

W.E. UPJOHN INSTITUTE FOR EMPLOYMENT RESEARCH

300 South Westnedge Avenue • Kalamazoo, Michigan 49007 • 269-343-5541 • www.upjohn.org

NEWS RELEASE: HOLD FOR RELEASE UNTIL WEDNESDAY, SEPTEMBER 2, 2020 at 8:30 am

CONTACT: JUSTIN CARINCI carinci@upjohn.org 269-385-0431 or

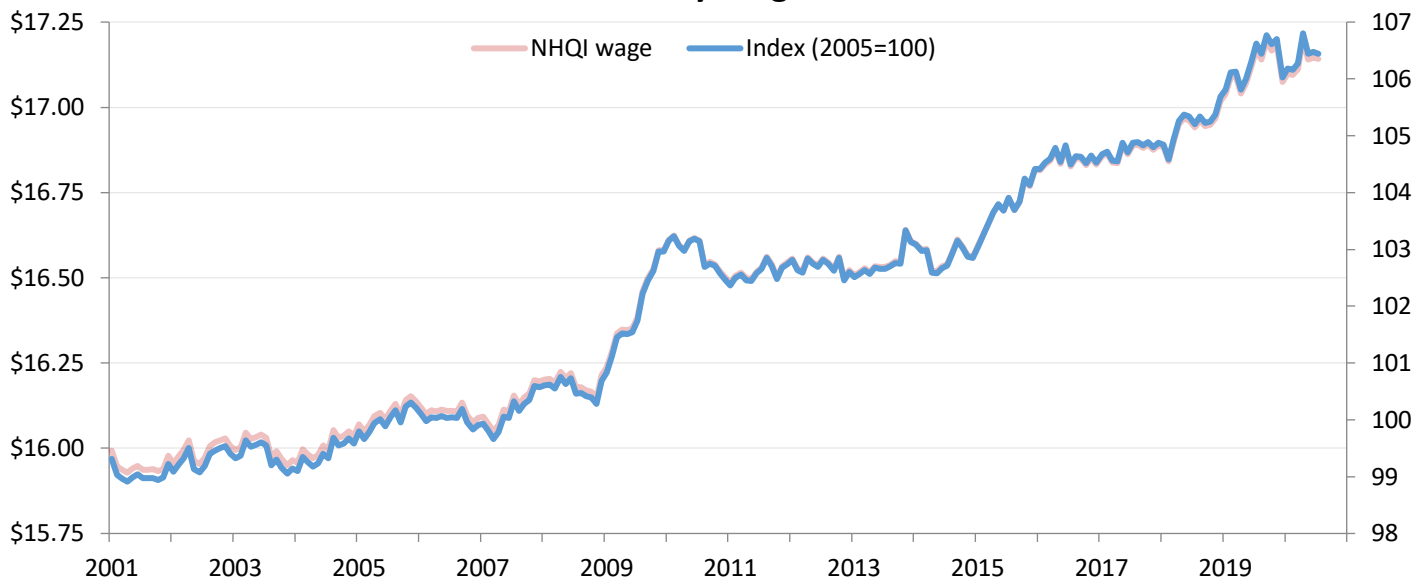
BRAD HERSHBEIN hershbein@upjohn.org 269-385-0437

Upjohn Institute New Hires Quality Index for July 2020 nearly unchanged over year and month, plus special Labor Day look at actual real wage growth

KALAMAZOO, Mich. — In July 2020, the Upjohn Institute New Hires Quality Index shows inflation-adjusted hourly earnings power of individuals starting a new job was essentially unchanged from June and slipped slightly, by 0.2 percent from a year prior, with a current reading of \$17.14. Despite a temporary dip over the winter, the index has changed little since last summer, after having risen rapidly over 2018 and the first half of 2019. The stagnation is notable in that the surge in (re-)hiring over the past three months, as many businesses reopened after closing for COVID-19-related shutdowns, has not appreciably affected the wage 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.

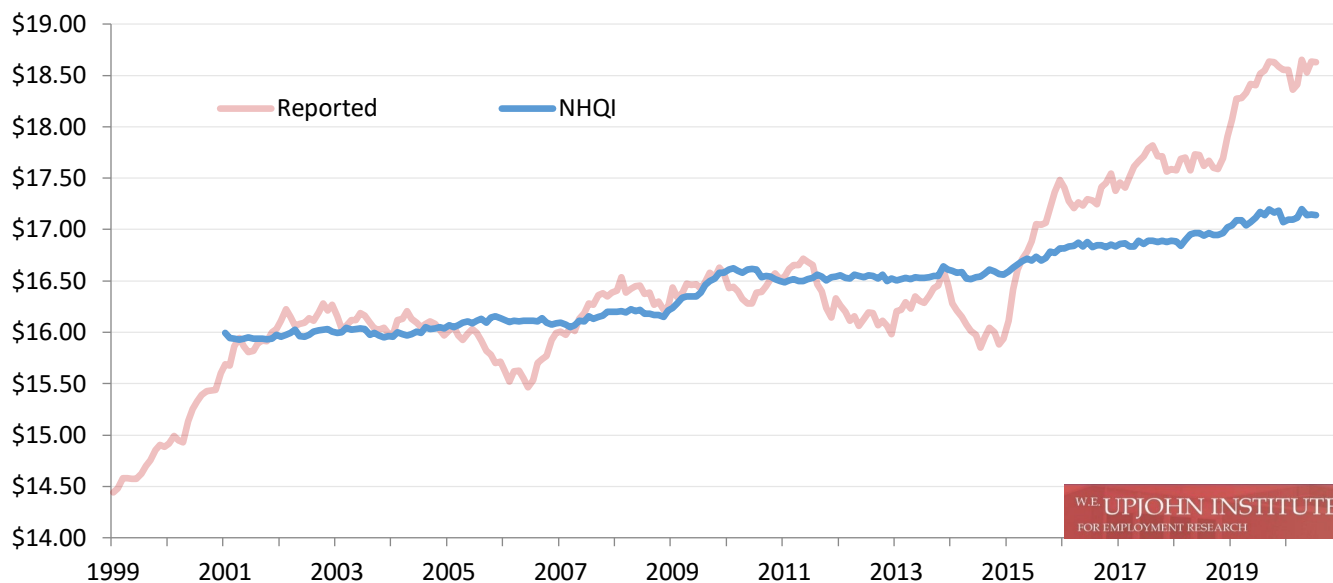


For this month's release around Labor Day, we again showcase trends in actual, reported wages of newly hired workers and compare these with the NHQI. As documented in the FAQ below, the NHQI does **not** measure actual wages but rather the earnings power of newly hired workers as proxied by their occupation

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. 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 in 2018 that has since flattened, 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 2019 dollars.¹

NHQI and CPS Self-Reports



While NHQI trends tend to be gradual, given their construction, actual self-reported wages of new hires have tended to change in rapid spurts. As [profiled earlier](#), there have been periods of rapid wage growth in the late 1990s, in the mid-2000s right before the Great Recession, in 2015, and as covered in [last year's special Labor Day release](#), in 2018. During other times wage growth has stalled or even turned negative. Over the past year, and well before COVID-19 hit, both the NHQI and actual self-reported wages of new hires have leveled off, suggesting the labor market was likely cooling several months before the pandemic began.

Over the past 12 months (July to July), actual inflation-adjusted hourly wages of new hires edged up by a scant 0.6 percent, with even this slight gain coming early last fall; the current hourly wage of \$18.63 is the same as last September. In contrast, the previous year's growth was a blistering 5.1 percent. Comparisons with [wage growth of incumbent workers](#) are always tricky during recessions, when the [composition of the workforce can change](#) as a result of rapid job loss, but the [Atlanta Federal Reserve Bank's Wage Growth Tracker](#) shows real wage growth of 2.2 percent between July 2019 and July 2020 for the same set of workers employed in the same job both months, a slight increase from the 1.9 percent the previous year.² This means that wages of new hires

¹ 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 and 2019 releases.

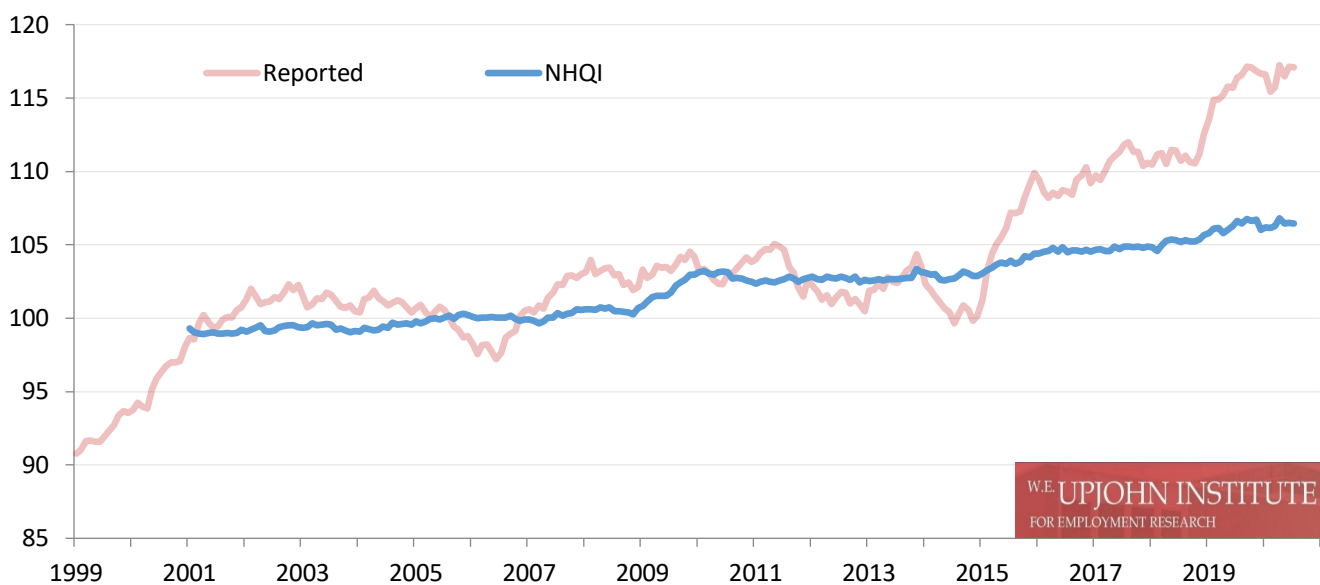
² The Wage Growth Tracker shows *nominal* wage growth, unadjusted for inflation; the numbers shown here are adjusted for inflation [in the same manner](#) as the self-reported wage growth of new hires.

grew faster than that of incumbent workers between the summer 2018 and summer 2019, but the reverse was true the following year.

Nonetheless, the 0.6 percent actual wage growth was still slightly faster than the 0.2 percent loss 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 0.8 percent on average, less than a quarter the rate of the previous year and more in line with recent historical trends.

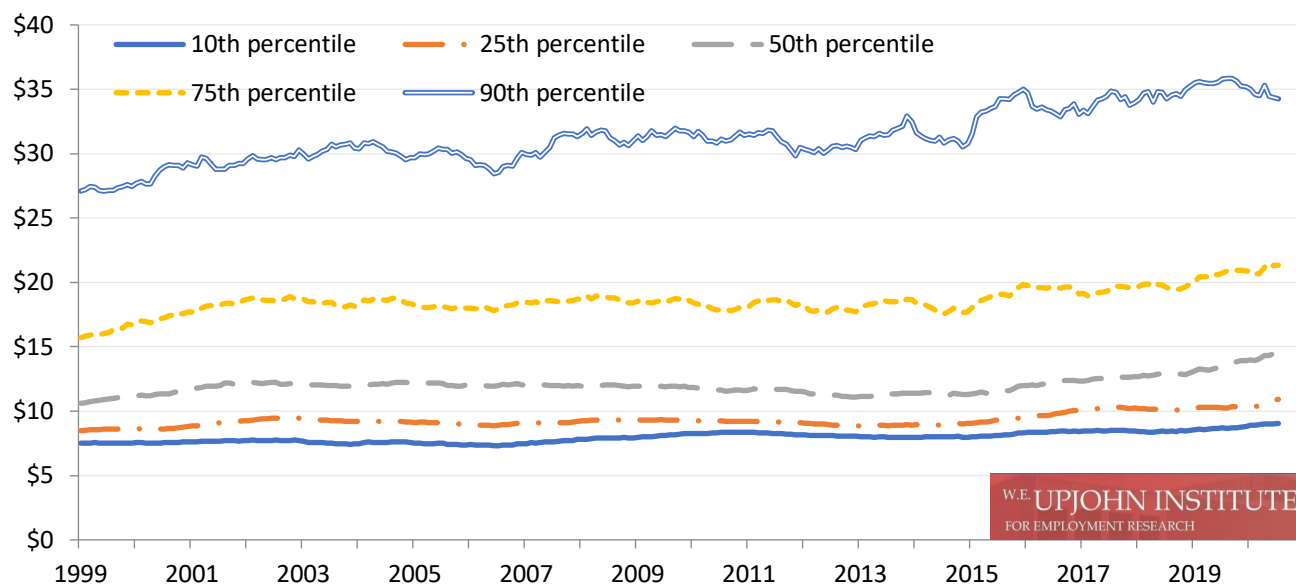
To understand longer-term changes, we normalize each wage series to its respective value in 2005, shown in the figure below. Despite last year's slowdown, real hourly wages of new hires have grown 17.1 percent since 2005, with practically all this growth occurring between 2015 and 2019. Netting out the 6.4 percent growth in the NHQI since 2005, composition-adjusted wages of new hires have grown 10.7 percent, or just under 0.7 percent per year.

NHQI and CPS Self-Reports (2005=100)



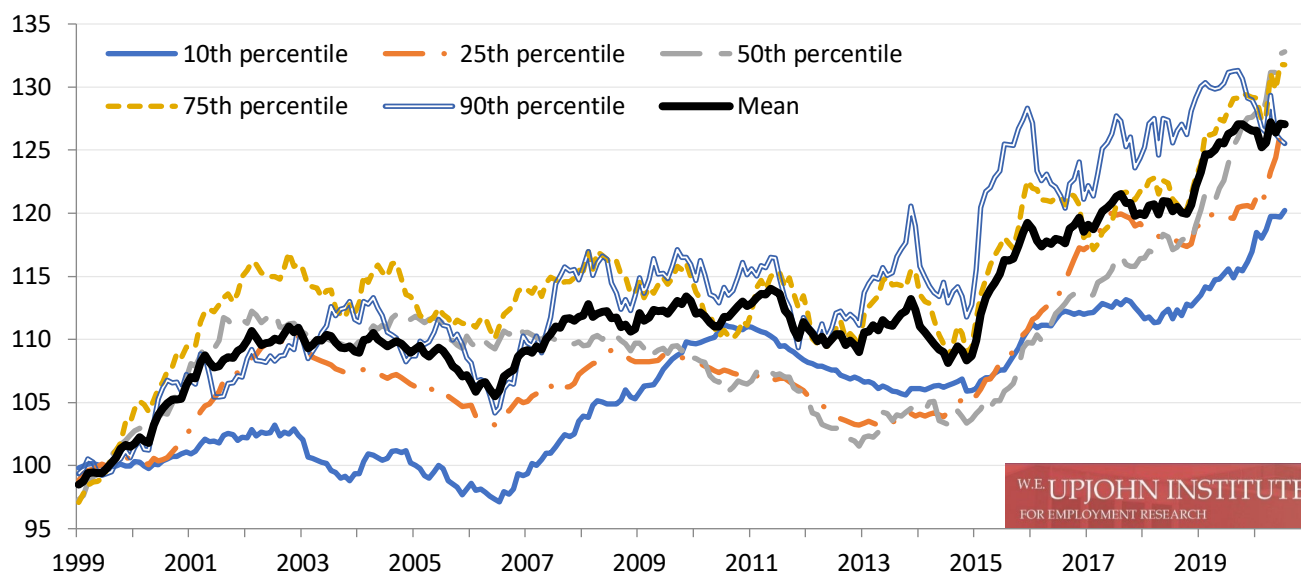
Growth in the average wage, however, does not necessarily mean that all parts of the wage distribution are growing similarly. Was the slowdown over the past year widespread or concentrated among higher earners? The figure below provides context by showing the real hourly reported wage (in 2019 dollars) of new hires for different percentiles. For example, at the 10th percentile—the point at which 10 percent of new hires makes less and 90 percent make more—hourly wages in July 2020 were about \$9.05, \$1.80 above the federal minimum wage (but below most state minimum wages). In contrast, at the 90th percentile, wages were \$34.27 per hour, almost four times as much. The 50th percentile, or median, where half of newly hired workers earn more and half earn less, was \$14.48, much less than the mean value of \$18.63 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 Self-Reports: 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 Self-Reports: Real Hourly Wage, Selected Quantiles (1999=100)



Whereas the mean reported wage of new hires increased 17.1 percent from 2005 to today, when the reference frame is 1999, the cumulative increase is more than one-and-a-half times as much, at 27.1 percent. This works out to an annualized rate of growth of 1.1 percent since 1999 (and 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 10th percentile real wage of new hires has risen by 20.2 percent, while that for the

median is up 32.8 percent. Over the past year, however, the trends are especially interesting, with the strongest growth in the lower middle part of the distribution. In particular, 10th percentile wages are up 4.0 percent, 25th percentile wages are up 6.4 percent, median wages are up 7.1 percent, 75th percentile wages are up 2.8 percent, and 90th percentile wages are *down* 4.3 percent. Thus, in sharp contrast with last year, newly hired workers in the bottom half of the distribution began to catch up with those in the top half (although they have a long way to go). Moreover, the overall slowdown in actual wage growth over the past year has been driven by the highest earners, and these trends again predate the emergence of COVID-19.

To summarize, both the NHQI—which captures the earnings power of new hires through their occupations and demographic characteristics—and actual reported wages have slowed their growth over the past 12 months, although this cooling appears to have been concentrated at the top. This marks a notable contrast from the preceding 12 months, when the NHQI had risen by a robust 1.4 percent and actual real wages had surged 5.1 percent. The recent headwinds began last fall, even as job growth continued at roughly the same pace it had over the prior 12 months. Since COVID-19's spread earlier this winter, tens of millions of jobs have been lost (and several million recreated), but this unprecedented churn in the labor market—surprisingly—has not had apparent effects on either the NHQI wage index or actual, self-reported wage growth. At least, not yet.

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.

The full report, including methodology, can be found here: 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 2020 will be released during the first week of October 2020. To sign up to regularly receive monthly press releases for the Upjohn Institute New Hires Quality Index, visit: www.upjohn.org/nhqi/signup.

The W.E. Upjohn Institute for Employment Research is a nonprofit, nonpartisan research organization devoted to finding and promoting solutions to employment-related problems. The views expressed in the report are those of the author and do not necessarily reflect the views of the W.E. Upjohn Institute. Visit us at www.upjohn.org.

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](#) and [July 2019](#) press releases, as well as this 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 2020. 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.