

Where are the workers at the end of 2021? An agricultural and food sector employment update

Dr. Margaret Jodlowski, Assistant Professor, Department of Agricultural, Environmental, and Development Economics, The Ohio State University.

INTRODUCTION

With the “Great Resignation” making headlines, and “Now hiring” signs appearing in stores and restaurants nationwide, it is no surprise that hiring and retaining workers is a source of stress for many businesses. The agricultural and food sector, nationally or in Ohio, is not immune to these concerns: regardless of where along the value chain a business finds itself, workers may seem harder to find. The October 12, 2021 release of the Job Openings and Labor Turnover Survey for August 2021 reported a quit rate of 2.9%, the highest recorded since data collection began. Of the 4.3 million Americans who quit a job in August 2021, 20% were from the food or agricultural industry.

As the COVID-19 pandemic is still ongoing, it is difficult to say whether the disruptions brought about by the pandemic caused these new patterns, or whether the pandemic simply exacerbated trends that existed prior to March 2020. In this article, I present some statistics on the current level of employment in two broad sections of the agricultural product value chain: food processing and food service, with a brief examination of the much smaller on-farm labor market. In addition, I provide a summary of the factors that are either pushing people out of employment in this sector or that are pulling people towards alternative uses of their time.

EMPLOYMENT AND WAGE LEVELS ACROSS THE AGRICULTURAL VALUE CHAIN

State-level estimates on employment in specific subsectors is published monthly, and so it is possible to observe fluctuations in the food processing or food service (and accommodation) industries within a year as well as across multiple years.

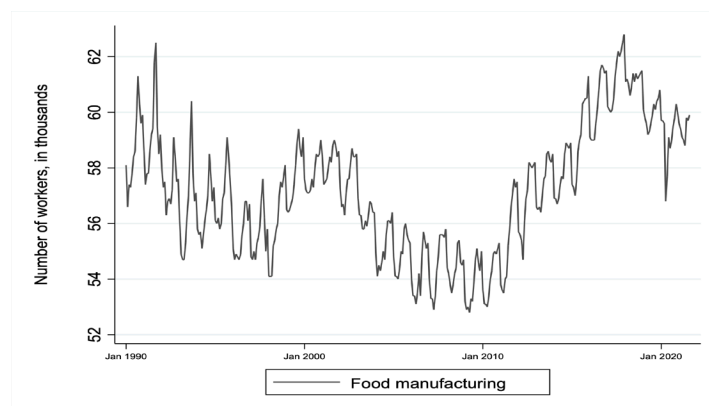


Figure 1: Food processing employment in Ohio; Source: SAE-CES

As shown in figure 1, food manufacturing employment had been trending downward since reaching a peak in December 2017, with a significant drop in early 2020, coinciding with the onset of the COVID-19 pandemic. However, the 5% loss in employment experienced in April 2020 was almost completely made up for by 2% increases in employment the following two months. Indeed, with the 2021 data available, the industry appears to be back on trend. Indeed, throughout the pandemic and after, employment in the industry remained above the average pre-pandemic level of 57,000 workers. Employment in food manufacturing is clearly subject to within year seasonality, although the actual average within-year percent change is negligible, at less than 1/1000th of a percent.

Food service in Ohio naturally experienced the largest percent decline, of -17%, in employment across the food-agriculture value chain during 2020; this value closely tracks the national decline in food service employment (18%).

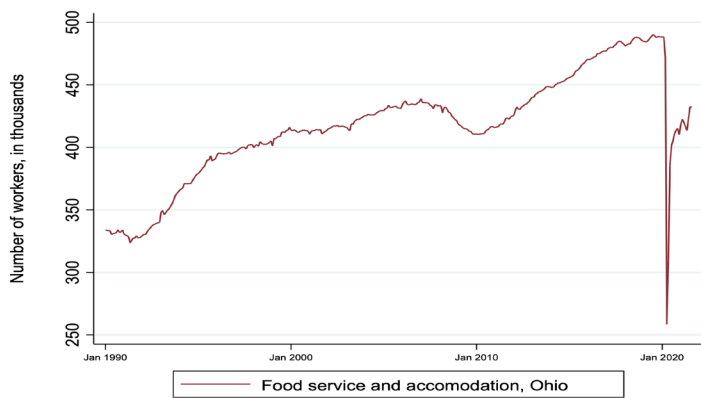


Figure 2: Food service employment in Ohio; Source: SAE-CES

Although there was significant recovery almost immediately after the dramatic decline in April 2020, the average employment in this sector in 2021 (through August) still represents a 13% decline from the average employment during 2019. In real terms, there are 56,400 fewer workers in food service and accommodation in August 2021 than there were before the pandemic was declared in February 2020; this reduction is equivalent to 11% of the pre-pandemic workforce. Although employment has been trending up, it is clear that, unlike in food processing, recovery to pre-pandemic levels is happening on a much longer timeframe, if at all. The pandemic-related restrictions on in-person dining reorientated the industry much more dramatically towards pick-up, takeout, or delivery, both for businesses well used to that model, such as fast-food outlets, as well as for those without such experience. The implications and staying power of this sector-wide reorganization, particularly for the amount and kind of labor these businesses require, are an important area for continued attention.

Age is one important worker characteristic that gives some insight into how the composition of an industry's workforce is changing over time.

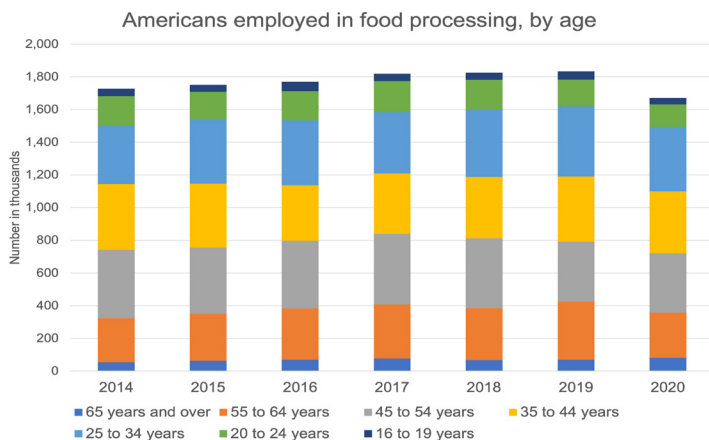


Figure 3a: Age distribution of the country's food processing workers; Source: CPS

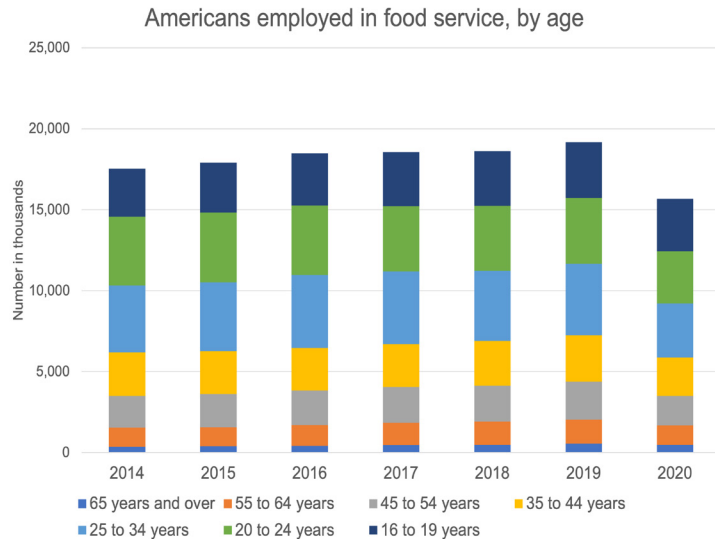


Figure 3b: Age distribution of the country's food service workers; Source: CPS

Nationally,¹ the breakdown in food processing employment by age shows that these declines were driven by reductions in employment across the different age categories, with one notable exception. Employment in the sector by those aged 65 years and older actually increased by 14% in 2020, although this increase was not enough to compensate for the decreases in employment across the other age categories. These groups all experienced an average decline of -12%, ranging from -1% for those aged 45 to 54 to -22% for those aged 55 to 64. Altogether, there are signals of the potential increase in the average age of a food processing employee, which the industry will continue to contend with into the future.

Unlike for food processing, food service nationwide experienced percent decreases in employment across all age groups. In an industry dominated by relatively young workers, the smallest percent decrease, of -6%, was for high-school aged workers (16-19 years). The largest percent decrease (-25%) came from those aged 25-34 years. People this age are, statistically, most likely to have young children at home; thus, these workers would have been disproportionately affected by the switch to remote schooling and the closure of daycares and other childcare options.

WHAT IS KEEPING WORKERS FROM RETURNING TO THESE SECTORS?

The changes in employment stratified by age give some indication of what factors might be disrupting people's return to work, particularly in the food service sector.

¹ Data limitations prevent state-level breakdowns of industry by age.

Before discussing particular reasons, it is important to note that there is an overall lower number of available workers as a result of the pandemic. Evidence from the University of San Francisco shows that COVID-19-related morbidity was not distributed equally among sectors. In fact, food and agriculture was the sector with the highest rate of excess mortality, with a mortality rate 39% higher in this sector relative to pre-pandemic times (see Chen et al. 2021). Other trends, such as a lower immigration rate and reduced border crossings, existed pre-pandemic; the pandemic caused both to decline further. For example, the number of certified H-2B workers in Ohio for food service declined by -17% (-9% nationally) from 2019 to 2020². In addition, travel restrictions between states during the height of the pandemic reduced worker mobility. Together, these forces have contributed to a lower stock of workers available to work.

The overall unemployment rate (4.6% nationally, 5.1% in Ohio) is higher than the unemployment rate in non-durable goods manufacturing (4.2% nationally) and significantly lower than the unemployment rate in leisure and hospitality (9.1% nationally), which includes food service³. These differences highlight workers' reluctance to return to this sector. People are returning to work to different industries at different rates. The number of job openings continues to outpace the number of unemployed people; this is a strong indicator of workers' bargaining power. Under such conditions, workers are able to wait for the job with the characteristics and compensation package that suits them best. For the food service and food processing subsectors, there are elements of the subsector that are disincentives to work (**push factors**) as well as elements of other sectors that are incentives to work there instead (**pull factors**).

PUSH FACTORS

- There are now increased health risks associated with working; this risk increases with the number of people an employee comes into contact with. Food service and other customer-facing jobs are thus particularly risky.

² The national change for food processing was even more dramatic, with 44% fewer certified workers from 2019 to 2020. There were no certified H-2B food processing workers in Ohio in either year.

³ For a more detailed discussion of the current unemployment situation in Ohio, please see "[Unemployment in Ohio at the end of 2021](#)," a companion piece to this article.

- The stress of the pandemic and its associated restrictions and mandates has led to an increase in the reports of bad behavior from consumers, ranging from rude to aggressive and even violent. The responsibilities of a customer-facing job have increased as a result: enforcing more policies, often set at the management or even government level, and dealing with the consequences when met with opposition to those policies.
- Staffing issues create a negative feedback loop, particularly with regard to the incidents of aggressive or violent customers: longer wait times and reduced product/time availability due to being short-staffed trigger some of these incidents, which further push workers out of the industry.

PULL FACTORS

- As mentioned above, the pandemic has increased the at-home workload for workers with families. The childcare, elder care, and health care industries are all experiencing worker shortages; the impacts of these shortages ripple through the economy as these services reduce their availability or grow more expensive. These changes increase the opportunity cost of working away from home and so serve as a disincentive for non-home work.
- Workers' valuation of job flexibility, whether in terms of hours or venue, is increasing. This is closely related to the increased home needs described above. Both food service and food processing tend to feature long shifts, and the venue is inflexible by definition. In addition, the gig economy has provided more opportunities for jobs that are flexible around scheduling. Demand for delivery drivers has increased with the re-orientation of the food service industry away from in-person, seated dining.
- While wages do seem to be increasing in the food processing and food service sectors, there are still significant gaps. Higher wages are one of the primary pull factors for any industry. Wages are only a part of the compensation package, of course: lower wages may be traded for increased flexibility, for example. In addition, wages must adequately compensate workers for the changing on-the-job experience related to risk exposure and customer behavior.

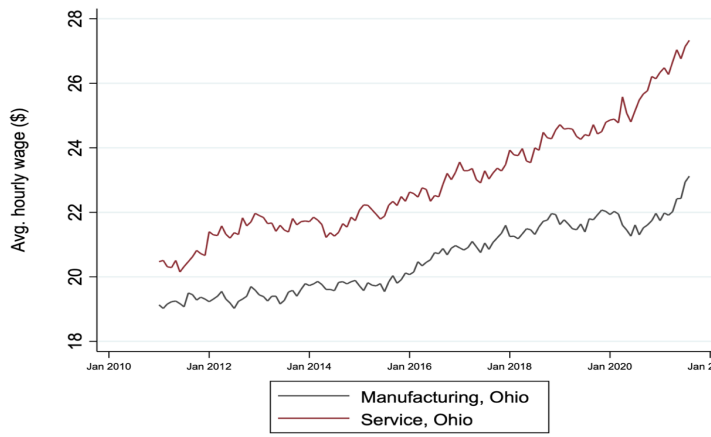


Figure 4: Wage rate over time in Ohio, by sector; Source: SAE-CES

In Ohio, as figure 5 shows, the average hourly wage in both service and manufacturing has been trending upward over the last decade, with significant within year variation. For the manufacturing sector, the average change in monthly wages was a drop of -0.02%; the service sector saw an average increase of 0.45%. Using these broad, sectoral level categories, the wages for service jobs in general are higher than those for manufacturing. National data in figure 6 allow us to look at specific subsectors: in this case, non-durable goods manufacturing and food service. Here, we see that food service experienced a decline in wages during the pandemic, a drop from which it has since recovered. However, food service wages remain about \$5 below the wages for non-durable goods manufacturing, and indeed, remain among the lowest across all subsectors. Non-durable goods manufacturing did not experience the same decline in wages during the primary pandemic months; in fact, there was a small bump in wages at that time. This could reflect “pandemic pay” or “hazard pay” that some companies extended to their workers. The incidence of this extra pay, however, seems to have eroded in the waning months of 2020, and the trend in wages for the first part of 2021 matches that of the pre-pandemic years.

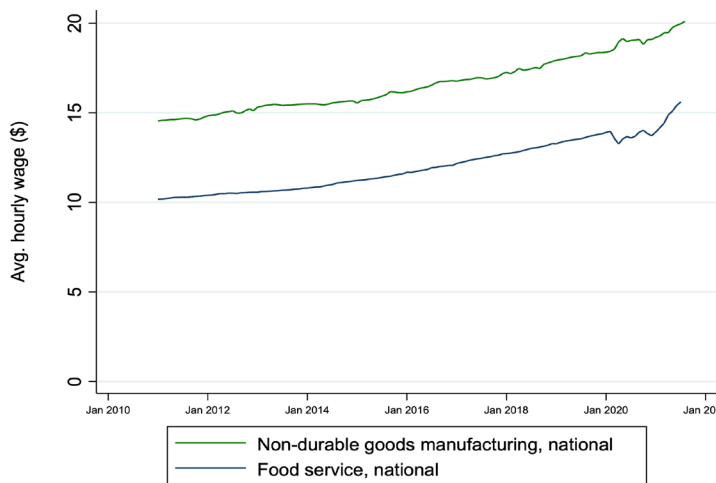


Figure 5: Wage rate over time nationally by sector; Source: CES

WHAT ABOUT FARMWORKERS?

On-farm employment is not necessarily subject to the same trends and influences as food processing or food service. The level of employment in the earliest part of the value chain in Ohio was quite low to begin with, and it did contract during 2020. The sub-sector experienced a significant decline of about 8% from 2019 to 2020. Here, farmworkers are defined as equipment operations, field workers, or livestock workers. As the graph shows, the trend in employment in this part of the sector had been increasing sharply from 2016, although the overall level is dwarfed by the employment levels in the food processing (3 orders of magnitude larger) and in food service (4 orders of magnitude larger).

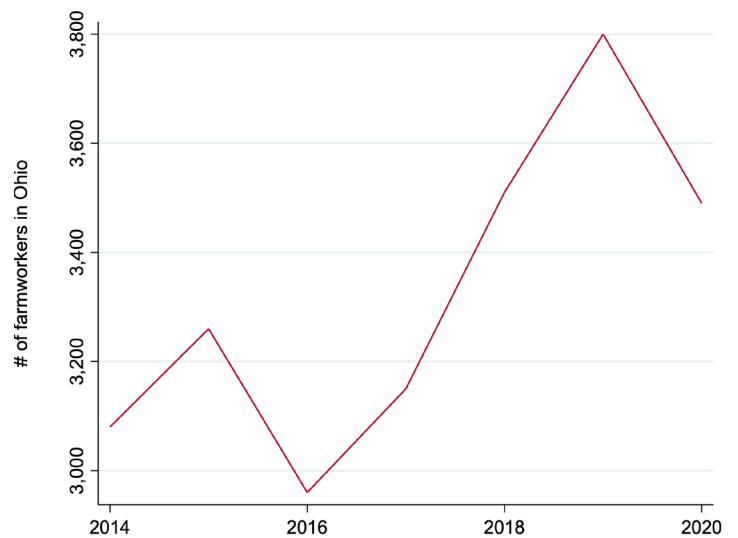


Figure 6: Farmworkers in Ohio over time; Source: OEWS

These massive differences in scale certainly complicate the comparison between on-farm employment and employment in either of these two other sectors. Direct comparison is further compromised when you consider that agriculture is not affected to the same extent by business cycles; downturns in the general economy do not always translate to on-farm downturns. In addition, the pool of potential workers in the three sectors is also very different. The precise number of on-farm workers is difficult to capture due to the prevalence of migrant or undocumented workers, who may not always be recorded in the official statistics.

CONCLUSION

Without more granular data, it is difficult to determine how much of the decline in the sector’s workforce is associated with each of the push/pull factors described above. As labor demand continues to grow, the bargaining power of any individual worker, particularly

one with specialized skills or experience, grows with it. Recognizing this, workers can afford to be more particular about which job they take, and so many are likely waiting for the right opportunity.

The economy-wide changes in the labor force are certainly inter-related, with changes in one sub-sector fueling changes in another. A multi-pronged solution to address it is needed, with one of the prongs being a better understanding of the reasons why workers take the jobs they do, as well the characteristics of the job, company, or industry that encourage them to stay. As the challenges brought on by the “Great Resignation” have continued to demonstrate, a higher-than-average wage alone is often not enough to either attract or retain workers. Flexible schedules and an understanding and responsive company culture are just two examples among many of non-wage benefits that are more valuable to workers as a result of the COVID-19 pandemic. The costs of working in this sector have increased, and the rational expectation of workers is that the benefits, wage and non-wage, will increase to compensate.

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