

FEATURE

## **US income inequality after the pandemic**

What happens now that government supports have ended?

Patricia Buckley, Akrur Barua, and Monali Samaddar

## Shifts in the US labor market's composition are making COVID-19's impact on income inequality more uncertain.

**A**LTHOUGH THE COVID-19 virus itself does not discriminate, existing inequalities have caused the impact of the pandemic to be similarly unequal across income groups in the United States. Stark fault lines in health outcomes were evident between the “haves and the have-nots” from the earliest days of the pandemic, with the gap growing as the pandemic went on.<sup>1</sup> But equally apparent were the pandemic's differential economic impacts on different labor force segments. Those working in occupations conducive to remote work were largely protected from job loss and thus financial stress.<sup>2</sup> However, the more than 22 million workers who abruptly lost their jobs between February and April 2020<sup>3</sup> experienced immediate financial pain on top of worries about the disease, child care, and other concerns. Since these newly unemployed workers were concentrated in jobs that required person-to-person contact—jobs that also generally paid low wages—they had fewer resources to fall back on.

Then government stepped in. Since the start of the pandemic, the federal government has spent US\$5.4 trillion<sup>4</sup> on a wide variety of support programs—programs covering everything from direct income support to households and businesses to student loan and mortgage forbearance programs. These supports were successful in mitigating much of the income loss and dislocation that would have occurred otherwise. But now that they have been withdrawn, the question becomes: “What happens next?” Recent labor market trends offer some clues.

## Incomes rose and income inequality shrank during the pandemic—though the official numbers don't reflect it

First, let's look at what actually happened to incomes during the pandemic. Official US government figures report that median household income fell by 2.9% between 2019 and 2020—the first statistically significant decline since 2011—but that's because much of the government support so critical to keeping many afloat falls outside standard government income measures. For example, the US Census Bureau's standard measure of income is money income on a pre-tax basis. While this definition includes the expanded unemployment benefits provided until recently, it excludes the additional income provided to households in the form of economic impact payments and tax credits. When post-tax money income, including pandemic benefits, is factored in, the numbers show that median household income actually rose by 4.0% between 2019 and 2020.

The standard measures suggest that income inequality increased in 2020 as well. However, when all government assistance programs for families are included on a post-tax basis, we see that income inequality decreased. When the more expansive money income definition is applied to both 2019 and 2020, the share of income flowing to the lowest income quintiles increased while the share of income accruing to the top 20% fell (figure 1).

FIGURE 1

**Due to fiscal aid, income inequality fell in 2020 compared to the previous year**

Income quintile by post-tax money income, including income from COVID-19 relief programs	Share of aggregate income (%)	
	2019	2020
0–20 (lowest income quintile)	3.8	4.2
20–40	9.5	9.9
40–60	15.2	15.5
50–80	23.2	23.4
80–100	48.2	47.1

Sources: United States Census Bureau; Deloitte Services LP economic analysis.

Given the spike in unemployment early in 2020 and the fact that job losses were higher in lower-wage occupations, the decline in median household income and the rise in income inequality using the Census’s standard money income definition are not surprising. And it’s a positive that when government supports are included, the figures reveal a rise in median household income and lower income inequality. But going forward, it will be up to the recovering economy and the distribution of jobs across the wage spectrum to drive improvements in both measures.

**The recovery in low-wage occupations is a positive sign, but there is still some way to go**

Between February and April 2020, as consumers shifted indoors and the country introduced social distancing measures to thwart COVID-19’s spread, the labor market took a hard hit. During this period, total employment in the economy fell by 16%, and unemployment jumped to 14.8% from 3.5%.<sup>5</sup>

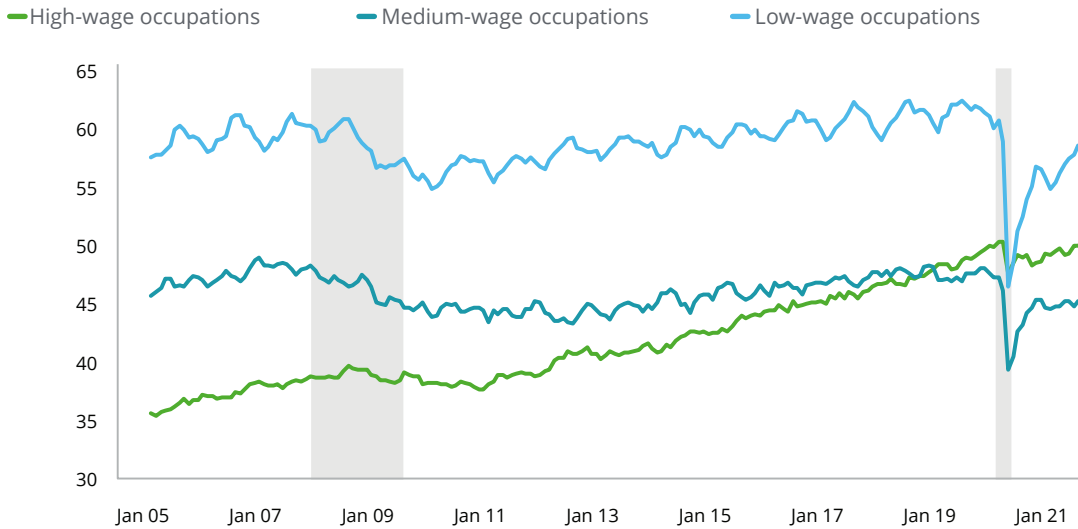
Yet the impact of the pandemic on the labor market wasn’t uniform. Businesses where social distancing was impractical, such as airlines, hotels, restaurants, and theaters, furloughed or let go a much higher percentage of their workforce than businesses whose workers could shift to remote work. For example, employment in food preparation and serving–related occupations fell by 48.8% between February and April 2020, while the number of people engaged in personal care and service occupations contracted 44.2%.<sup>6</sup> In contrast, employment in computer and mathematical science occupations rose by 1.1%—the only occupation among the 22 major occupations studied in this report to witness an increase in employment during this period.

Because many of the lost in-person jobs were also low-paying, employment in high-wage occupations fared better than others in the pandemic’s initial months.<sup>7</sup> While employment in high-wage occupations fell by 5.4%, the decline in employment was much higher for medium and low-wage occupations (figure 2). This likely is why the official measure of income inequality increased during 2020.

FIGURE 2

## The initial hit to employment due to the pandemic was the hardest on low-wage occupations

Employment (million, nonseasonally adjusted)



Sources: United States Bureau of Labor Statistics (sourced through Haver Analytics); Deloitte Services LP economic analysis.

While the labor market has been steadily recovering since the trough of April last year, it still has some way to go before returning to prepandemic levels. In September 2021, total employment was still 3.2% lower than it was in February 2020. Also, the recovery hasn't been the same for all wage categories. Employment in high-wage occupations, taken together, has recovered more strongly—0.1% higher than February 2020—than medium- (-4.1%) and low-wage (-3.5%) occupations. This lag in recovery in medium- and low-wage employment could mean that income inequality could start to widen again as the government supports that reduced income inequality during the pandemic are withdrawn.

Even occupations in the same wage categories vary in the extent of their recovery. For example, in the low-wage group, employment in food preparation and serving-related occupations fell by almost half in the two recession months, and even with strong growth between April 2020 and September 2021, it is still 6.1% lower than prepandemic levels. In contrast, building and grounds cleaning and maintenance occupations overcame their initial slump and more, with employment in these occupations currently at 11.3% above prepandemic levels. In the medium-wage group, the number of people employed in education, training, and library occupations is currently 7.6% below prepandemic levels. On the other hand, employment in the construction and extraction occupations is 2.2% above.

FIGURE 3

**Employment in high-wage occupations is now back to prepandemic levels, even as employment in low- and medium-wage occupations remained below February 2020 levels**

Occupations	Change in employment (%) over the course of the pandemic		
	Feb 2020–Apr 2020	Apr 2020–Sep 2021	Total change (Feb 2020–Sep 2021)
<b>High-wage occupations total</b>	-5.4	5.7	0.1
Management	-4.5	6.1	1.3
Legal	-8.5	10.2	0.8
Computer and mathematical science	1.1	-2.7	-1.6
Architecture and engineering	-7.0	7.4	-0.1
Health care practitioner and technical	-8.8	8.5	-1.1
Business and financial operations	-6.8	4.8	-2.4
Life, physical, and social science	-1.8	13.8	11.8
<b>Middle-wage occupations total</b>	-16.5	14.9	-4.1
Arts, design, entertainment, sports, and media	-19.1	10.2	-10.8
Education, training, and library	-14.8	8.4	-7.6
Construction and extraction	-19.7	27.2	2.2
Community and social services	-5.2	9.0	3.4
Installation, maintenance, and repair	-14.7	17.6	0.3
Protective service	-12.6	5.2	-8.1
Sales and related	-18.9	16.4	-5.6
<b>Low-wage occupations total</b>	-23.4	26.1	-3.5
Office and administrative support	-11.9	7.6	-5.3
Production	-23.8	25.3	-4.5
Transportation and material moving	-20.5	20.9	-3.9
Farming, fishing, and forestry	-5.6	-5.2	-10.5
Building and grounds cleaning and maintenance	-19.0	37.4	11.3
Personal care and service	-44.2	68.9	-5.8
Health care support	-16.0	16.0	-2.6
Food preparation and serving related	-48.8	83.2	-6.1

Note: The data is not seasonally adjusted.

Sources: United States Bureau of Labor Statistics (sourced through Haver Analytics); Deloitte Services LP economic analysis.

As we noted above, income inequality fell during the pandemic due to government support. But now that government supports are withdrawn, the stronger recovery in employment in high-wage occupations may mean that income inequality will start to widen again.

## Women in the labor market have had it worse than men

The pandemic and the subsequent recovery also affected male and female workers differently, which does not augur well for improved gender equality in the labor market. According to seasonally adjusted employment data from the US Bureau of Labor Statistics, female employment fell by 17.9% between February and April 2020, while male employment declined by 14.3%. And even though employment for both men and women has been recovering steadily, employment among women as of September 2021 was still 3.6% lower than pre-pandemic levels—worse than the 2.8% decline among their male counterparts.<sup>8</sup> Consequently, the share of women in total employment has gone down marginally to 47.0% during this period.

A deeper dive into seasonally unadjusted data on employment by gender and occupation<sup>9</sup> further highlights the differential impact of the pandemic on women workers. Female employment was

generally more volatile than male employment across high-, medium-, and low-wage occupations. For example, compared to pre-pandemic levels,

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female employment in high-wage occupations as of September 2021 seems to be better off than male employment, as figure 4 shows. But this static comparison masks dynamic differences between men and women in employment rate swings. Employment for women in high-wage occupations fell by 7.8% between February and April 2020 compared to a 3.1% decline in male employment, and then went back up by 8.8% versus a 3.1% increase among men (figure 4).

FIGURE 4

### Employment of women in low- and medium-wage occupations is far lower than prepandemic levels

Occupations by gender	Change in employment (%) over the course of the pandemic		
	Feb 2020–Apr 2020	Apr 2020–Sep 2021	Total change (Feb 2020–Sep 2021)
<b>MEN</b>			
High-wage occupations	-3.1	3.1	-0.2
Medium-wage occupations	-16.4	15.3	-3.6
Low-wage occupations	-20.2	24.3	-0.9
<b>WOMEN</b>			
High-wage occupations	-7.8	8.8	0.3
Medium-wage occupations	-16.7	14.4	-4.7
Low-wage occupations	-26.3	27.8	-5.8

Note: The data used here is not seasonally adjusted.

Sources: United States Bureau of Labor Statistics (sourced through Haver Analytics); Deloitte Services LP economic analysis.

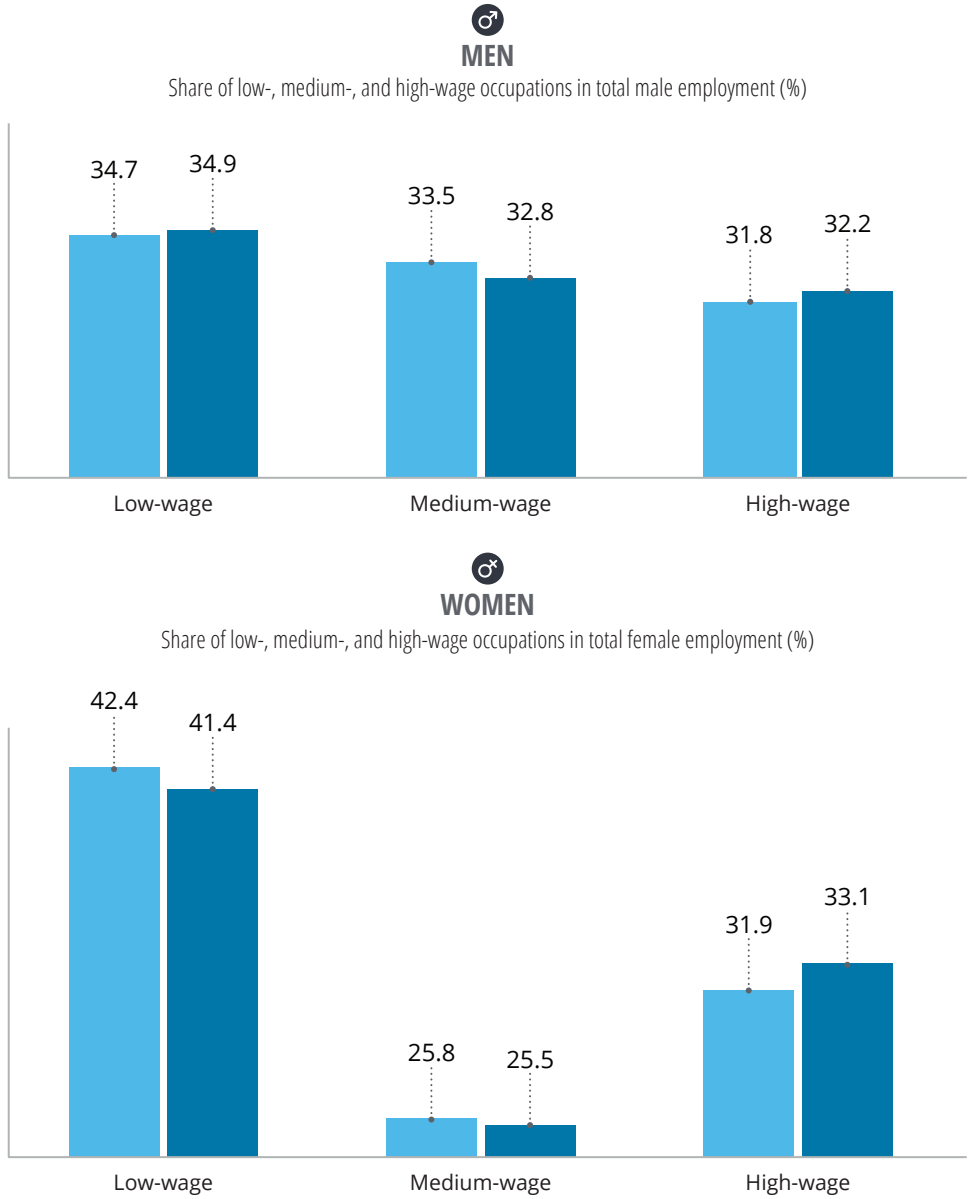
Across wage categories, medium-wage occupations appear to have fared the worst among both men and women, as well as in overall employment. Among men, the share of medium-wage occupations in their total employment fell to 32.8% from 33.5% between February 2020 and September 2021, while their shares of high- and low-wage occupations went up. The distribution of employment, therefore, has

become more skewed toward high- and low-wage occupations for men. Meanwhile, among women, the share of employment in medium-wage occupations also went down while that in high-wage occupations went up, but unlike with men, female employment in low-wage occupations continues to lag in recovery.

FIGURE 5

### The distribution of employment has become more skewed toward high- and low-wage occupations for men

■ Prepandemic ■ Postpandemic



Note: The data is not seasonally adjusted.  
Sources: United States Bureau of Labor Statistics (sourced through Haver Analytics); Deloitte Services LP economic analysis.

Unfortunately, while the increase in the percentages of both genders in high-wage occupations seems like a step toward greater equity, a closer examination of the actual numbers shows that exactly the opposite is true. As shown in figure 6, the number of women in

high-wage occupations stayed essentially the same despite their gain in percentage terms. This is because female employment has become smaller overall, largely because of job losses in low- and medium-wage occupations. In contrast, men



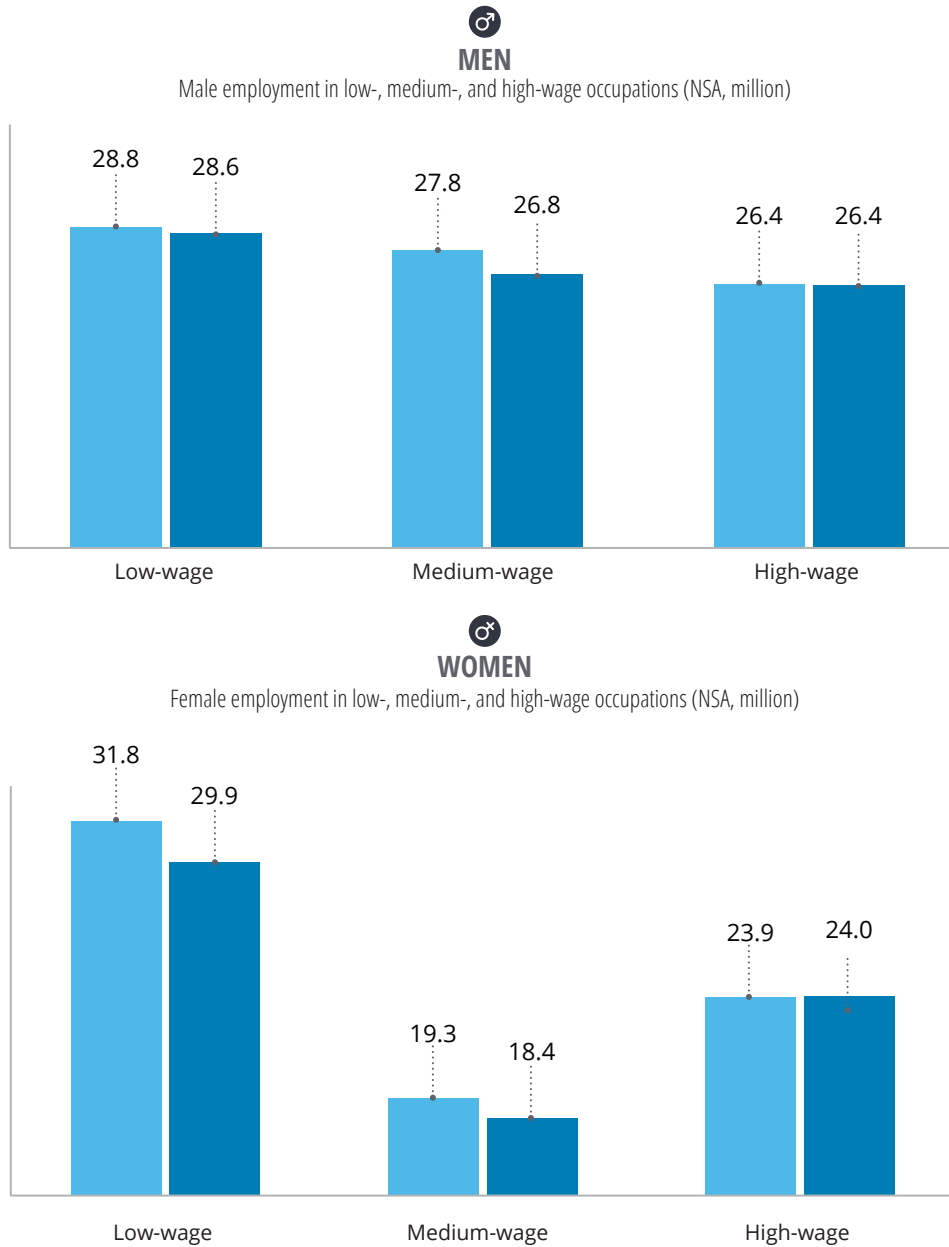
employed in low- and medium-wage occupations suffered fewer job losses. The implication: Unless the number of jobs in low- and middle-income

occupations recovers among women, the long-standing income disparity between women and men may widen.

FIGURE 6

**The number of workers of both genders in high-wage occupations hasn't changed much—but many more women in low- and medium-wage occupations lost their jobs**

■ Prepandemic ■ Postpandemic



Note: The data is not seasonally adjusted.

Sources: United States Bureau of Labor Statistics (sourced through Haver Analytics); Deloitte Services LP economic analysis.

## Strong growth in earnings offers some succor

While the pandemic has dented employment, the same cannot be said of earnings. Earnings data from the BLS's Establishment Survey reveals that between February 2020 and September 2021, average weekly earnings<sup>10</sup> went up by 9.5%, far greater than earnings growth during the previous 19-month period (figure 8). Looking back further to the past decade, moreover, annual earnings growth averaged a much lower 2.5% per year. With earnings going up by a much larger amount since the start of the pandemic, household incomes have received a much-needed boost, and provide encouraging news for income growth in the economy.

The industry-based Establishment Survey cannot provide direct insight into earnings on an occupational basis. Some occupations are highly concentrated in a specific industry; for example, 75.7% of those employed in food preparation and serving–related occupations are employed by the restaurant and food services industry. But most occupations are spread over many industries. As an example, those employed in health care support occupations work in many industries such as home health care services (17.8%), general medical and surgical hospitals (14.8%), and nursing care facilities (13.3%).<sup>11</sup> Because of this, any conclusions regarding income by wage category based on the Establishment Survey are necessarily tentative.

However, even though we cannot give direct evidence, the data does provide indirect evidence that industries that employ larger numbers of low- to medium-wage workers are seeing stronger earnings growth. For example, earnings growth from February 2020 to September 2021 has been higher in the services sector (9.7%), than for the generally higher-wage occupations in

goods-producing industries (6.4%). Within services, the fastest increase in earnings was in leisure and hospitality (13.9%), followed by retail trade (10.4%) and education and health services (9.8%). This contrasts sharply with the average earnings growth in these sectors in all of 2019, which ranged between 2.5% and 3.7%.

## Gains in earnings just one part of the income inequality puzzle

What happens to income and income inequality without the federal support programs will depend on two key factors.

First, any reduction in income inequality will depend on the recovery of employment in medium- and low-wage occupations. For example, employment in the medium-wage education, training, and library occupations is still 7.6% below prepandemic levels, and employment in the low-wage food preparation and serving–related occupations is 6.1% lower. Since many who left the labor force during the pandemic have not returned, households that previously depended on workers in these occupations might have sustained permanent income loss, which would lead to a rise in income inequality.

However, much will also depend on whether the bout of earnings growth since the start of the pandemic will continue over the medium to long term, especially for low-wage occupations. Here, historic trends offer some good news. Over the past decade, median hourly wages went up faster for many low-wage occupations compared to their high-wage counterparts.<sup>13</sup> Between 2010 and 2019, for example, median hourly wages for farming, forestry, and fishing occupations went up by 4.2% per year on average, while wages for personal care

and service gained 3.1% per year; pay for management occupations, on the other hand, went up by only 1.8%. The strong earnings gains of 2020 have added to the previous decade's growth in low- and middle-income wages, thereby helping to decrease the gap with high-wage occupations.

If the disparity in income across occupations continues to go down, it would contribute to a decrease in income inequality. Moreover, the return of workers to low- and medium-wage jobs and rising wages accruing to these jobs could have an even larger impact than narrowing the income gap: a reduction in wealth inequality. If lower-income workers have more money to invest due to

higher wages, they can begin to invest in houses and financial assets, increasing their relative wealth. Of course, it's also possible that the gap will continue to widen due to gains in wealth among the nation's wealthy continuing to outpace those among the poor. Between Q4 2019 and Q1 2021, the net worth of the United States' top 1% of income earners went up by a staggering 23.1%, while those at the bottom 20% of the income ladder witnessed just a 2.5% rise in their wealth. Still, if the disparity in income across occupations continues to go down, that would be a step in the right direction—creating a path to a more equitable America.

## Endnotes

1. Penn State Health News, "Certain pre-existing conditions can double, triple mortality risk for COVID-19 patients," October 8, 2020.
2. Patricia Buckley and Akrur Barua, *COVID-19's impact on US income inequality: It's going to get worse before it gets better*, Deloitte Insights, July 23, 2021; Monali Samaddar et al., *How risky is your industry? Industry risk when operating during the COVID-19 pandemic*, Deloitte Insights, June 26, 2020.
3. US Bureau of Labor Statistics, sourced (through Haver Analytics) in September 2021. All labor market data is from this source, unless mentioned otherwise.
4. Committee for a Responsible Federal Budget, "Tracking the COVID Responses," accessed September 22, 2021. The figure cited here excluded actions by the Federal Reserve.
5. US Bureau of Labor Statistics, Household Survey, sourced through Haver Analytics in September 2021. Unless mentioned otherwise, all data is from the same source in this section.
6. The occupation-level employment data is not seasonally adjusted.
7. The authors have divided 22 major occupations by high-, medium-, and low-wage occupations based on mean and median wages for these occupations. Please refer to figure 3 in the paper to see the list of occupations under each of the three categories.
8. The data is seasonally adjusted.
9. The occupation- and gender-level employment data is not seasonally adjusted and therefore the totals vary from the seasonally adjusted data presented earlier although the trends are similar.
10. In this section, wherever we refer to earnings, it means average weekly earnings.
11. Data USA, sourced in September 2021.
12. Bureau of Labor Statistics, "Usual weekly earnings of wage and salary workers, second quarter 2021," news release, July 16, 2021. According to the BLS, usual weekly earnings refers to "earnings before taxes and other deductions and include any overtime pay, commissions, or tips usually received (at the main job in the case of multiple jobholders)."
13. Buckley and Barua, *Slow growth in wages: Is the reason occupational shifts?*, Deloitte Insights, April 3, 2020; Bureau of Labor Statistics, Occupational Employment Statistics, sourced through Haver Analytics in September 2021. All the data referred to in this paragraph is from this source.

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