

# W.E. UPJOHN INSTITUTE FOR EMPLOYMENT RESEARCH

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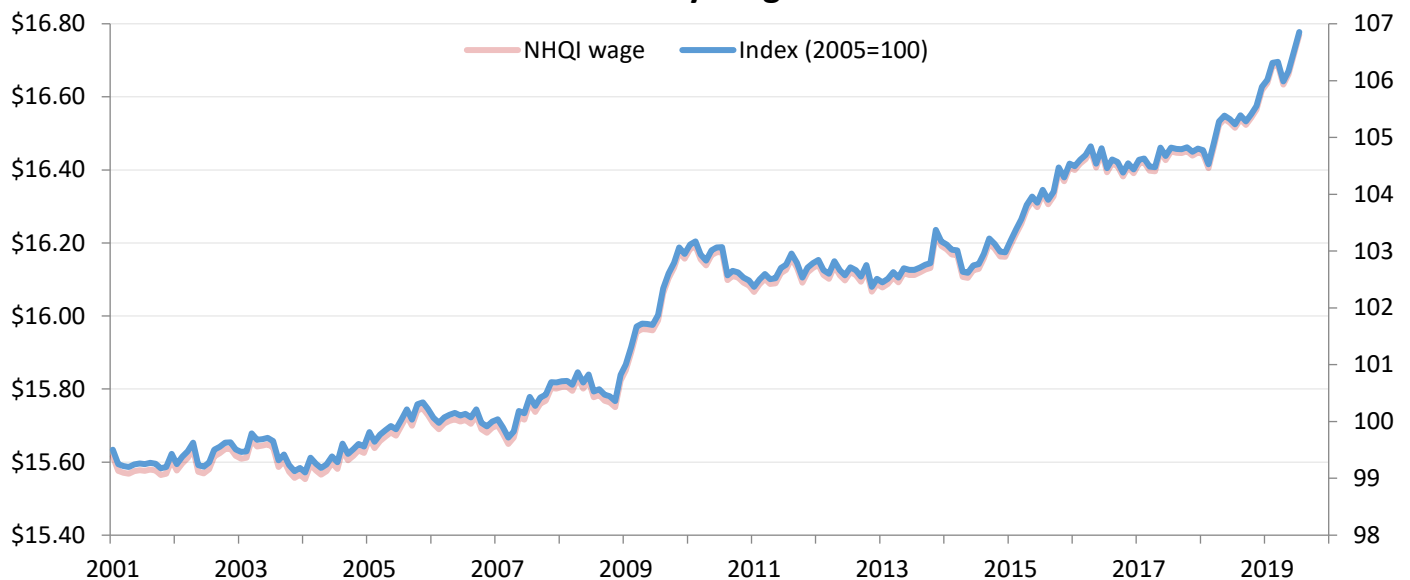
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## Upjohn Institute New Hires Quality Index for July 2019 up 1.5 percent from last year, plus special Labor Day look at acceleration in actual real wage growth

KALAMAZOO, Mich.— In July 2019, the Upjohn Institute New Hires Quality Index shows inflation-adjusted hourly earnings power of individuals starting a new job rose 1.5 percent from a year prior, rising from \$16.52 to \$16.77. This marks the third month of accelerating growth, a return to the high growth rates achieved in early 2019, and a new all-time high. Hourly earnings power of new hires has risen 6.9 percent since 2005, according to the index.

The index and accompanying [interactive database](#) and [report](#), developed by Upjohn Institute economist Brad Hershbein, fill a key gap in the measurement of hiring activity. The NHQI provides monthly updates on the volume and occupation-based wages of newly hired workers, and is available for different groups based on sex, age, education, and other characteristics.

### New Hires Hourly Wage Index: All



SOURCE: Upjohn Institute New Hires Quality Index

NOTE: The lighter line uses the left axis and shows the inflation-adjusted hourly wage of new hires. The darker line uses the right axis and shows the relative change since the base year of 2005.

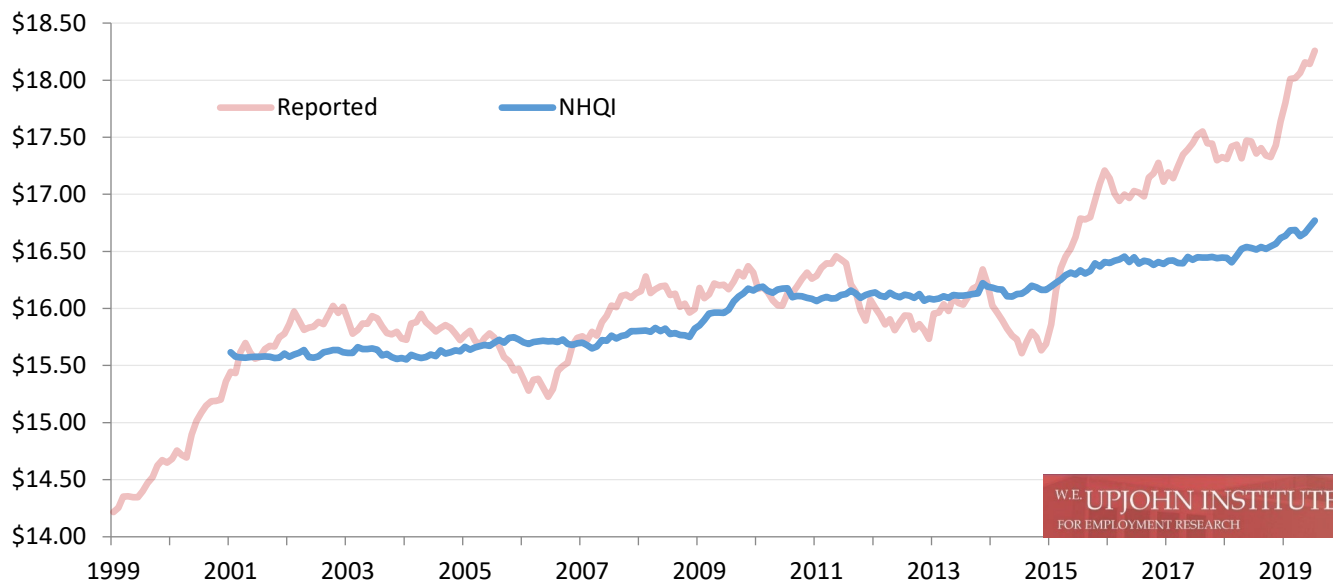


For this month's release around Labor Day, we again showcase trends in actual, reported wages of newly hired workers and compare these with the NHQI. As documented in the FAQ below, the NHQI does **not** measure actual wages but rather the earnings power of newly hired workers as proxied by their occupation and demographic characteristics. While there are pitfalls to using actual wages of new hires (also described in the FAQ), they can sometimes be illustrative, especially when compared to the NHQI.

While [one year ago](#) the release documented concerns of relatively slow wage growth despite large employment gains, the past year has [featured](#) many [stories](#) of [faster wage growth](#), at least among incumbent workers. Even though there are [some signs](#) this faster wage growth [may be tailing off](#), it can be useful to take a longer perspective. In particular, because existing [theory](#) and [evidence](#) suggests that wages of new hires should be more responsive to economic conditions than wages of incumbents, looking at growth in the former can shed important insight on the strength—or possible weakness—of the labor market.

The NHQI shows that newly hired workers have steadily become more skilled, with particularly sharp growth since 2018, but it does not address whether these workers are being paid commensurate with these higher skills, or how a stronger economy has translated into actual wage growth. The figure below plots the NHQI wage (in blue) and the average reported wage of newly hired workers (in salmon); both are adjusted for inflation to year 2018 dollars.<sup>1</sup>

**NHQI and CPS Reported: Real Hourly Wage**

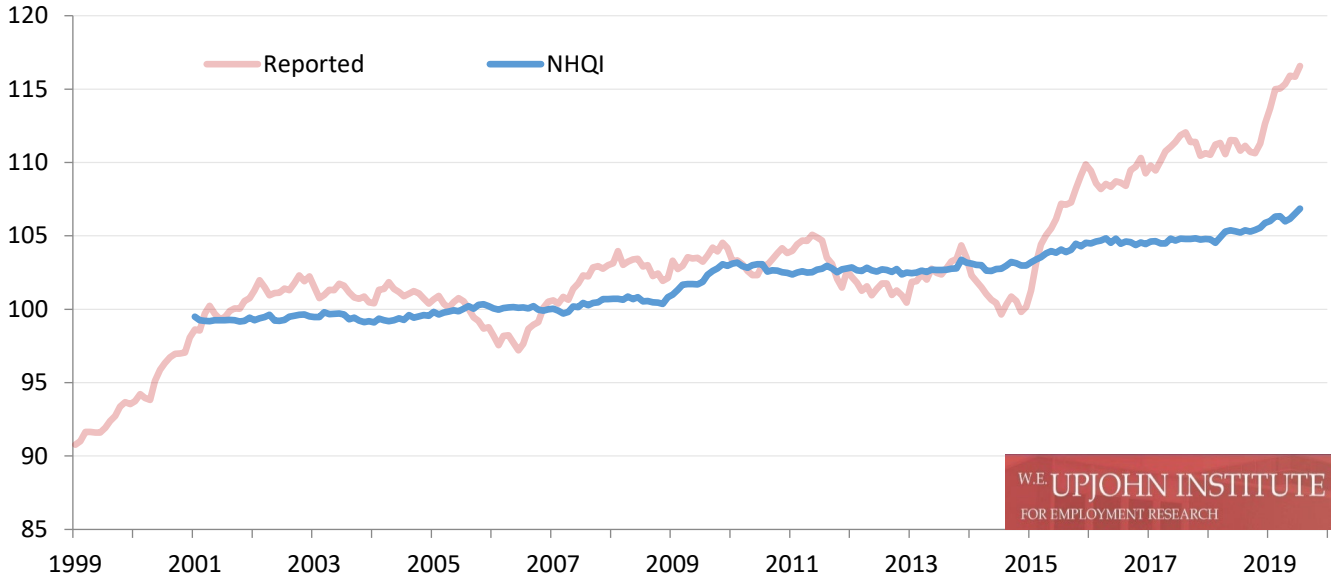


Over the past 12 months, actual inflation-adjusted hourly wages of new hires have been on a tear, jumping 5.2 percent to \$18.26, considerably faster than the [1.8 percent average real wage growth for incumbent workers](#), and also faster than the 1.5 percent growth in the NHQI wage index. Roughly speaking, the difference between the two series implies that real wage growth, controlling for changes in the occupations and demographics of new hires, is up 3.7 percent on average, an impressive pace last seen in 2015. This sharply contrasts with the trend over the preceding 12 months, from July 2017 to July 2018, when real wage growth was almost completely flat.

To understand longer-term changes, we normalize each wage series to its respective value in 2005, shown in the figure below. With last year's spurt, real hourly wages of new hires have grown 16.6 percent since 2005, with practically all this growth occurring over the last four years. Netting out the 6.9 percent growth in the NHQI since 2005, composition-adjusted wages of new hires have grown 9.7 percent, or just under 0.7 percent per year.

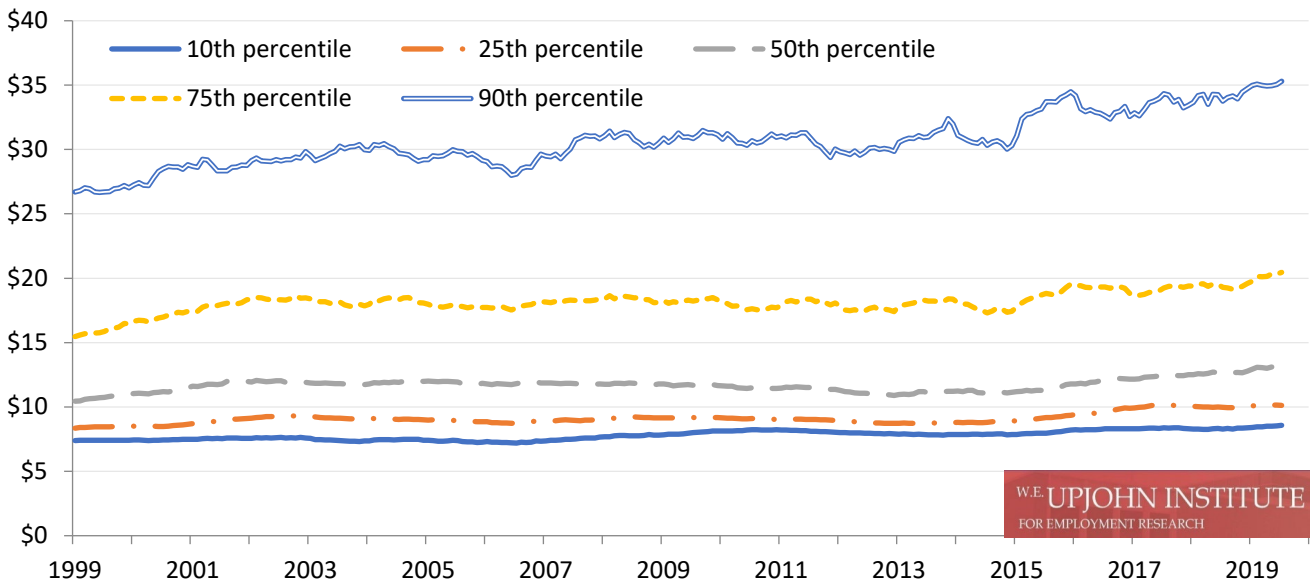
<sup>1</sup> As detailed in the [technical report](#), the reported wage includes only non-imputed responses, and for consistency with the NHQI, is also shown as a 12-month lagged moving average. The figure is an updated version of the one in the technical report and the July 2018 release. CPS stand for Current Population Survey, the source for identifying newly hired workers.

## NHQI and CPS Reported: Real Hourly Wage (2005=100 Index)



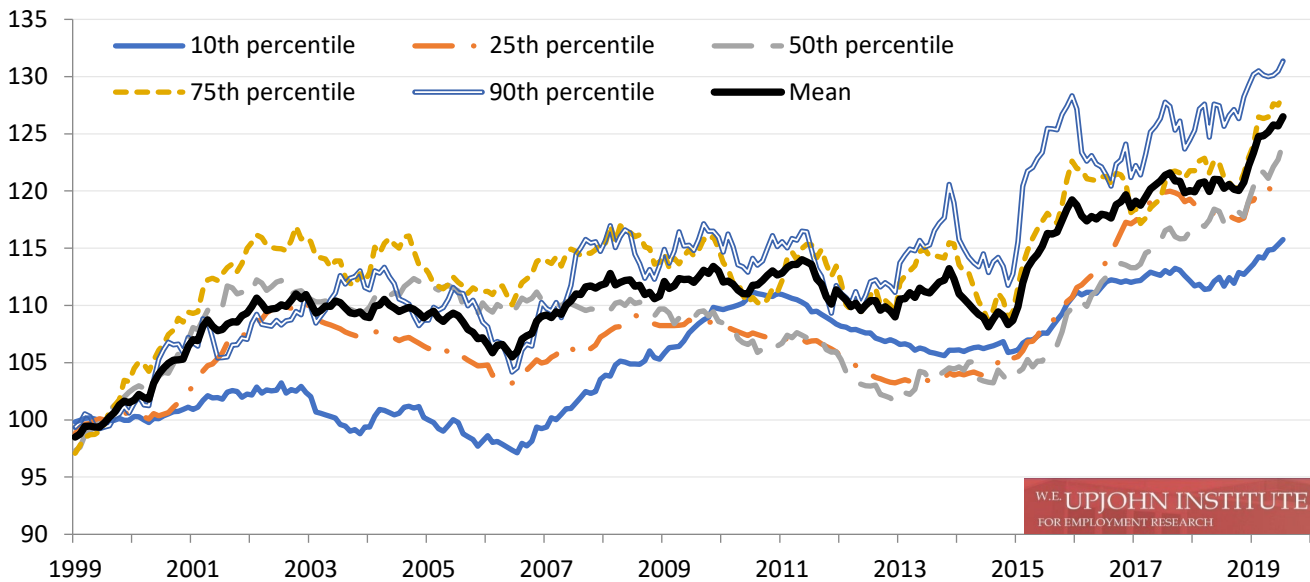
The rapid growth in the average wage, however, does not necessarily mean that all parts of the wage distribution are growing similarly. Was the uptick over the past year widespread or concentrated among higher earners? The figure below provides context by showing the real hourly reported wage (\$2018) of new hires for different percentiles. For example, at the 10<sup>th</sup> percentile—the point at which 10 percent of new hires makes less and 90 percent make more—hourly wages in July 2019 were about \$8.57, slightly above the federal minimum wage. In contrast, at the 90<sup>th</sup> percentile, wages were \$35.30 per hour, more than four times as much. The 50<sup>th</sup> percentile, or median, where half of newly hired workers earn more and half earn less, was \$13.33, much less than the mean value of \$18.26 found above. Thus, earnings of the typical new hire (represented by the median) diverge quite a bit from the average, which is skewed by higher earners. The divergence speaks to the importance of looking at the entire wage distribution.

## CPS Reported: Real Hourly Wage, Selected Quantiles



To see growth in the distribution more clearly, however, it is helpful to normalize the series. In the next figure, each selected wage percentile is normalized to its value in 1999, and the mean is included for reference. (The trends are clearer than if normalized to 2005.)

### CPS Reported: Real Hourly Wage, Selected Quantiles (1999=100)



Whereas the mean reported wage of new hires increased 16.6 percent from 2005 to today, when the reference frame is 1999, the cumulative increase is one-and-a-half times as much, at 26.5 percent. This works out to an annualized rate of growth of 1.2 percent since 1999 and 1.1 percent since 2005, but almost all this growth was concentrated at the turn of the millennium or since 2015. The average real wage of new hires was essentially unchanged between 2002 and 2015.

The graph also shows sizable deviations from the mean over the long term for the different percentiles. Since 1999, for example, the 10<sup>th</sup> percentile real wage of new hires has risen by just 15.8 percent, while that for the 90<sup>th</sup> percentile is up 31.4 percent, twice as much. Over the past year, however, the trends are somewhat more sanguine, with meaningful growth throughout the distribution. In particular, 10<sup>th</sup> percentile wages are up 3.6 percent, 25<sup>th</sup> percentile wages are up 1.5 percent, median and 75<sup>th</sup> percentile wages are both up 5.9 percent, and 90<sup>th</sup> percentile wages are up 4.5 percent. Thus, newly hired workers in the top half of the distribution continued to pull away from those in the bottom half, although the middle caught up slightly to the top.

To summarize, both the NHQI—which captures the earnings power of new hires through their occupations and demographic characteristics—and actual reported wages have both risen sharply in the past 12 months, and this growth appears to have been widespread. This marks a notable contrast from the preceding 12 months, when the NHQI had risen only slightly (0.3 percent) and actual real wages had dropped 0.9 percent. Moreover, net job growth over the past 12 months has averaged 1.5 percent, barely down from the 1.7 percent over the previous period. Thus, the labor market of the past year has been quite kind to workers taking new jobs. It is an open question, however, whether the [economic headwinds](#) may reverse this good fortune over the next year.

These statistics and many more, as well as interactive charts and data downloads, can be found at the website for the Upjohn Institute New Hires Quality Index: [www.upjohn.org/nhqi](http://www.upjohn.org/nhqi).

The full report, including methodology, can be found here:  
[http://www.upjohn.org/nhqi/reports/NHQI\\_report.pdf](http://www.upjohn.org/nhqi/reports/NHQI_report.pdf).

All data will be regularly updated during approximately the first week of the second month following the reference of the data release month. For example, data for August 2019 will be released during the first week of October 2019. To sign up to regularly receive monthly press releases for the Upjohn Institute New Hires Quality Index, visit: [www.upjohn.org/nhqi/signup](http://www.upjohn.org/nhqi/signup).

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## FAQ

### 1. What is the New Hires Quality Index?

The New Hires Quality Index (NHQI) is a consistent way of measuring the earnings power of people taking new jobs each month, allowing comparisons over time.

### 2. How is the Index constructed?

The Index is based on the occupations of newly hired workers as documented in the [Current Population Survey](#), the same source used to produce the national unemployment rate each month. Separate data on the hourly wages for each occupation from another government survey, [Occupational Employment Statistics](#), are connected to the newly hired workers in the Current Population Survey. These hourly wages are then statistically adjusted to account for differences in the demographic composition of new hires (sex, race and ethnicity, education, and age) before being averaged.

### 3. Does the Index measure actual, reported wages of newly hired workers?

No. Although the data used to create the Index do have some information on self-reported wages (or those reported by another household member), many economists consider these self-reported wages [increasingly unreliable](#), as a growing fraction of workers refuse to answer the wage questions, and the government's attempts to impute (make an "educated guess") for these workers are [problematic](#). Moreover, because relatively few workers are even asked the wage questions, and only a small subset of these are newly hired, use of the self-reported wage data would lead to very small samples.

The Index captures change in the wages of new hires due to both changes in the mix of occupations hired and the demographic characteristics of individuals taking new jobs. It will not capture change in the wages of new hires due to other factors, such as individual aptitude, geography, or employer characteristics.

A comparison of the Index with a series derived from the actual self-reported wages in the Current Population Survey can be found in the [technical report](#). An analysis of self-reported wages can also be found in the [July 2018 press release](#).

### 4. Does the NHQI count self-employed workers?

No, the NHQI excludes self-employment or people who work for themselves.

### 5. How often is the NHQI updated?

Every month, with the release by the Census Bureau of the Current Population Survey microdata. Updates will be posted on the [NHQI website](#) during the first week of the month, covering data from two months ago. Data are currently available from January 2001 through July 2019. To receive updates through email or social media, [visit the signup page](#).

### 6. What data are available on the NHQI website?

The [NHQI website](#) contains monthly data for all components of the NHQI. The four main components are: the hourly wage index, the hiring volume index, the wage bill index (the product of hourly wages and hiring volume), and the hires per capita index. Each component is available in its actual level or normalized to the base year 2005. In addition to providing data for all new workers, the NHQI exists for men, women, different age groups, different education groups, different races/ethnicities, different industry sectors, different regions, native and foreign-born, full- and part-time workers, and different types of new hires (the newly employed and employer changers). All data can be charted interactively or downloaded for separate analysis.