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Compression in the Wage Distribution During the Post-Covid-19 Labor Market

The COVID-19 pandemic caused changes for business across all industries, though the effects were unequal. As lockdown restrictions aimed at mitigating the spread of COVID-19 were relaxed, nominal wage growth rose sharply in leisure and hospitality and in trade and transportation, the two industries with the highest concentration of low-wage workers. In fact, wage growth was most pronounced for workers in the bottom 50 percent of the wage distribution who changed jobs into one of these industries.

Daniel R. Carroll, Christopher J. Walker

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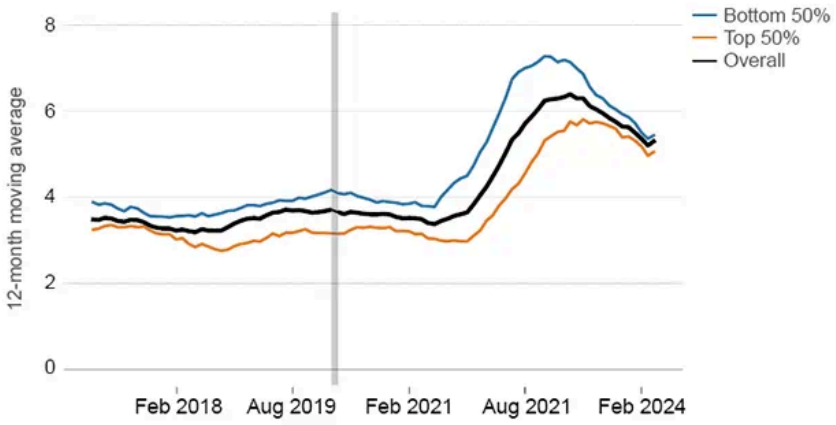
In March 2020, much of the United States went into lockdown in response to the COVID-19 pandemic. Aggregate demand for services fell sharply, leading to historic disruptions in the labor market. The unemployment rate, which had been at a 50-year low of 3.5 percent in February of 2020, surged to 14.8 percent by April, its highest rate since the Great Depression. Over the ensuing 18 months, the economy underwent a gradual and uneven reopening. During this reopening period, demand for services rose rapidly, fueled in part by pent-up demand amassed over the lockdown and by savings built through fiscal rescue packages (Aladangady et al., 2022).

The dramatic stopping and restarting of the economy precipitated a tight labor market for an extended period. In order to meet demand, many firms, particularly those in public-facing industries such as restaurants, hotels, and travel, sought to rehire staff who were dismissed during the earlier days of the pandemic lockdown. However, previous employment relationships that had been severed during the pandemic were hard to restore, and labor was scarce. Some workers had moved on to other employment, while some others were still reluctant to reenter the workforce because of both real and perceived health risks. These conditions gave rise to rapid wage growth as firms competed for labor (Figure 1).

Wage growth over this period was much higher for workers in the bottom half of the wage distribution than for workers at the top. Before the pandemic, wage growth for the bottom half of earners outpaced that of the top half of earners by approximately 0.66 percentage points. However, this gap significantly widened as the United States emerged from COVID-19 restrictions, peaking at 2.59 percentage points in July 2022.

Figure 1: Median Wage Growth (Nominal)



Source: Current Population Survey via CADRE

Note: Gray bar represents NBER recession.

In this *Economic Commentary*, we dig deeper into the patterns in wage growth that emerged during the reopening of the US economy from COVID-19. Because the reopening was staggered in timing across locations, for the purposes of this research, we define the reopening period as October 2021 to March 2023. With this in mind, we investigate the breakdown of industries across the economy by job movement and income to see what did occur during the reopening period. We find that those with low wages—around $25,000 to $45,000 annually—who switched from a different industry to manufacturing, leisure and hospitality services, or trade and transportation had high wage-growth premiums compared to all other workers during this period.

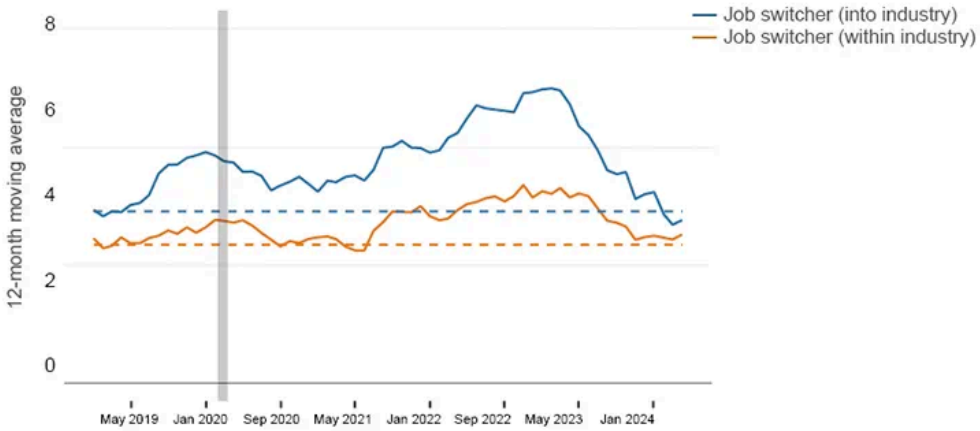
Wage Distribution across Job Movement

We use data from the Current Population Survey (CPS) administered by the Bureau of Labor Statistics to measure individuals' wage growth. We take the data from the Harmonized Variable and Longitudinally Matched CPS provided by the Federal Reserve Bank of Kansas City's Center for the Advancement of Data and Research in Economics (CADRE). With this data, we compute individuals' year-over-year nominal wage growth and occupation changes over 12-month periods. [1] Growth rates are also smoothed with a 12-month moving average for better visualization of trend patterns. Lastly, we use the weights provided by the harmonized series to measure the distribution of wages across industries by quartile and by job movement status. [2] When we report wage growth for a group of workers, the number corresponds to the median of that group's wage growth distribution. [3]

Fierce competition for labor during the reopening period is visible in the behavior of the wage-growth premium; namely, it is going to workers who switched jobs rather than to workers who remained employed in the same job (Figure 2). We categorize those who switched within an industry ("within industry") as those who have either changed their employer or their function at work in the previous two months of being surveyed but who have not changed industries in the last 12 months. Those who did switch into a new industry ("into industry") are those who satisfy the first criterion but who have also changed industries in the last 12 months.

The difference in wage growth between these two groups of workers expanded to its largest margin since the series began in the late 1990s. Usually, wage growth is higher for workers who have switched jobs than for those who stayed (0.7 percentage points over the series' history). One immediate explanation for this is selection bias: job-to-job switchers tend to move precisely because they receive a higher wage offer. During the recovery period, however, this premium was especially pronounced for job switchers who changed industries.

Figure 2: Wage Growth Premium for Job Switchers relative to Stayers



Source: Current Population Survey via CADRE

Notes: Dashed lines are averages of measures from 1998 to 2018. Gray bar represents NBER recession.

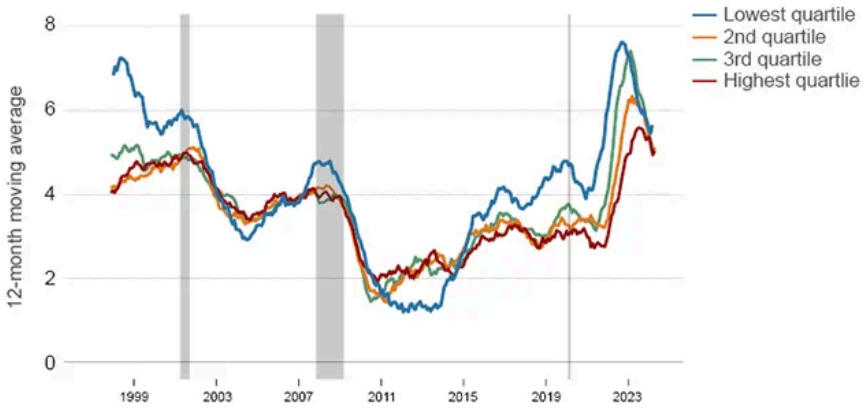
Because these premiums are measured as differences in growth rates, the direct effect from changes in the price level cancels out in the calculation. This is important because nominal wage growth was greatly impacted by inflation during this period. Hajdini (2024), for instance, finds that certain industries in the service sector have strong relationships between inflation of their prices and wages during this period. By taking the premium between those who switch over those who stay and focusing on relative wage growth, we can cut through the effect of inflation.

Wage Distribution across Income

Returning to different experiences across the wage distribution and drilling further into the data, we investigate how the reopening period impacted individuals differently based on their position in the income distribution. Luduvice et al. (2025) investigate the wage growth and inflation of different quintiles of income and wages. They find that wage growth among the lowest-wage workers, the bottom 20 percent, has been the primary driver of much of the wage growth for the bottom 40 percent of workers during the reopening period.

Because we report median wage growth, it is difficult to decompose the contributions from subgroups to the whole. We can, however, compute median wage growth for finer cuts of the data, such as for quartiles. The results of this exercise are shown in Figure 3.

Figure 3: Wage Growth by Quartile



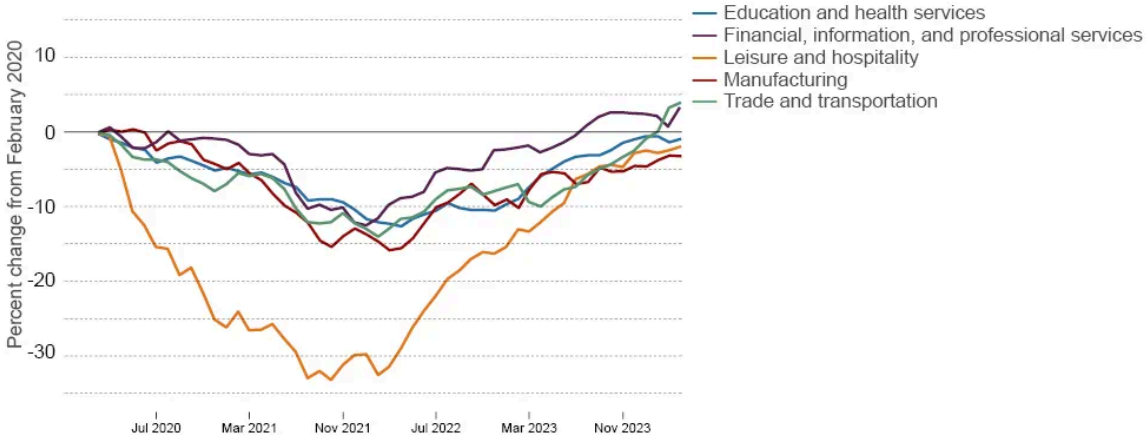
Source: Current Population Survey via CADRE

Note: Gray bar represents NBER recession.

Breakdown of Wage Growth by Industries

Figure 4 shows the growth pattern in employment relative to February 2020 within the top five industries when ordered according to share of below-median wage earners.[4] Most industries lost employment following the COVID-19 recession. Trade and transportation and manufacturing were down 12 percent and 16 percent, respectively, at their troughs, but the dip for leisure and hospitality was extremely pronounced. At its trough, employment in leisure and hospitality was down by almost one-third, and even with the rapid expansion in employment after the economy reopened, it took more than two years for employment to return to near its prepandemic level.

Figure 4: Wage Growth by Quartile



Source: Current Population Survey via CADRE

Movements in employment within these industries can have a significant impact on employment for below-median-wage workers. Table 1 reports each industry's share of employed workers and the

composition of their workers across the four quartiles of the wage distribution. Industries such as leisure and hospitality and, to a lesser extent, trade and transportation have a high concentration of low-wage workers. For example, about 57 percent of workers in leisure and hospitality earn wages in the bottom quartile. At just over one-third, trade and transportation also has an outsized share of these workers. Together, these two industries account for 41 percent [5] of the workers in the bottom half of the wage distribution.

Table 1: Average Employed by Industry and Wage Quartile: 1997–2024

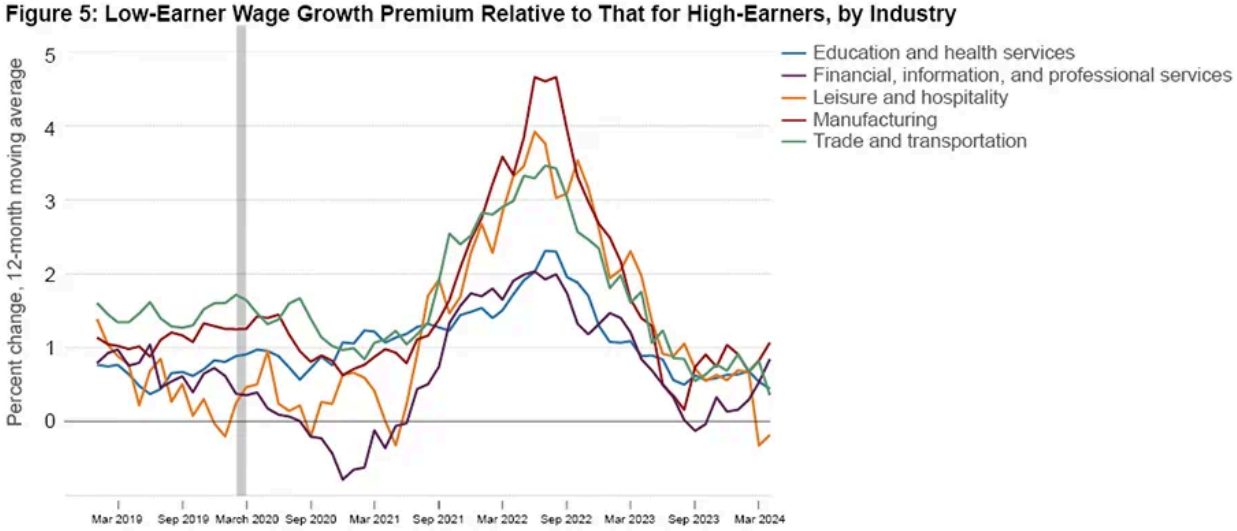
	Total Population	Percent of Workers			
Industry	*Average share*	*1st quartile*	*2nd quartile*	*3rd quartile*	*4th quartile*
Construction	5.9	15.5	27.9	30.9	25.7
Education and health services	25.7	22.4	24.6	26.6	26.4
Financial, information, and professional services	18.4	17.7	22.0	24.6	35.7
Leisure and hospitality	11.0	57.4	20.7	13.6	8.3
Manufacturing	13.4	18.1	28.0	26.6	27.3
Public administration	5.9	8.8	20.2	31.2	39.8
Trade and transportation	19.7	35.3	26.0	22.0	16.7

Source: Current Population Survey via CADRE

It is worth noting that the wage growth premium for the bottom 50 percent in manufacturing follows a similar trend to that of leisure and hospitality and trade and transportation even though it does not have a high share of low-wage workers.

As demand for labor ramped up in these industries in late 2021, wage growth also began to pick up, particularly for below-median-wage workers, as firms battled for a scarce pool of workers. Figure 5 plots the difference in wage growth (12-month moving average) between the bottom and top 50 percent wage earners for the same five industries. The premium in wage growth for the bottom half as compared to for the top half of the distribution increased the most for manufacturing, leisure and hospitality, and trade and transportation (approximately 53 percent of below median earners collectively).

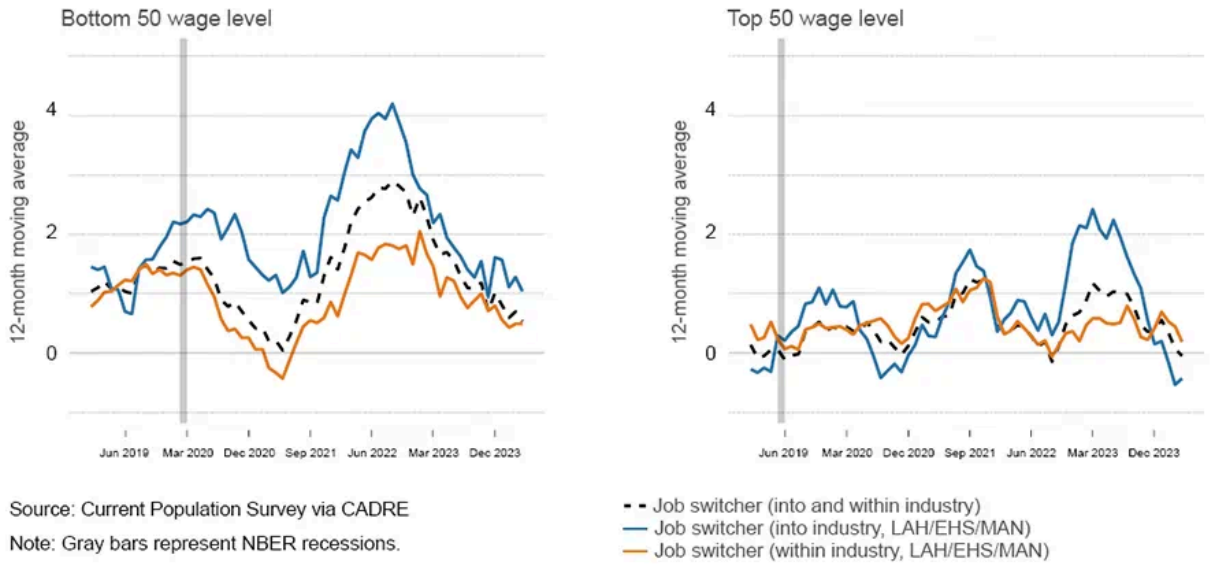
Figure 5: Low-Earner Wage Growth Premium Relative to That for High-Earners, by Industry



Source: Current Population Survey via CADRE
Note: Gray bar represents NBER recession.

Finally, focusing on just those workers employed in these three industries with the highest premia, we compare the wage-growth premium for job switchers relative to stayers in the bottom 50 percent of the wage distribution to that of the top 50 percent. Did rising wage pressures favor low-skill workers, especially those who switched industries? The results in Figure 6 suggest they did. Job switchers among the bottom 50 percent of earners in these industries realized a larger wage growth by 1 percentage point to 2 percentage points relative to job switchers in the top 50 percent. Moreover, a significant factor behind the premium difference came from workers switching into new industries. On average, the difference between the premium for switching out of an industry and switching within an industry was 1.07 percentage points for the bottom 50 percent during this period. In fact, over much of the reopening period, the top 50 percent got roughly the same job-switcher premium whether they had switched from another industry or stayed within their current industry. It is only when the reopening phase had nearly ended that we see a bump up in the switcher premium for the industry-switcher group.

Figure 6: Wage Growth Premium for Job Switchers by Relative Wage Level



Source: Current Population Survey via CADRE

Note: Gray bars represent NBER recessions.

Conclusion

Over the period from October 2021 to March 2023, wage growth, especially for low-wage earners, rose sharply as firms competed for labor to satisfy pent-up demand built during the COVID-19 pandemic. Three main industries appear to be behind the greater rise for low-wage workers: leisure and hospitality, trade and transportation, and manufacturing. The three industries employ more than half of low-wage workers, and each industry suffered large declines in employment as the economy dealt with the pandemic. Once the economy reopened, each rapidly gained back employment. For workers in the bottom 50 percent of wage earners, these three industries stand out for their high wage growth, particularly for workers who switched from other industries.

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Endnotes

1. Our measure of annual 12-month wage growth is identical to that used by the Federal Reserve Bank of Atlanta Wage Growth Tracker. The data for wages only goes up to March 2024 due to changes that occurred within the CPS that impacted the top coding. For more information, see Croteau et al. (2024). Return to 1
2. See Daly et al. (2012) for more details. Return to 2
3. For consistency with the Federal Reserve Bank of Atlanta Wage Growth Tracker, the unweighted data are used in our wage growth charts. Return to 3
4. Two industries are omitted for clarity of exposition: construction and mining and public administration. Less than 6 percent of the total sample of below-median wage workers are in either of these industries. Return to 4
5. Forty-one percent comes from summing the first and second quartile in each industry, multiplying that sum by the share of the respective industry population, and dividing by 50 percent. Return to 5

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