

# District Data Brief

## The Quality of Jobs Created Since the Start of the COVID-19-Related Recession

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### Introduction

Despite the deep declines in employment that occurred during the pandemic-related recession (February to April 2020),<sup>1</sup> the employment recovery in the current business cycle<sup>2</sup> has been robust. Indeed, in just under two-and-a-half years (28 months), payroll employment had recovered to its level at the onset of the pandemic. Moreover, four years into the current cycle, employment had grown by a cumulative 3.6 percent, roughly equal to cumulative employment growth four years into the recession/recovery period that started in the early 1990s (Figure 1). By contrast, cumulative employment growth was still negative even five years into the recession/recovery period following the Global Financial Crisis.

Nonetheless, there remains a question about the quality of the jobs being created. As in earlier expansions, some observers have wondered whether the jobs being created during the current recession/recovery period have been better-paying than those they have replaced.<sup>3</sup> Wages are, of course, only one dimension of job quality. Other factors, such as job security, opportunities for advancement, retirement and healthcare benefits, and working conditions also help to determine the quality of a job. But as a rough way to assess the quality of jobs being created, it is informative to consider whether net job creation this cycle has been greater in below- or above-average-paying industries. The following analysis uses that formulation to assess the quality of jobs created recently both nationally and across Fourth District states.<sup>4</sup>

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<sup>1</sup> Between February and April 2020, US employment fell by 21.9 million jobs or 14.4 percent of employment.

<sup>2</sup> The term *business cycle* refers to fluctuating levels of economic activity in an economy over a period measured from the beginning of one recession to the beginning of the next. See Wolla (2023).

<sup>3</sup> See, e.g., Nguyen (2023) and US Conference of Mayors (2014).

<sup>4</sup> This analysis updates the work of Mester and Venkatu (2015), which focused on the United States and Fourth District states (Ohio, Pennsylvania, Kentucky, and West Virginia). It is also comparable to previous work from Mester and Sen (2013) and Mester and Olney (2004).

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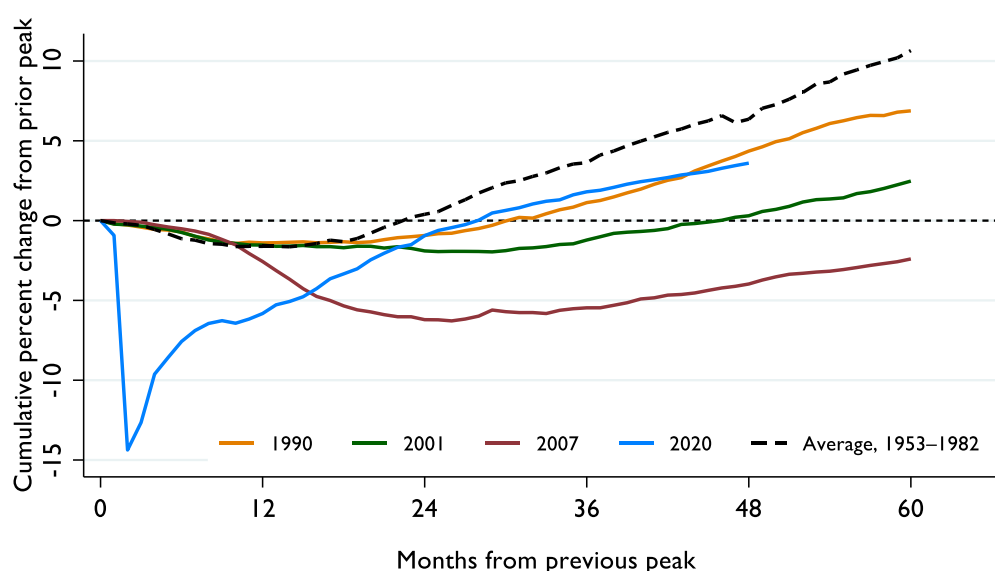
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## Analysis

Using US data on average hourly earnings in private industries,<sup>5</sup> I divide these industries into those that are *high-pay* and *low-pay*.<sup>6</sup> Table 1 shows 10 industry sectors,<sup>7</sup> their associated average hourly earnings, and their categorization into *high-* and *low-pay* industries, with the former paying above-average wages and the latter below-average wages. These groupings into *high-* and *low-pay* industries have been stable through the current business cycle, as shown in Figure 2. Looking further back, only three industries have switched pay categories since 1990: financial activities, manufacturing, and education and health services. Financial activities paid below-average wages from January 1990 through December 1991 and then switched to paying above-average wages in January 1992. Manufacturing paid above-average wages from January 1990 to July 2006 and then switched to paying average or below-average wages in August 2006.<sup>8</sup> Lastly, education and health services paid average or below-average wages from January 1990 through September 1991 and from August 1997 through March 2001; it paid above-average wages from October 1991 through July 1997 and from April 2001 onward.

**Figure 1: US Payroll Employment**

Percent change from previous cycle peak, first five years



Source: Bureau of Labor Statistics.

<sup>5</sup> These data include information only for production and nonsupervisory employees to facilitate comparability with earlier work.

<sup>6</sup> This categorization is also employed at the state level because comparable state-level data on average hourly earnings are not available.

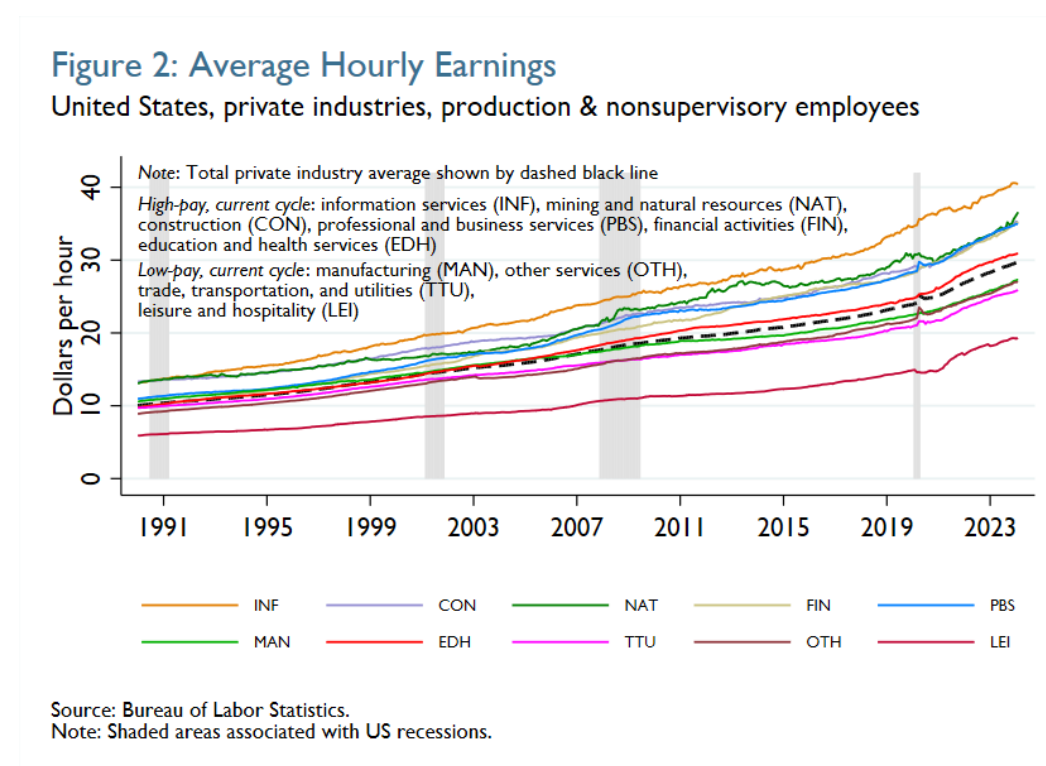
<sup>7</sup> Industry sectors are defined by the North American Industry Classification System (NAICS).

<sup>8</sup> Manufacturing was a below-average-paying industry before the mid-1970s.

**Table 1: Average Hourly Earnings by Industry, Production and Nonsupervisory Employees**

|                                      | Average hourly earnings (US dollars),<br>production and nonsupervisory<br>employees, January 2020 |
|--------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Total private industries</b>      | 23.91                                                                                             |
| <b>High-pay industries</b>           |                                                                                                   |
| Information services                 | 34.54                                                                                             |
| Mining and natural resources         | 30.23                                                                                             |
| Construction                         | 29.00                                                                                             |
| Professional and business services   | 28.35                                                                                             |
| Financial activities                 | 28.18                                                                                             |
| Education and health services        | 24.72                                                                                             |
| <b>Low-pay industries</b>            |                                                                                                   |
| Manufacturing                        | 22.45                                                                                             |
| Other services                       | 21.81                                                                                             |
| Trade, transportation, and utilities | 20.90                                                                                             |
| Leisure and hospitality              | 14.88                                                                                             |

Source: Bureau of Labor Statistics via Haver Analytics.

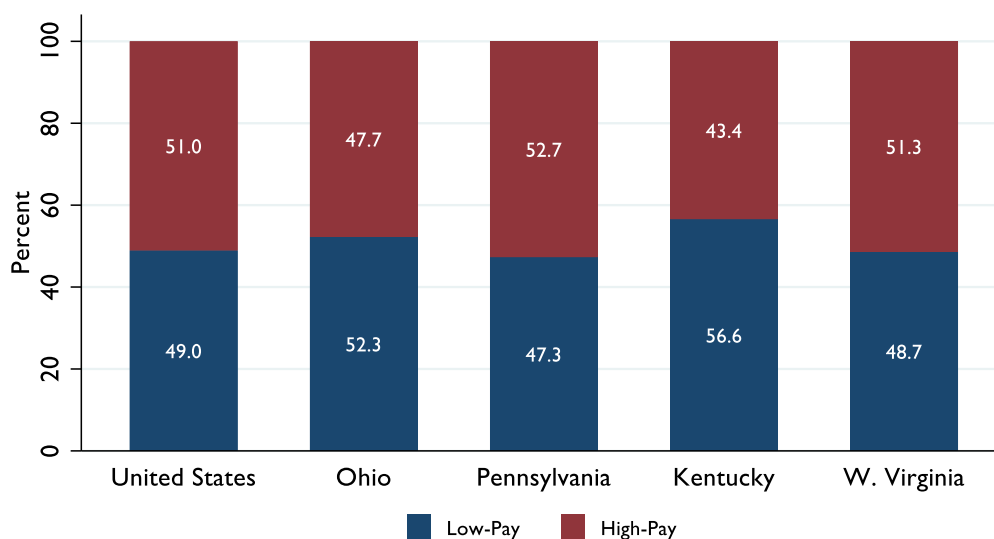


For *high-* and *low-pay* industries, recent data, as indicated in Figure 3, show that employment shares are about evenly divided in the geographies considered herein. Specifically, prior to the pandemic in January

2020, *high-pay* industries accounted for just over half of private-sector employment in the United States, Pennsylvania, and West Virginia (51.0, 52.7, and 51.3 percent, respectively). By contrast, *low-pay* industries accounted for just over half of private-sector employment in Ohio and Kentucky (52.3 and 56.6 percent, respectively). The gap between the share of jobs in *low-* and *high-pay* industries was greatest in Kentucky (13.2 percentage points).

**Figure 3: Employment Shares**

United States and Fourth District states, January 2020



Source: Bureau of Labor Statistics.

So, has the US economy created more jobs in *high-pay* industries than in *low-pay* industries, on net, since the start of the COVID-19-related recession in 2020? The answer appears to be a resounding “yes.” Nationally, the economy lost approximately 21 million private-sector jobs in March and April 2020 but thereafter added more than 26 million jobs through February 2024. Of the more than 5 million net new jobs added to the US economy since February 2020, more than three-quarters (75.6 percent) were associated with *high-pay* industries (Table 2). That said, there is more variation in these proportions across the four Fourth District states. Across these states, Ohio’s experience is most similar to that of the United States, with about 85 percent of the net new jobs the state added from February 2020 to February 2024 associated with *high-pay* industries. In Pennsylvania and West Virginia, *all* the net new jobs added in the four years following February 2020 were in *high-pay* industries. At the other end of the spectrum, about 60 percent of the net new jobs added in Kentucky during this period were in *high-pay* industries.

**Table 2: Cumulative Change in Private-Sector Employment (thousands) during the COVID-19-Related Recession and Subsequent Economic Expansion**

|                   | United States | Ohio   | Pennsylvania | Kentucky | West Virginia |
|-------------------|---------------|--------|--------------|----------|---------------|
| <b>Recession</b>  |               |        |              |          |               |
| Total             | -20,936       | -839.2 | -1,098.4     | -276.7   | -91.4         |
| High-pay          | -6,786        | -255.6 | -380.5       | -85.9    | -31.1         |
| Low-pay           | -14,150       | -583.6 | -717.9       | -190.8   | -60.3         |
| <b>Recovery</b>   |               |        |              |          |               |
| Total             | 26,099        | 877.5  | 1,158.3      | 349.1    | 99.5          |
| High-pay          | 10,690        | 288.3  | 448.2        | 127.9    | 44.5          |
| Low-pay           | 15,409        | 589.2  | 710.1        | 221.2    | 55.0          |
| <b>Net Change</b> |               |        |              |          |               |
| Total             | 5,163         | 38.3   | 59.9         | 72.4     | 8.1           |
| High-pay          | 3,904         | 32.7   | 67.7         | 42.0     | 13.4          |
| Low-pay           | 1,259         | 5.6    | -7.8         | 30.4     | -5.3          |

Source: Bureau of Labor Statistics via Haver Analytics.

Note: Data in the table are through February 2024.

As noted above and in previous work,<sup>9</sup> there are several caveats to this analysis. Job quality entails more than just earnings. In addition, average hourly earnings for most industries are not available at the state level, so the classification of jobs into *high-* and *low-pay* may not be strictly applicable to the states in the Fourth District. Moreover, this analysis is limited to 10 industry sectors; using a greater number of sectors would reduce the distortions resulting from combining different jobs within the same industry category. Lastly, this approach does not distinguish between jobs that pay well above (below) the industry average and those that pay only slightly above (below) the industry average.

## Conclusion

Caveats aside, this analysis suggests that job growth has generally been biased toward *high-pay* industries since the COVID-19-related recession began in February 2020. Indeed, nationally, net job creation from February 2020 through the end of 2023 has heavily favored *high-pay* industries, with more than three jobs in *high-pay* industries added to the economy for every one added in *low-pay* industries. The imbalance in net new jobs created between these two categories in the current cycle is even more pronounced in Ohio, Pennsylvania, and West Virginia, with *all* net new jobs created in the latter two states associated with

<sup>9</sup> See Mester and Sen (2013) and Mester and Venkatu (2015).

*high-pay* industries. And while job gains in the two categories were more balanced in Kentucky, that balance is still tilted toward *high-pay* industries.

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