# The 2017 Case for Aggressive Fiscal Spending on Infrastructure

## Despite Recent Job Growth, Reports of the U.S. Nearing Full Employment Have Been Greatly Exaggerated

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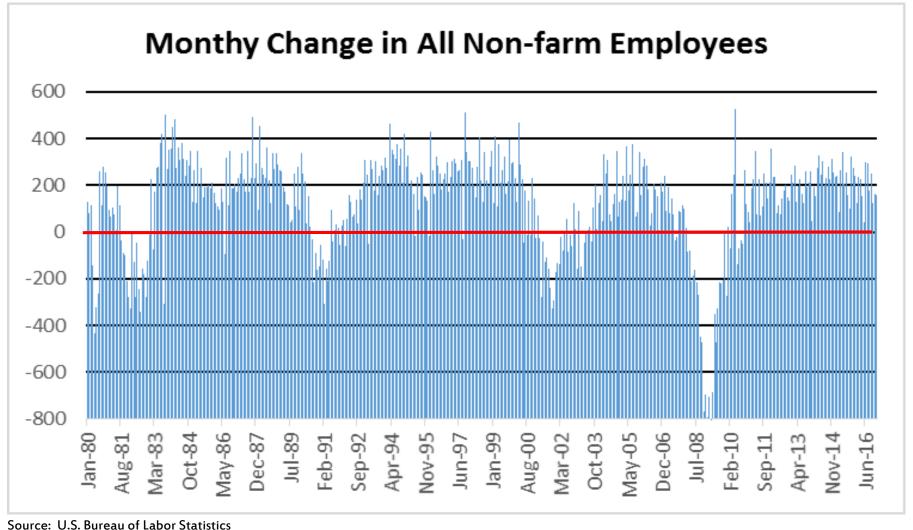




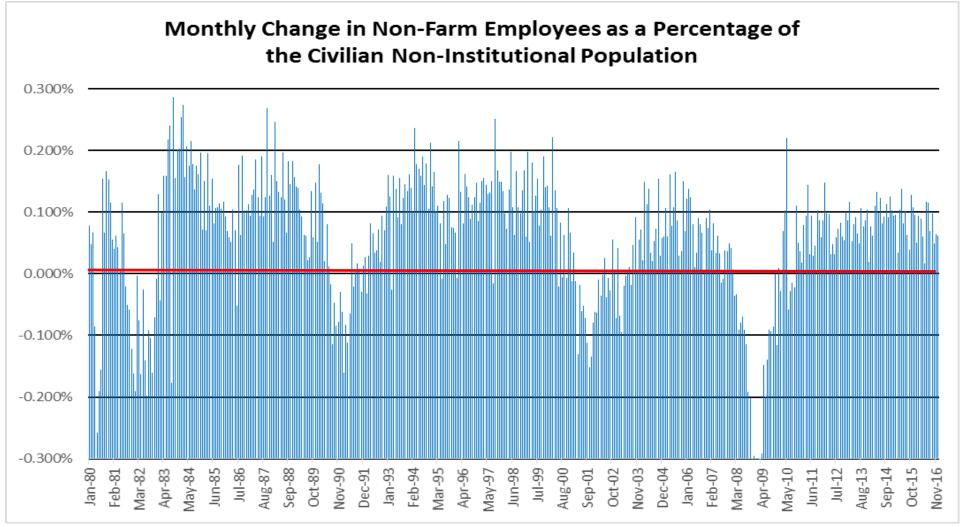
#### Some folks look at this and say "Mission Accomplished!"



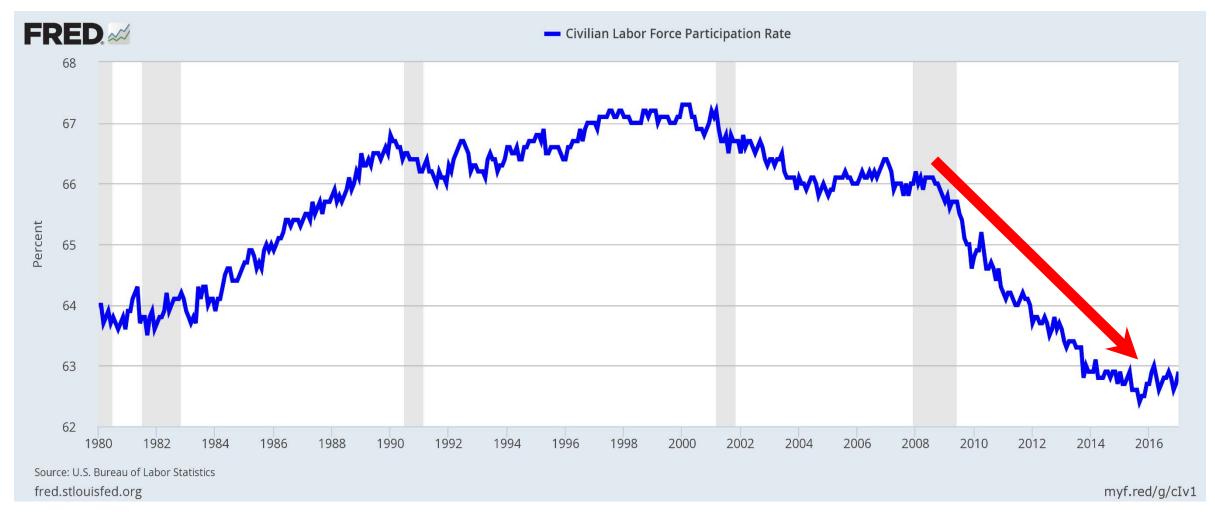
### Others take comfort that net job formation has recovered to levels typical of a recovery:



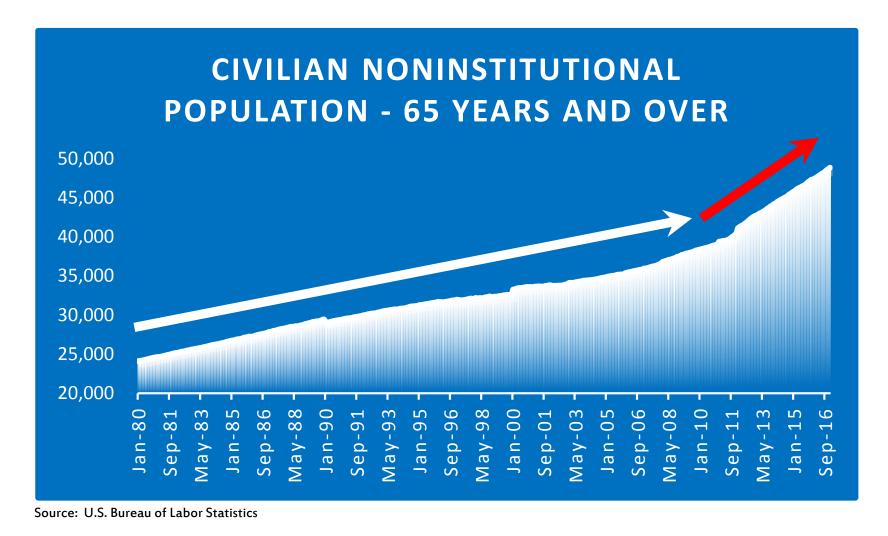
### Yet when net job formation is weighted for changes in population, the recovery looks considerably less robust:



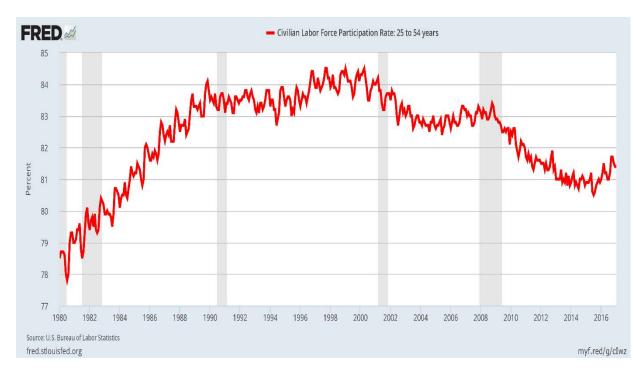
#### And an old story still haunts: The Post-Crisis Collapse in Labor Force Participation:

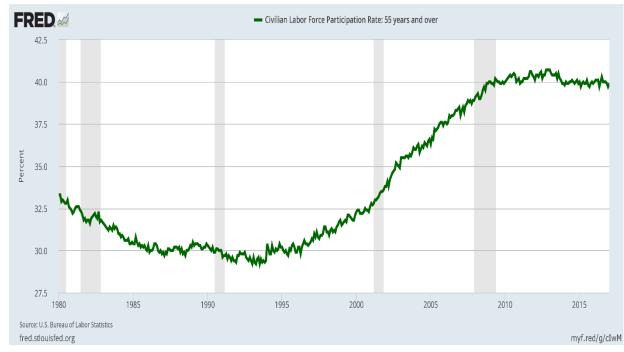


### LFPR collapse is often attributed to accelerated aging of the Baby Boom Generation:



#### But there is Clearly More to this Story than Just the Larger Cohort of Older People





Prime aged workers, 25 to 54, have left the labor force...

...and workers 55 and older are staying in the labor force at record levels.

## Labor force participation, the nominal unemployment rate and job formation mask an underlying picture that indicates persistent and sizable labor slack...

- The U.S. has become increasingly dependent on a subset of Low-wage and Low-hours jobs in the private service sectors for job creation since the Great Recession;
- Low-wage, low-hours ("LWLH") jobs are concentrated in four service sectors and subsectors, representing 44.5 million positions as of December 2016, or 36% of private sector U.S. jobs;
- > Yet, LWLH sectors have accounted for 60% of all net job creation since the end of 2007, the pre-Great Recession peak employment year.

### In addition to limiting aggregate incomes of Americans, and thus constraining aggregate demand, we see:

Much of the recovery in job openings, hires and turnover (taken as a sign of market strength) is occurring within the Low-wage/Low-hours sectors, to a significantly greater degree than prior to the Great Recession.

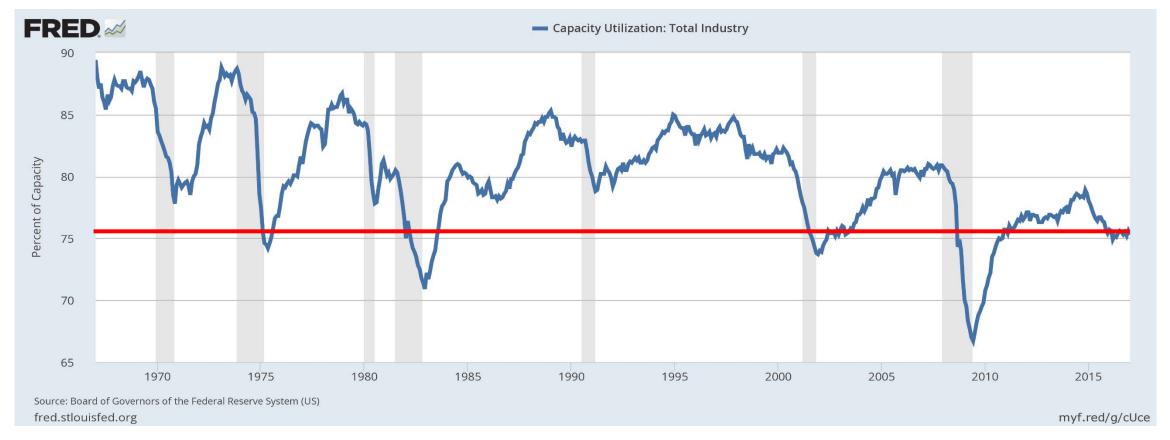
Evidence of a correlation between falling productivity growth levels in the U.S. economy and the increase in the proportion of less-productive, low-wage/low-hours jobs.

High-wage, High hours sectors that are experiencing reported (data-based and anecdotal) evidence of difficulty in filling positions, are often experiencing problems because of unattractive relative wages rather than a shortage of potential workers.

## Accordingly, this presentation argues for the commencement of a large, government sponsored infrastructure investment program in order to:

- Increase employment in the construction and materials manufacturing sectors (with appropriate "Buy-American" restrictions to prevent leakage), so as to "pull-up" overall wages as workers are drawn in from the services sectors to better-paying, goods-producing jobs;
- Benefit the many services sectors that support the goods-producing sectors;
- Provide the U.S. economy with tertiary benefits in the form of repaired, replaced and expanded transportation, utility, information technology, security and educational infrastructure.

Although not to digress, with capacity utilization at the lowest non-recession level in modern history, it is hardly surprising that persistent labor slack remains. But back to labor market issues...



### Better-paying jobs are mostly found in these sectors (December 2016): Average Average Implied

|   | Ni la a f   | A                   | Mark III     | VA / 1 .1 |          |
|---|-------------|---------------------|--------------|-----------|----------|
|   | Number of   | Average             | Weekly Hours | Weekly    | Annual   |
| Sector or Subsector                         | Jobs (000s) | <b>Hourly Wages</b> | Worked       | Earnings  | Earnings |
| Mining and Logging                          | 468         | 27.41               | 45.40        | 1,244.41  | 64,710   |
| Construction                                | 5,125       | 26.23               | 39.20        | 1,028.22  | 53,467   |
| <b>Durable Goods Manufacturing</b>          | 5,299       | 21.64               | 42.30        | 915.37    | 47,599   |
| Non-Durable Goods Manufacturing             | 3,350       | 19.01               | 41.10        | 781.31    | 40,628   |
| Wholesale Trade                             | 4,710       | 24.45               | 38.80        | 948.66    | 49,330   |
| Transportation and Warehousing              | 4,392       | 20.83               | 38.70        | 806.12    | 41,918   |
| Utilities                                   | 447         | 35.80               | 42.90        | 1,535.82  | 79,863   |
| Information                                 | 2,229       | 30.44               | 35.80        | 1,089.75  | 56,667   |
| Financial Activities                        | 6,513       | 26.35               | 37.10        | 977.59    | 50,834   |
| <b>Professional and Techinical Services</b> | 7,073       | 34.08               | 36.40        | 1,240.51  | 64,507   |
| Management of Companies                     | 1,471       | 27.57               | 38.80        | 1,069.72  | 55,625   |
| <b>Educational Services</b>                 | 3,082       | 22.25               | 31.66        | 704.51    | 36,635   |
| Healthcare                                  | 13,741      | 24.91               | 33.10        | 824.52    | 42,875   |
| Other Services                              | 4,725       | 19.56               | 30.80        | 602.45    | 31,327   |
| TOTAL OR WEIGHTED AVERAGE                   | 62,625      | 25.11               | 36.56        | 918.16    | 47,745   |

Source: U.S. Bureau of Labor Statistics

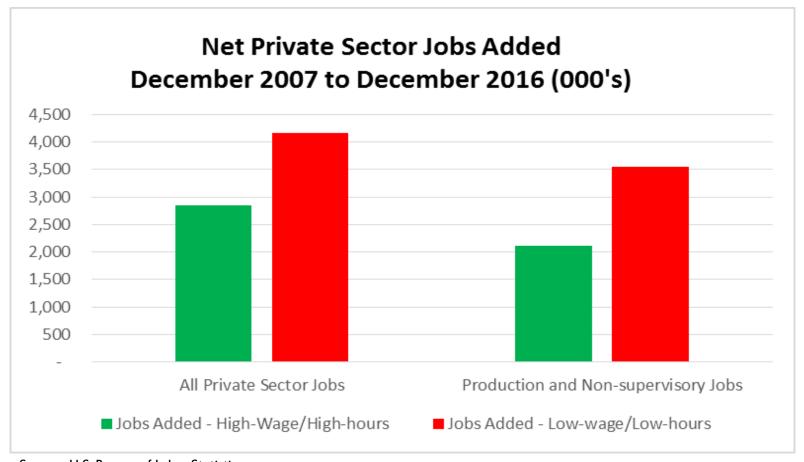
# Yet 60% of net new jobs created since December 2007 have been created in these LWLH sectors, paying less than \$20/hour and employing 44.5 million people (December 2016):

|  |                  |                     | <b>Average</b>      | <b>Average</b> | Implied  |
|--|------------------|---------------------|---------------------|----------------|----------|
|  | <b>Number of</b> | Average             | <b>Weekly Hours</b> | Weekly         | Annual   |
| Sector or Subsector                      | Jobs (000s)      | <b>Hourly Wages</b> | Worked              | Earnings       | Earnings |
| Retail Trade                             | 15,901           | 17.97               | 31.10               | 558.87         | 29,061   |
| <b>Administrative and Waste Services</b> | 9,143            | 19.81               | 34.40               | 681.46         | 35,436   |
| Social Assistance                        | 3,673            | 16.16               | 29.80               | 481.57         | 25,042   |
| Leisure and Hospitality                  | 15,756           | 19.19               | 26.00               | 498.94         | 25,945   |
| TOTAL OR WEIGHTED AVERAGE                | 44,473           | 18.63               | 29.86               | 556.40         | 28,933   |

Source: U.S. Bureau of Labor Statistics

**Author's Note**: The "Other Services" sector, included in the high-wage/high-hours classification, should arguably be incorporated within the low-wage/low hours group, above. It has not been included in this analysis given the wide variety in types of jobs included in that sector.

## For Production and Non-Supervisory Jobs (82% of all private sector jobs), 63% of all net positions created since 2007 are in sectors with below \$600 in weekly earnings...

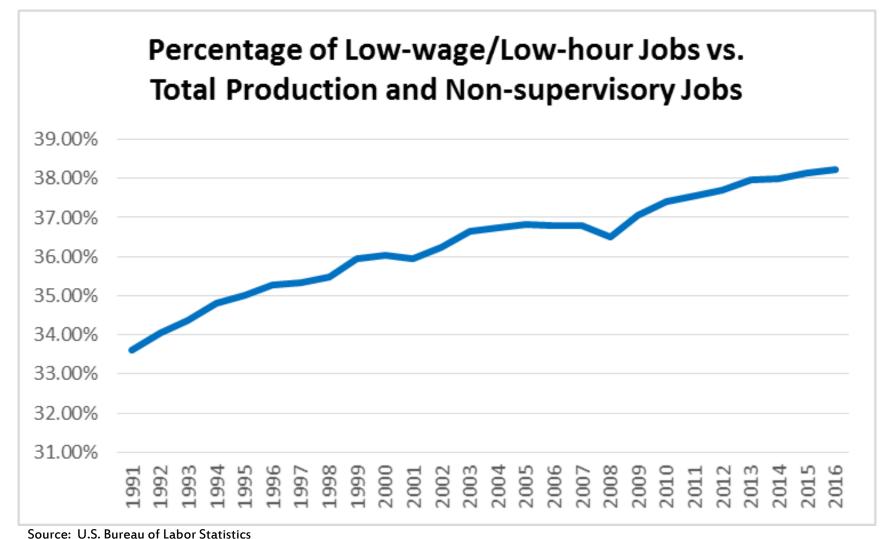


Source: U.S. Bureau of Labor Statistics

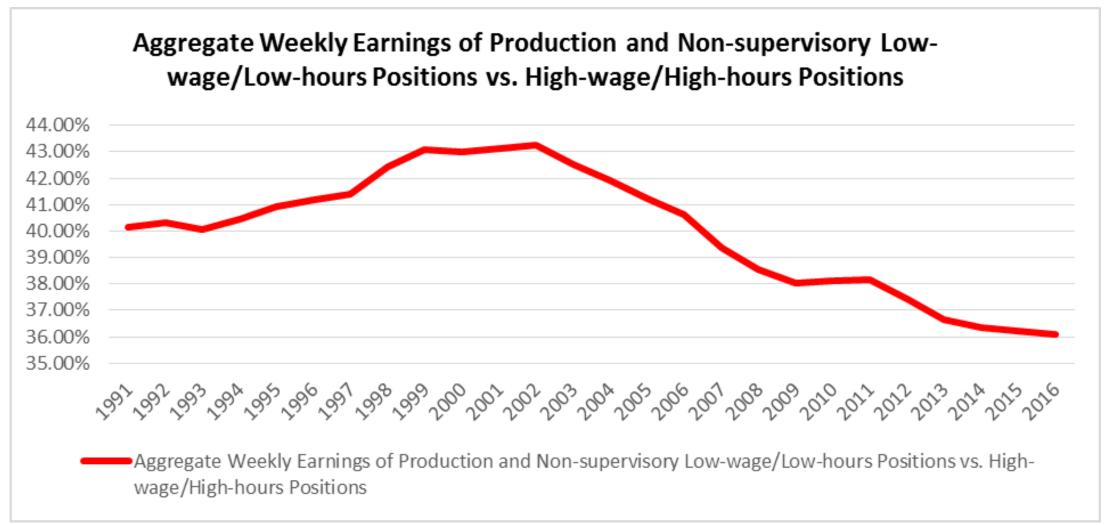
#### ...and here's how it plays out. Low-wage/Low-hours jobs increasing in proportion and paying half as much:

| Production and Non-supervisory Jobs                        | Number of<br>Jobs (000s) | Average<br>Hourly Wages | Average<br>Weekly Hours<br>Worked | Average<br>Weekly<br>Earnings | Implied<br>Annual<br>Earnings |
|--|--------------------------|-------------------------|-----------------------------------|-------------------------------|-------------------------------|
| High-wage/High-hours Positions                             | 62,625                   | 25.11                   | 36.56                             | 918.16                        | 47,745                        |
| Low-wage/Low-hours Positions                               | 38,766                   | 14.88                   | 28.74                             | 427.58                        | 22,234                        |
| Low-wage/Low-hours as a Percentage of High-wage/High-hours |                          | 59.25%                  | 78.60%                            | 46.57%                        | 46.57%                        |

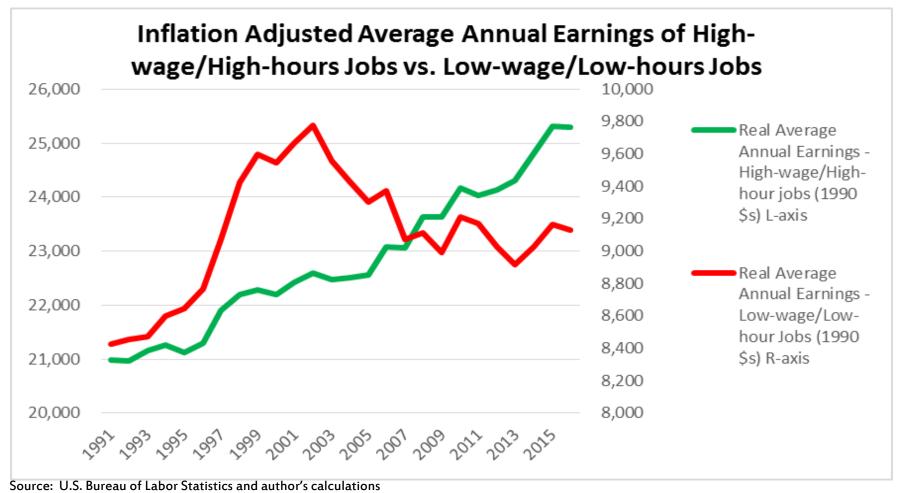
### And notwithstanding that the percentage of LWLH jobs, to total jobs, has crept steadily higher for the past 25 years...



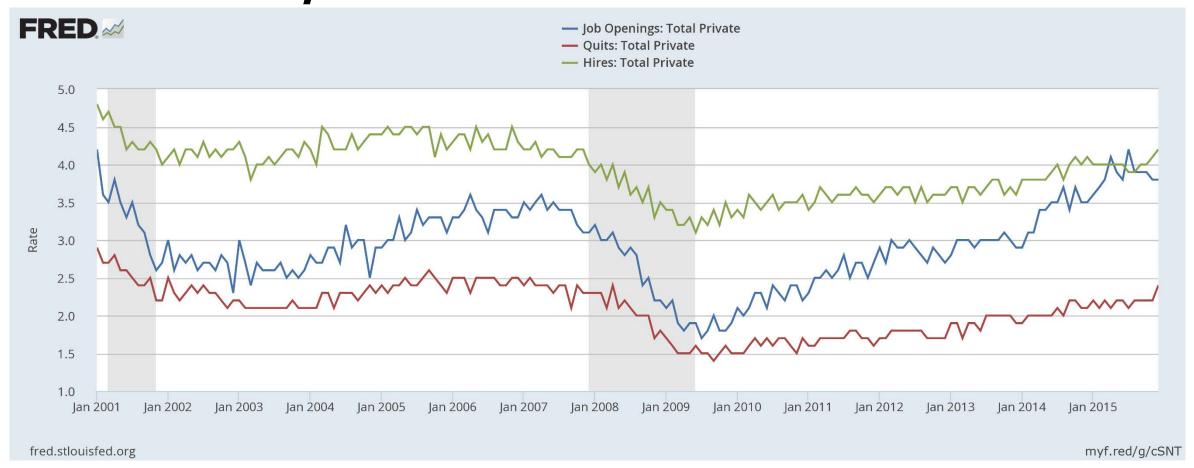
### ...the <u>aggregate</u> weekly earnings from LWLH jobs, has fallen relative to total earnings from all jobs:



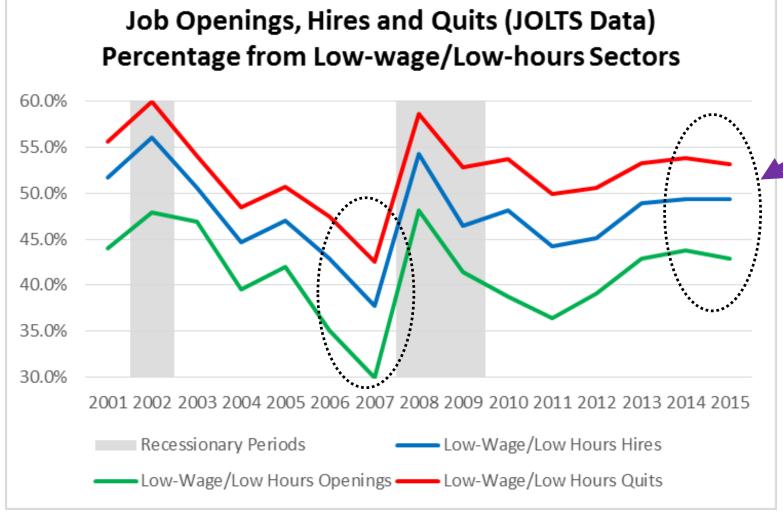
## Adjusted for inflation, average annual earnings of High-wage/High-hours jobs have risen, while those of Low-wage/Low-hours jobs have declined markedly this century:



## Many, in the Federal Reserve and elsewhere, have been encouraged by the recovery in Job Openings and Labor Turnover Survey (JOLTS) Data...



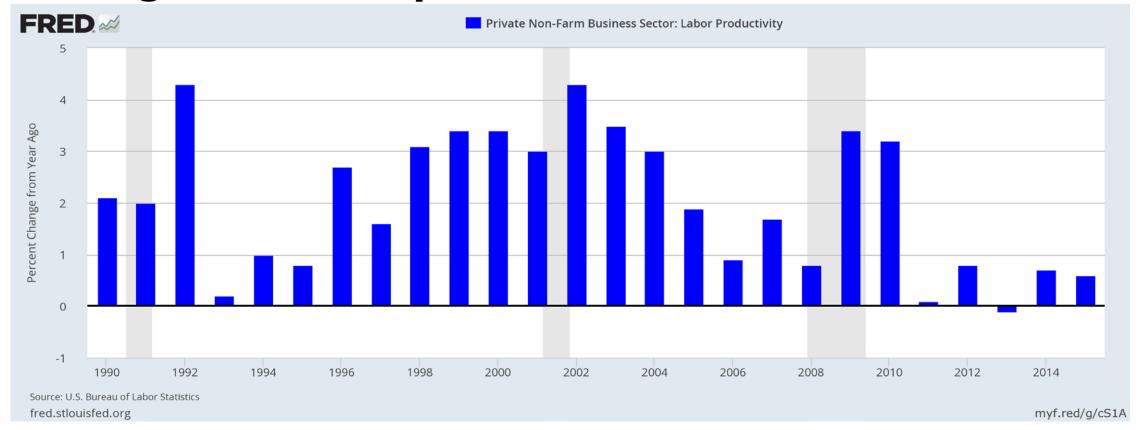
### ...ignoring that the rotation out of LWLH jobs to better paying jobs, expected in a recovery, has not materialized:



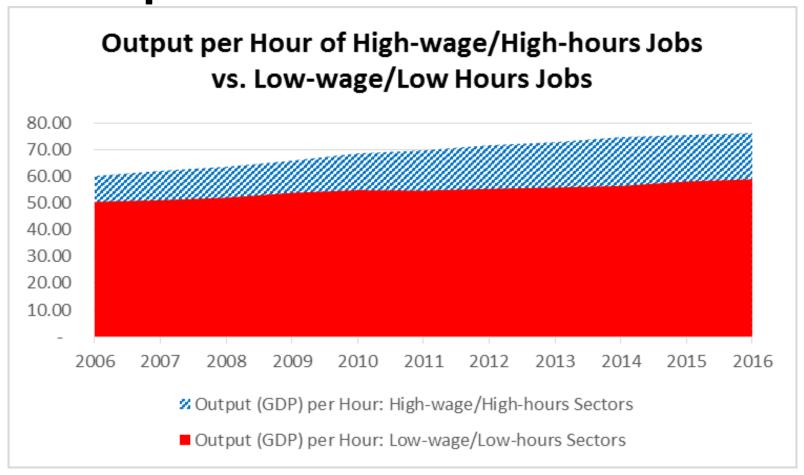
Remains Elevated in Comparison to Prior Expansion

Author's Note: While the temporal comparisons here are accurate, the percentage levels are the result of the author's calculations of two of the four (Administrative and Waste Services and the Social Assistance) components of the Lowwage/Low-hours sectors. Such calculations prorated the contribution of those components based on the relationship between the number of jobs created in each, and the jobs created in the larger sectors (Professional and Business Services and Healthcare and Social Assistance, respectively) that are actually reported in the more limited JOLTS data (which dates back only to 12/2001).

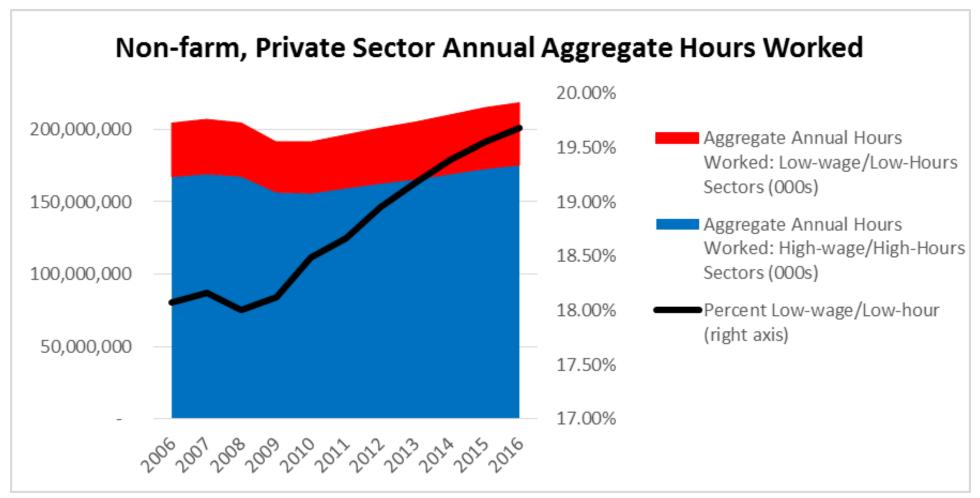
Among the other mysteries of the U.S. economy since 2005 has been the dramatic fall-off in labor productivity growth (increases in 2009 and 2010 resulted from job losses exceeding recessionary contraction in GDP):



#### The increased proportion of LWLH jobs has contributed to the overall decline in overall productivity growth, as such jobs are 30% less productive (as of 2016):



## Measured in annual aggregate hours worked, the proportion of labor dedicated to the less-productive, LWLH sectors has increased by 9%, to 19.75% from 18%:



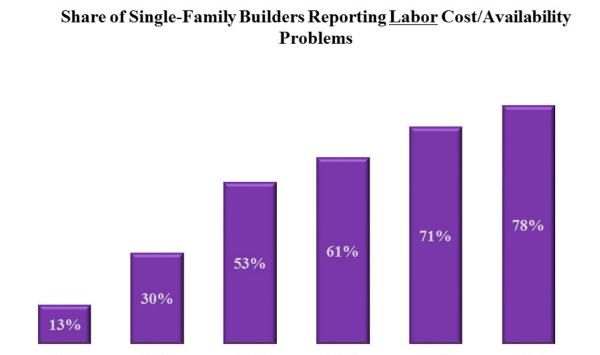
## For additional context, compare the take home pay of the average Production and Non-supervisory LWLH job and amounts received by an unemployed individual on benefits:

| (Assumes no State or Local Taxes)            | Average National   |         |   |           |            |  |  |
|--|--|---------|---|-----------|------------|--|--|
|  | Average Annual Take Home Pay of a Production and Non- supervisory Low- wage/Low Hours Worker |         | Unemployment and Per Person Supplement Nutrition Assistance Program (SNAP) Benefits |           |            |  |  |
|  |  |         |   |           |            |  |  |
|  |  |         |   |           |            |  |  |
|  |  |         |   |           | Difference |  |  |
| Gross Income                                 | \$   | 22,234  | \$  | -         |            |  |  |
| Unemployment Insurance Benefit               |  |         |   | 14,400    |            |  |  |
| SNAP Benefit                                 |  |         |   | 1,512     |            |  |  |
| Payroll Taxes (Social Security and Medicare) |  | (1,694) |   | -         |            |  |  |
| Federal Taxes                                |  | (1,280) |   | (360)     |            |  |  |
| Take Home                                    | \$   | 19,260  | \$  | 15,552 \$ | 3,707.77   |  |  |

Source: U.S. Bureau of Labor Statistics and Author's calculations

### Finally, let's take a look at an industry that has lately been complaining about difficulty in hiring construction workers – Homebuilding:

The National Association of Homebuilders asserts that in December 2016, there were 148,000 job openings between residential builders and third-party residential trade contractors. 78% of singlefamily builders report the cost/availability of labor was their biggest problem in 2016.



2013

2014

2015

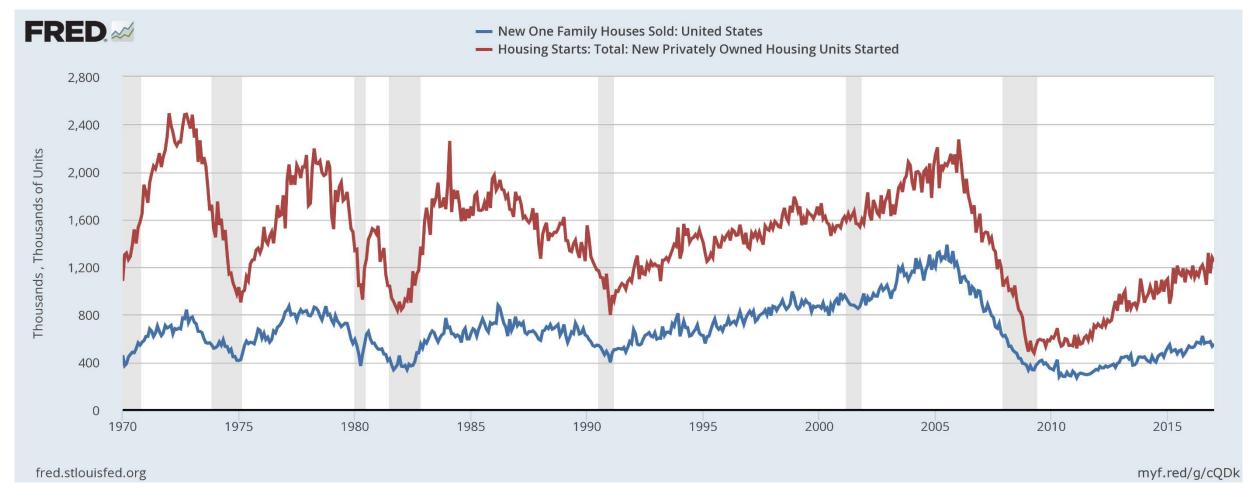
Source: HMI Survey, NAHB EcHp.

2012

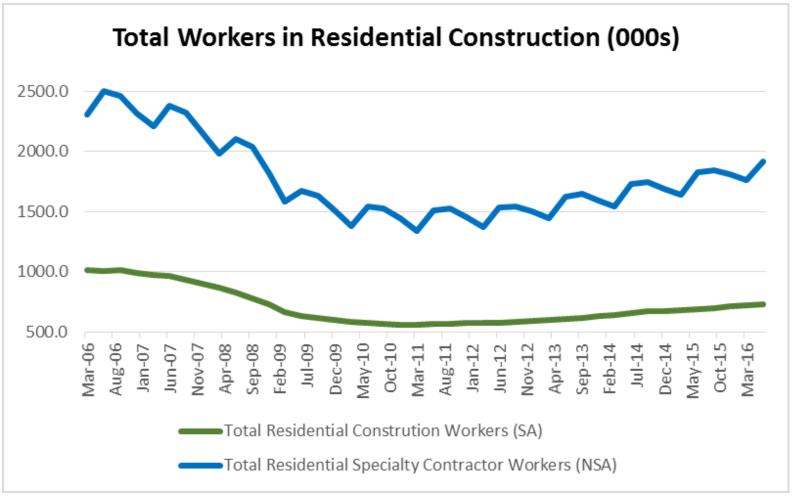
2011

2016

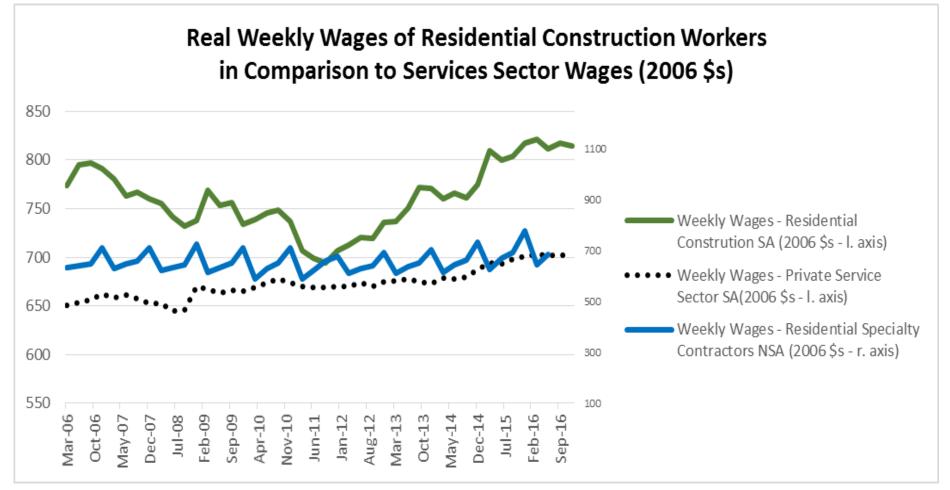
## But how can that be if housing starts and new home sales both remain at or near recessionary levels and at the lowest levels in modern history on a per capita basis?



And the number of residential construction workers has not nearly recovered to pre-recession levels. Is hysteresis the culprit? Have workers just gotten lazy? Nope....



## ...here's what's happening. The homebuilding industry is hemmed in because it is not able to hire at a cost that will permit profitability: "Labor demand at a price."

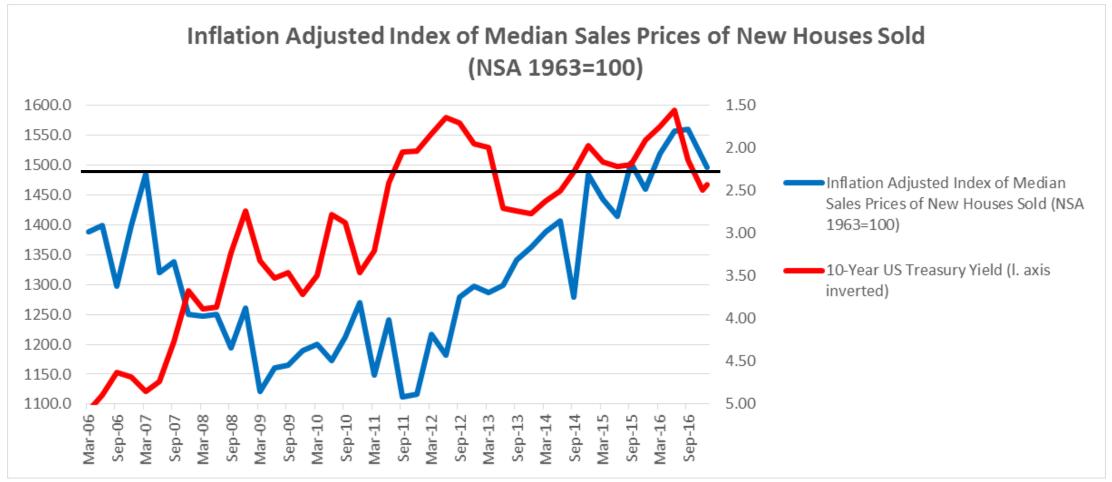


Real wages have been stagnant for specialty contractors during the recovery and are only back to pre-crisis levels for construction workers.

More importantly the gap between homebuilding wages and the average wage (all categories) in the services sectors has evaporated for contractors and is down to 15.8% from 21.5% for construction workers. And construction work is hard labor!

Source: U.S. Bureau of Labor Statistics and Author's calculations

## Real prices of new homes have recovered to pre-recession levels, but the boost was almost entirely driven by interest rates, not household-level, wage driven end-demand.



#### So here's what we conclude from all of this:

- There has been a substantial change in the types of jobs available and created in the U.S. during the recovery from the Great Recession (in comparison to prior recoveries) as over 60% of net additional new jobs have been in the Low-wage/Low-hour sectors.
- The rotation out of LWLH jobs, that would have been expected to occur well before what is now the 8<sup>th</sup> year following the end of the Great Recession, is still nowhere to be seen.
- The condition of having more labor expended on less productive LWLH jobs is contributing to the stagnation of overall U.S. labor productivity growth.

#### So here's what we conclude from all of this (cont'd):

- ➤ Perceived labor shortages in certain sectors of the economy are less related to robust end-demand then they are to relative wages among jobs in comparison to historical relationships. We believe this applies beyond the homebuilding sector examined in this presentation.
- While job openings have recovered sharply (substantially more so than hires and quits, although they have all improved) many are job openings "at a price," with wages less than what workers require to accept such positions and with end-demand still too weak to alter this phenomenon.
- ➤ BOTTOM LINE: There is substantial labor slack in the U.S. economy with many workers who would work for higher wages and longer hours not working, or accepting LWLH jobs out of necessity, despite qualifications.

The U.S. economy continues to suffer from an unabated global oversupply of labor, productive capacity and capital, the drain of consumer and industrial product manufacturing jobs to competitive economies, and decades of under-investment in public and private capital goods.

## THE PRIVATE SECTOR HAS DONE ALL IT REASONABLY CAN, YET THE U.S. LABOR MARKET REMAINS A SHADOW OF ITS FORMER SELF.

#### IT IS TIME TO REBUILD AMERICA