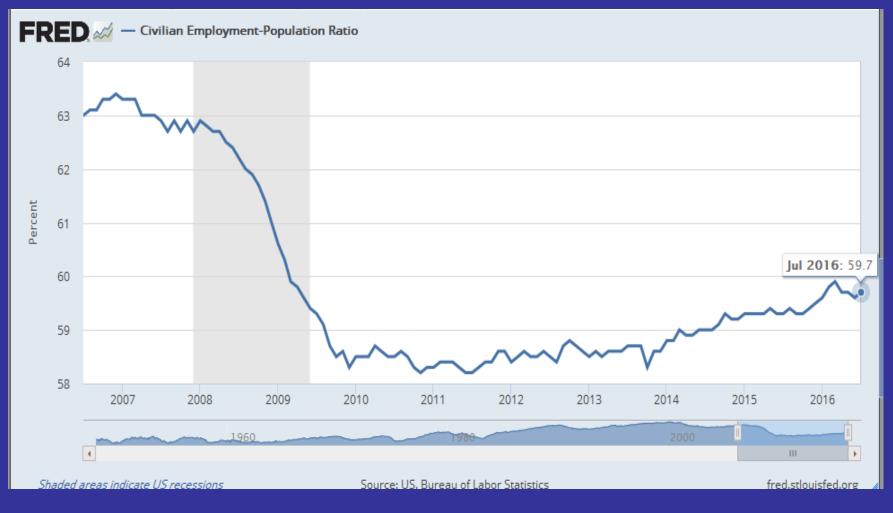
(http://finance.yahoo.com/news/us-competitiveness-project-harvard-business-school-hbs-michael-porter-030021739.html)

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

New part time jobs still outnumber full time by 1 million since the recession – also, 51% of workers make less than \$30,000/year Key reason why housing starts remain weak!



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



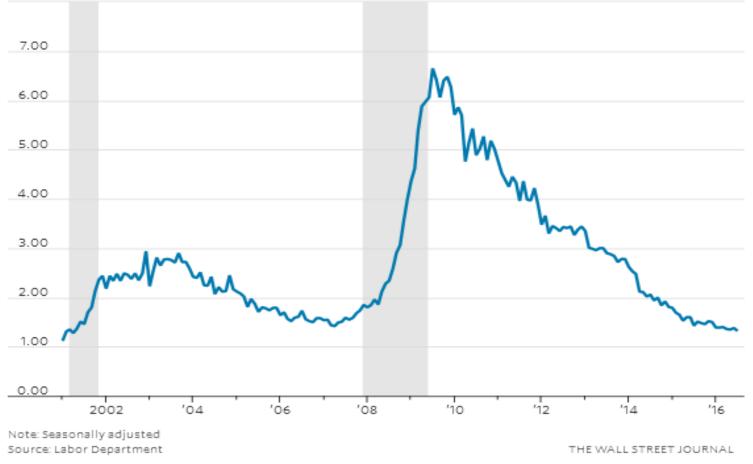
(http://www.wsj.com/articles/the-idle-army-americas-unworking-men-1472769641)

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

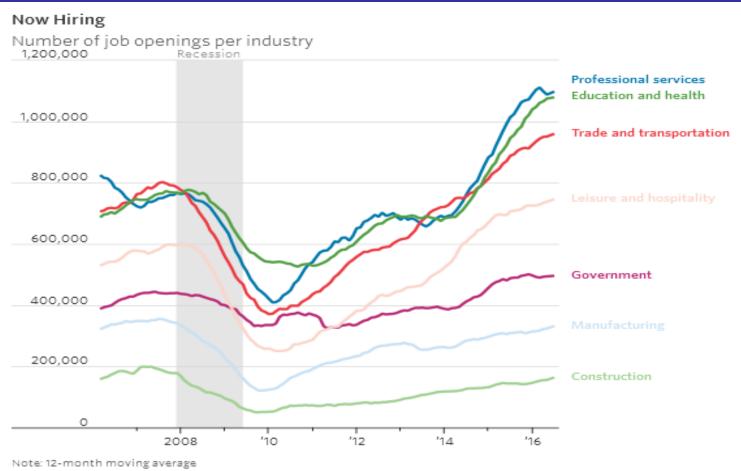
(http://blogs.wsj.com/economics/2016/09/07/a-new-record-for-job-openings-deepens-mystery-over-lack-of-hiring/)

Job Seekers

Number of unemployed workers per job opening 8.00 Recession



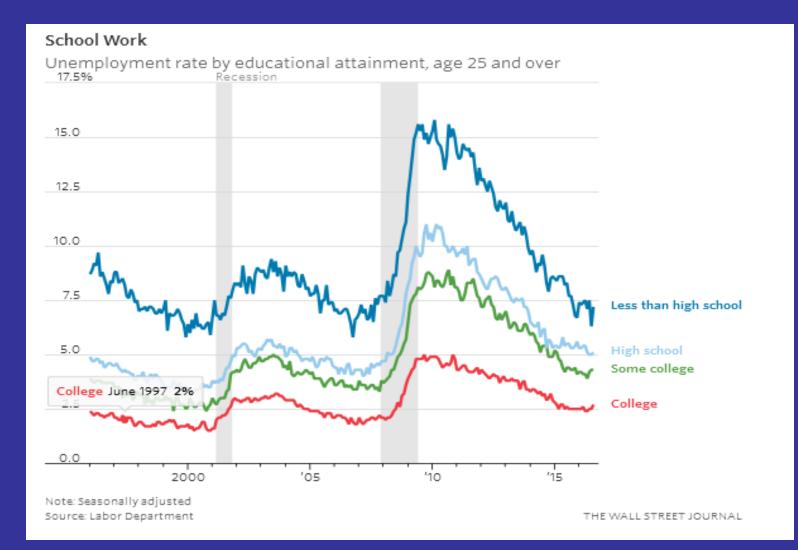
Here's where the jobs are – but, again, lack of skills means many of these positions go unfilled...



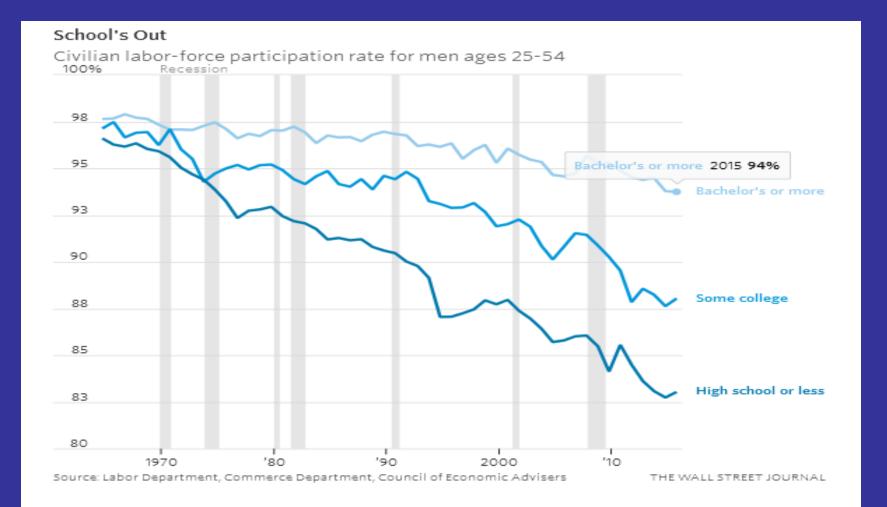
Source: Labor Department

THE WALL STREET JOURNAL

Education will help keep you out of the unemployment line



Getting an education will get you back into the labor force



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

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

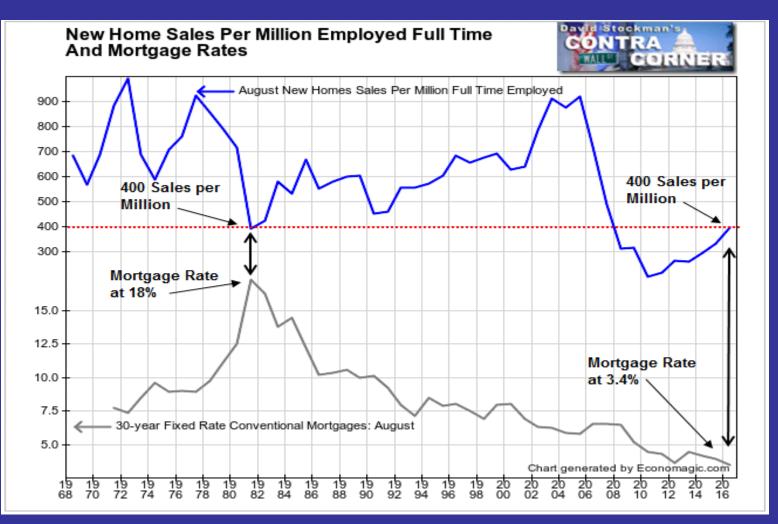
New Single Family Home Sales are the key statistic to watch for wood products demand – sales drive housing starts – this drives demand for wood products!

up 30% versus September 2015 OK. We're making progress, but still a terrible market



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%. 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!



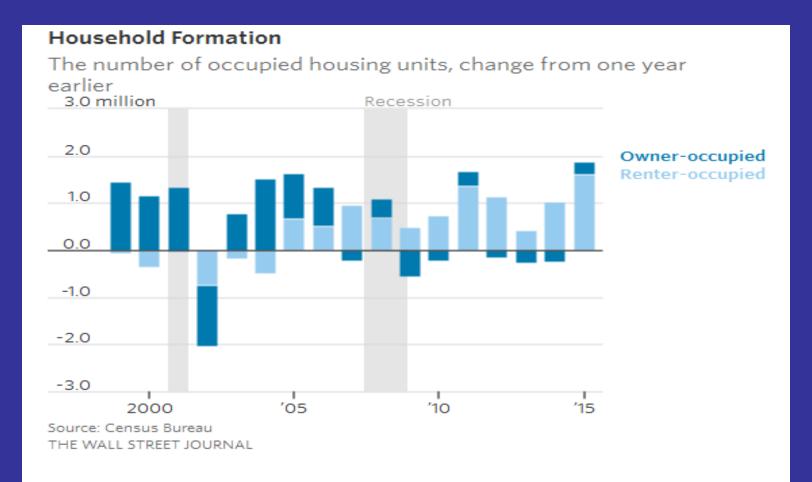
Resale market continues to improve - however, tight supply (which drives prices), currently at 4.5 months, remains a problem. Healthy market is about 6 months supply. <u>Median prices are up 5.6%, annual basis - 53rd</u> <u>consecutive monthly increase.</u>



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

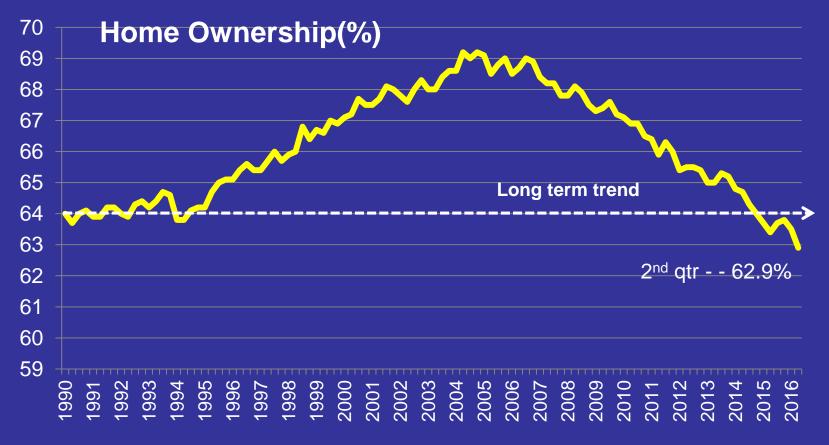


Household formations and shift to renting - - Falling Homeownership rate for millenial's – used to be 43% - now it is 33% - young people are renting

Recent study shows that people with college degree takes 5 years to save enough for down payment for starter home (with student debt – 10 years),

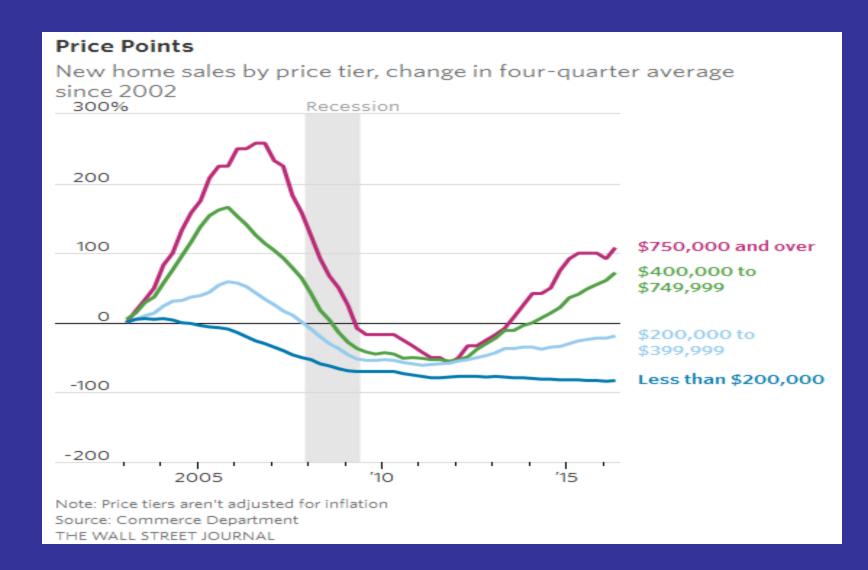
No college – 16 years (http://www.wsj.com/articles/homeownership-elusive-for-young-adults-without-college-degrees-1463909402)

Homeownership lowest in 50 years

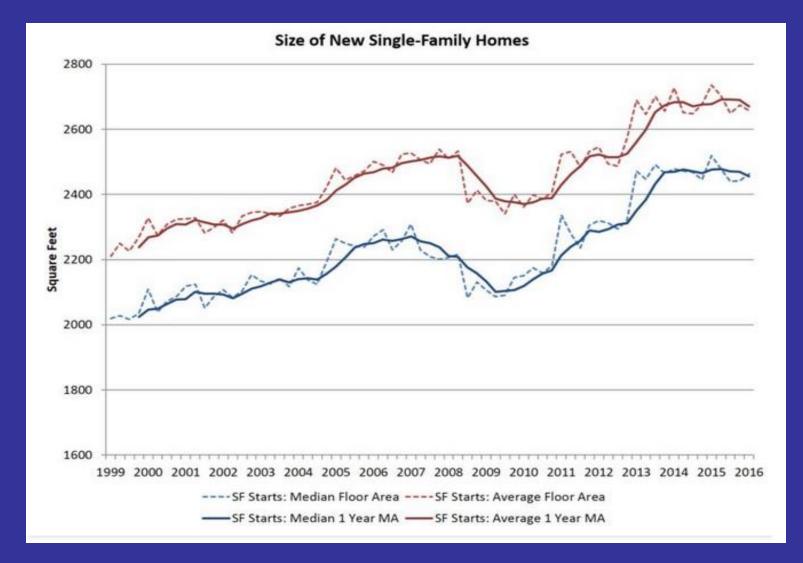


Source: Census (https://www.census.gov/housing/hvs/data/q413ind.html)

The supply of new homes is only 4.3 months – 6 months is considered healthy. The median price in July was \$295,000 – but the chart below shows this is heavily skewed to larger homes. 1st time buyers are missing so builders are building larger, more expensive homes.

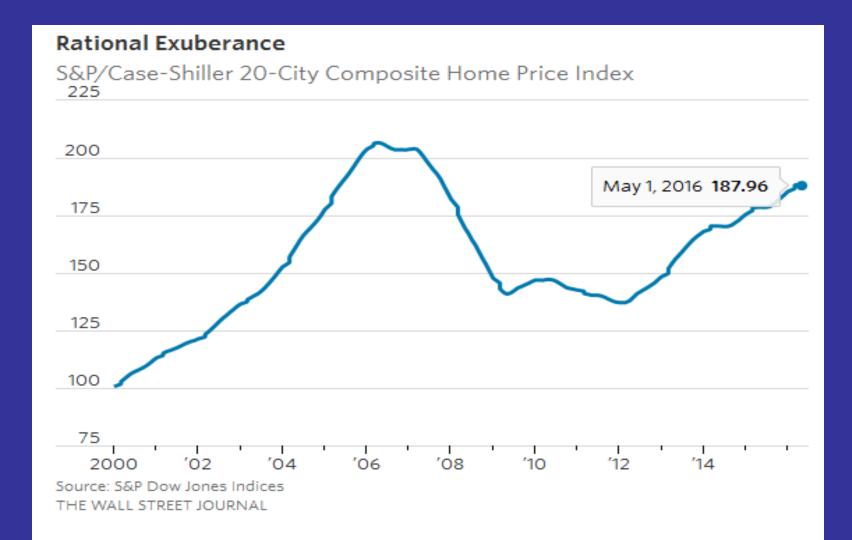


Builders are building bigger homes in response to weaker demand from millenials who buy starter homes



(http://eyeonhousing.org/2016/05/flat-trends-continue-for-new-single-family-home-size/http://eyeonhousing.org/2016/05/flat-trends-continue-for-new-single-family-home-size/)

Existing home prices almost back to pre-recession levels – good for existing homeowners, but a deterrent to millenial's and other potential buyers



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

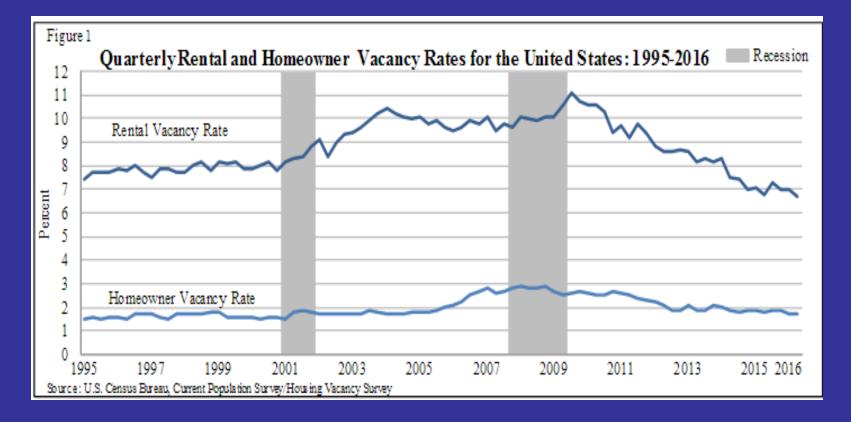
(http://www.wsj.com/articles/new-housing-crisis-looms-as-fewer-renters-can-afford-to-own-1433698639)

Why - - demographics; growing minority population; student debt; weak income growth; E.g., minorities (nonwhite) will make up 75% of net household growth over the next 3 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, for example, 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 have to improve if home ownership is to return to "good old days"

(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.

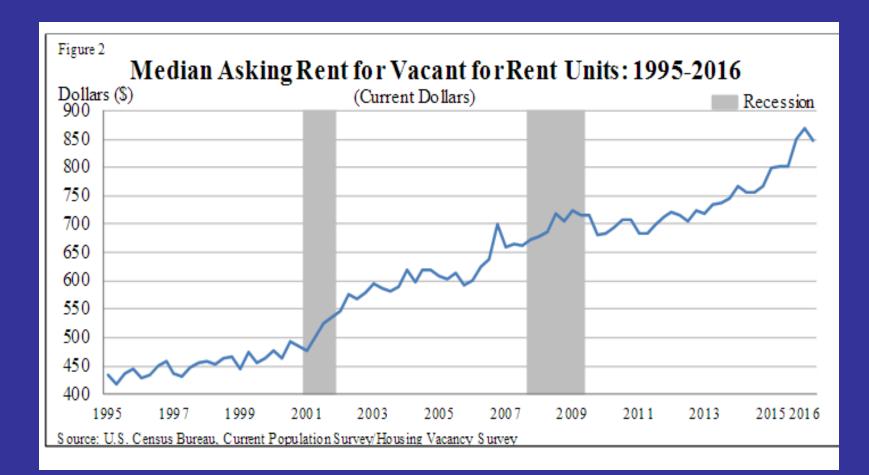
Rental vacancy rates lowest in 20 years Falling rental vacancy rates will drive rental prices higher and this will drive multi family construction – Economics 101 – <u>if I were a</u> <u>Builder, I would focus on rental construction</u>



Source; Census (http://www.census.gov/housing/hvs/files/currenthvspress.pdf)

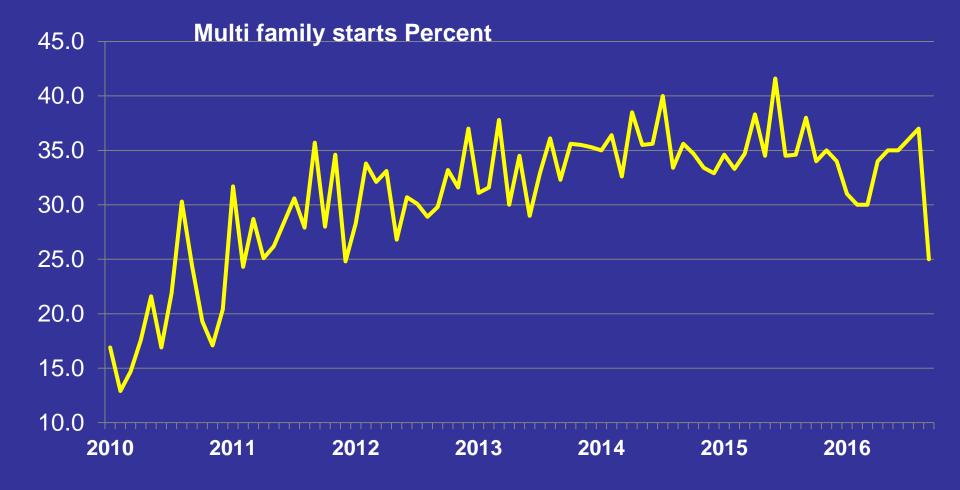
Increasing rents are slowing housing starts - -

more difficult for renters to save for down payment for house purchase

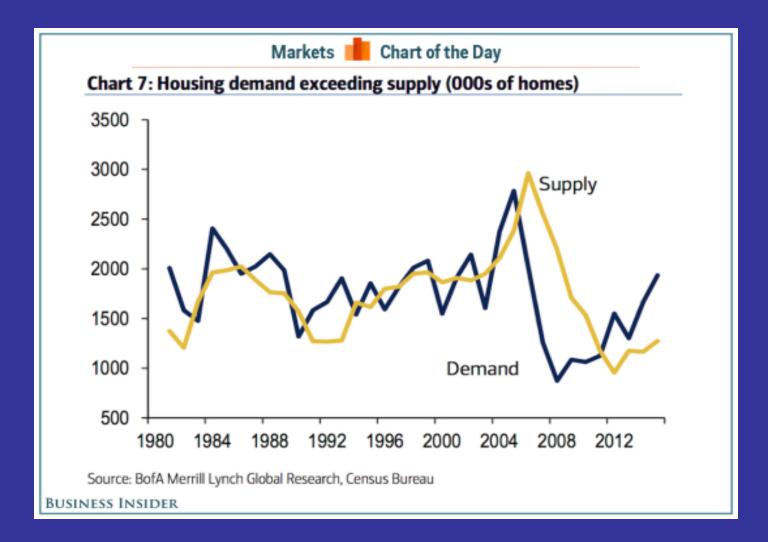


Multi family share of housing starts – upward trend expe for some time. Also, since the housing crash in 2008, sin have now reached 13% of overall housing stock, up from 9% in 2005 (http://blogs.wsj.com/economics/2015/07/20/signs-of-overheating-in-the-single-family-rent

Check numbers – why this drop?

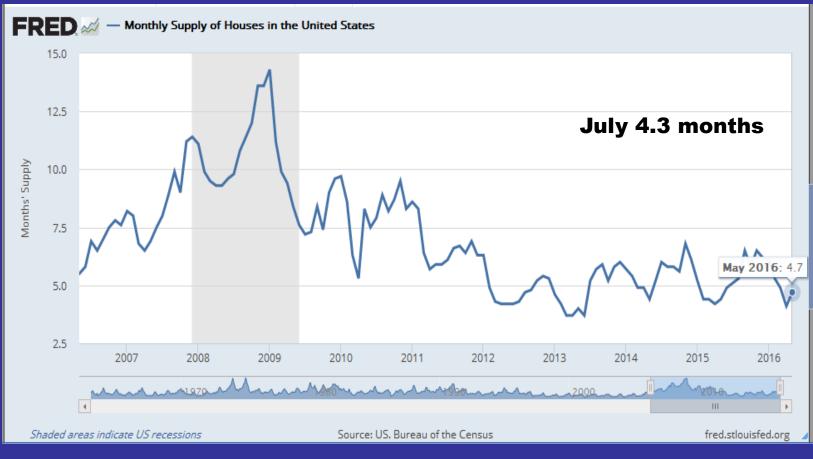


Tight supply drives up prices – existing homes At 4.7 months supply – normal supply is 6 months



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

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

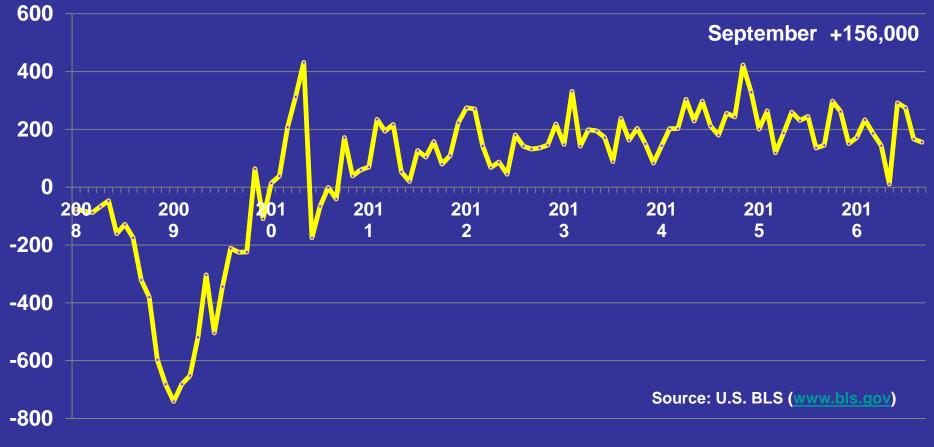


⁽https://research.stlouisfed.org/fred2/series/MSACSR)

More news on the labor front

Employment situation - OUr biggest problem – stuck near 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>

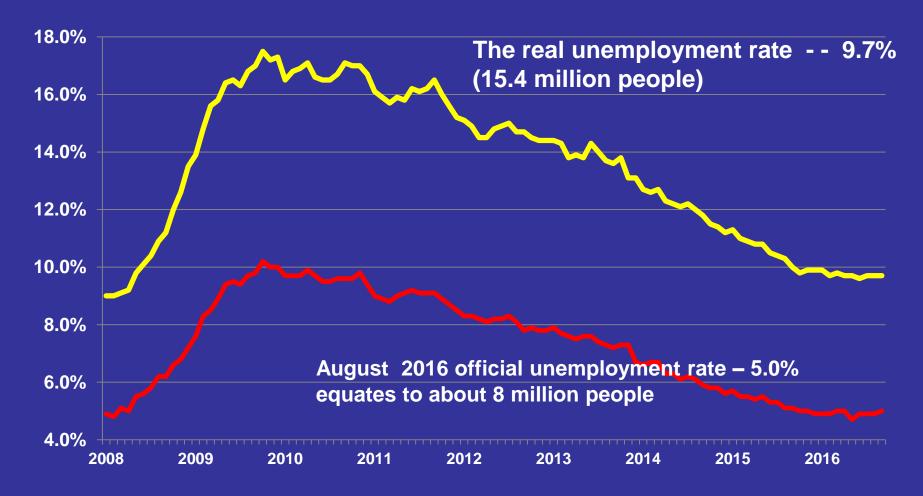
Net change in non farm payrolls – monthly, thousands



Good article on how too much government is killing innovation and job creation! (http://www.wsj.com/articles/whats-killing-jobs-and-stalling-the-economy-1464992963)

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

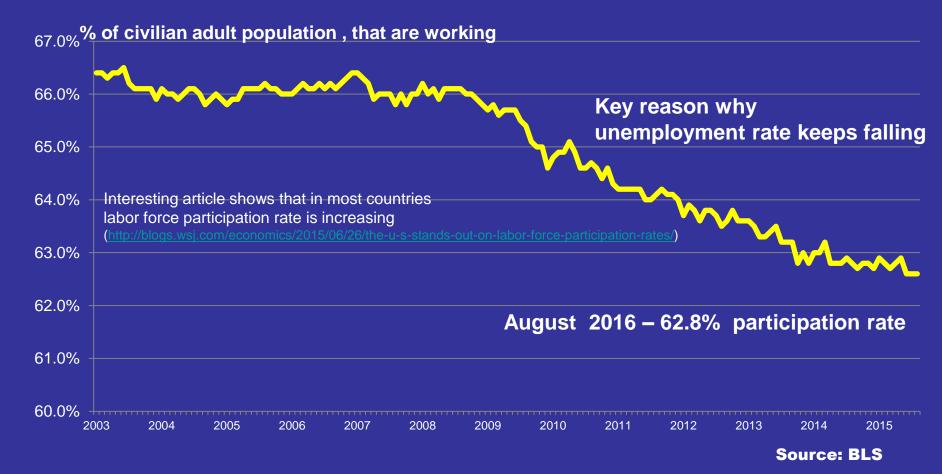
**There are about 16 million people either unemployed, underemployed, or stopped looking – Key reason why wage increases are stagnant!



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



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

- (1) Economy will continue to sputter -- 2016 growth expected to be about 2.0%
- (2) Housing market not healthy 1st time buyers (31% 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) Weak/no leadership from current administration and Congress,
 - our biggest problem neither Hillary nor "the Donald' will fix our problems
- (6) The fed can't make decisions doesn't know what to do confused soon, the U.S. will Join Europe and Japan with negative real interest rates. Negative rates are a clear sign of weak demand. 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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