

# THE FUTURE OF DINING OUT: THE IMPLICATIONS OF FOOD SERVICE EMPLOYMENT TRENDS ON THE RESTAURANT INDUSTRY

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## ***ABSTRACT***

In the aftermath of the COVID-19 pandemic, substantial shifts have occurred in the restaurant and food service industry necessitating closer examination of the longitudinal effects on business, the economy, and broader society. As numerous restaurants and food service companies closed their doors amidst the public health crisis, millions of employees across this important – and large – part of the American economy found themselves jobless. This research seeks to uncover the sizeable impacts of the pandemic on employment trends and job insecurity in the restaurant and food service sector using longitudinal data from the United States Census Bureau. Through exploration of overall pre- and post-pandemic income trends, employment disparities across job categories in the restaurant business, and volatile metrics such as turnover and outmigration, combined into a new metric, the “Churn Rate” in occupations, the researchers offer insight into the changing trajectory of food culture and what it truly means to “dine out.” Future economic implications – for the food service value chain overall *and* for consumers - are summarily explored and suggestions for further research are offered.

## ***KEYWORDS***

*Service Industry, Restaurants, Employment, Information Technology, Change Management, Strategy, Work, Human Resource Management, Customer Service*

## **1. INTRODUCTION**

Officially declared a pandemic by the World Health Organization (WHO) in March 2020, COVID-19 caused marked shifts in business, education, sports and more. In fact, the pandemic initiated – almost overnight – a profound change in the overall ways of life for billions globally. [1]. It was perhaps the most impactful “Black Swan” event that we have seen on the planet since World War II. [2]

Impacts across many industries globally were pronounced as *all* businesses shifted to adjust to new restrictions and continue operations amidst the pandemic [3]. With growing concerns about health and safety looming, changes, both small and large, were evidenced in the restaurant and food service industry and in consumer perceptions of these operations, both in the United States and abroad. The present research aims to shed light on the broad implications of the pandemic and its aftermath on the restaurant and food service sector, specifically regarding employee turnover and retention in this important – and large – part of the American economy.

As a key employer in the United States, the restaurant and food service industry was disproportionately affected by the COVID-19 pandemic. [4] Growing consumer concerns about health, safety, and hygiene, coupled with governmental restrictions/recommendations on operating procedures, created massive changes in all retail and consumer-facing industries. And

in turn, all of this combined to produce a significant economic downturn, leading to high turnover and job loss. [5] Prior to the pandemic, the restaurant industry and food service-related jobs represented a substantial portion of the U.S. workforce, boasting approximately 13.5 million jobs. [6] After the economic downturn that followed the COVID-19 pandemic, over 3 million food service industry jobs were lost and over 100,000 restaurants permanently shuttered their doors, representing a massive shift in this previously healthy business sector. [7] And what happens to this industry – and to the millions employed in it – it of vital importance to all Americans. At present, according to the latest data (2023) from the National Restaurant Association, the restaurant and food service industry today generates approximately a trillion dollars annually in the U.S.! [8]

Previous research has demonstrated a link between occupational stress and employee turnover and retention. [9] [10] Occupational stress has been shown to be exacerbated by heavy workloads, precarious job security, and variable pay and scheduling—all of which are conditions evident in the restaurant and food service industry. Research has provided additional evidence that the large-scale layoffs and subsequent job insecurity that came with the pandemic may have increased occupational stress further, particularly in the restaurant and food service industry, which already showcased features highly correlated to such stressors. [4] While prior work has examined the causes and contributing factors of occupational stress on employee turnover, this study attempts to uncover the overarching changes taking place in the restaurant and food service industry in terms of both employment rates and income in the wake of the coronavirus.

To analyse these trends and uncover nuances in the changes seen in the restaurant industry, the present research utilizes longitudinal United States Census Bureau data to track changes in the industry prior to and during the COVID-19 pandemic. Specifically, this research attempts to illuminate employment and compensation trends in the restaurant industry during the critical 5-year period from 2017-2021. In doing so, the researchers will not just look at what has happened to date and the implications for this very important industry in the United States – and the millions of Americans employed in it – but also look ahead as to how the seeming “perfect storm” of fast-changing technologies, consumer preferences, and management priorities in the restaurant industry, combined with a global pandemic, is rapidly reshaping the way we eat and the way the restaurant and food service sector operates.

## **2. RESEARCH METHODS**

To examine the changes taking place in employment across the restaurant industry as a whole, the present research makes use of employment data that is collected annually by the United States Census Bureau (henceforth the Census Bureau). The Census Bureau tracks the “who, what, and where” of work in America as part of its mission to gather data to depict the current state of the American population. This data affords the opportunity for a longitudinal analysis of changes occurring in the U.S., demographically, socially, and economically. The federal agency continually tracks jobs across the top 100 occupational areas (in terms of the total number of workers employed in these fields and job changes within and between them), capturing the vast majority of those who are employed on a full-time basis.

Recently, the non-profit, non-partisan group, USA Facts, released a report (*Which Americans are leaving their occupations?*) looking at the most recent 5 years (2017-2021) of Census data, examining - and creating new data on - employment trends spanning the pre-pandemic, pandemic, and now, the post-pandemic periods. [11] This data forms the basis for the present research. The present research took a “deep dive” into the USA Facts/Census data to examine employment trends across the restaurant industry during the 2017-2021 five-year time span,

specifically looking at the number of workers employed, along with their annual incomes, in restaurant and food service jobs. This includes four categories of direct service work:

1. Restaurant Servers (Waiters and Waitresses);
2. Bartenders;
3. Chefs and Cooks; and
4. Food Preparation Workers.

Additionally, the dataset for this study includes those employed in managerial roles across the restaurant and food service area, with distinctions made between those employed as first-line (direct) supervisors of food preparation and serving workers (categorized as “*Food Supervisors [First-Line Supervisors of Food Preparation and Serving Workers]*”) and those who are managing at a higher level in the restaurant and food service industry, as well as lodging (hotels) (categorized as “*Food Service and Lodging Managers*”). And yes, the Census data aggregates hotel managers into this category, along with those employed as managers above the front-lines in restaurants and other food service businesses. With no way to disaggregate the Census data, this combined category is the best way to observe employment and compensation trends for mid and upper-level managers in restaurant and food service sector.

The present research examines three specific elements of the Census data on employment in the restaurant industry. First, the study analyzes annual income data across the six occupational areas in the restaurant industry. This is important, as pay in the restaurant and food service arena has been documented to historically lag well behind that of other occupations [12]. Secondly, the research looks at the total number of people employed in each of the six specific categories of restaurant and food service jobs tracked by the Census Bureau over the five-year period under review, examining the changes that have taken place from 2017 through 2021. Due to the fact that the Census changed how they track employment and incomes in the middle of the last decade, no further longitudinal or horizontal data comparison was undertaken. Thirdly, the present research takes a deep dive into the overall employment data for these restaurant and food service jobs. In doing so, the researchers generate a new metric to show the relative volatility and the velocity of turnover and job outmigration in occupational areas – and not just those in the restaurant industry specifically. This new measure will be referred to as “*Churn Rate*.”

The Churn Rate is the percentage of workers in an occupational area who leave their job – *for whatever reason* – over the course of a year. The Churn Rate thus encompasses the overall percentage of workers who choose to switch to another occupation, quit and take a similar job, or simply leave the employment workforce (whether to pursue their own business, to retire, for health or family reasons, etc.). In the present analysis, the research will determine annual churn rates for each of the six categories of restaurant and food service work under review, along with presenting the trends in overall “churn” across this important industry between 2017 and 2021.

### **3. ANALYSIS**

The analysis of the Census data on employment trends across the restaurant industry in the critical years between 2017 and 2021 produced interesting findings. Some were consistent with past research on work in the hospitality field, while others generated findings that will necessitate both new thinking and additional research. This section looks at the results found regarding three specific areas of analysis that were conducted in the present research:

1. The Income Structure in the Restaurant Industry
2. Total Employment in the Restaurant Industry
3. Employment “Churn” in the Restaurant Industry.

### 3.1. The Income Structure in the Restaurant Industry

The relative low incomes earned by workers across the entirety of the restaurant industry is well known and controversial, seemingly being an intractable issue for decades. Today, while the federal minimum wage is \$7.25 an hour, for wait staff (restaurant servers and bartenders) who are tipped by customers, the minimum hourly wage still stands at just \$2.13 an hour. [13] The relatively low pay in the restaurant sector is not limited to just waiters and waitresses, and this has been cited as a key factor as to why many workers in the field have left their jobs since the pandemic. And as more and more employers outside of restaurants and food services have offered higher and higher pay to attract new employees, the incentive for restaurant workers to pursue better wages in other industries becomes clearer. [14] And while restaurants – of all types – have recently upped their wages (and introduced new benefits) to better compete for needed personnel as well, [15] relatively low wages (vis-à-vis other occupational areas) still permeate this sector of the economy. [16] In fact, the present research found that in 2021, the average annual income for *all* workers employed in the restaurant and food service sector stood at \$17,586, just 37.72% of the overall average yearly earnings (\$46,617) across the top 100 occupations tracked by the Census Bureau!

The present research found that low pay was indeed a concern for all workers – and managers – across the restaurant and food service sector. As seen in Figure 1 (*Median Annual Income for Restaurant Servers [Waiters and Waitresses], 2017-2021*), overall, annual pay for wait staff fell by 15% over the five-year period. Annual earnings for restaurant wait staff saw a slow but steady, increase between 2017 and 2020. However, yearly pay for waiters and waitresses fell precipitously in 2021 year-over-year, declining from \$17,000 in 2020 to just \$11,900 in 2021 – a 30% decline in just 12 months! This income loss for wait staff may be attributable to a combination of any number of factors impacting the restaurant sector, including the shift to more self-service and automation in a wide swath of the industry [17] and consumers continuing to shift to drive-thru, take-out, and especially delivery options for their meals. [18] However, income trends for waiters and waitresses will need to be tracked *very* closely by restaurant management over the next few years, as declining incomes could make wait staff jobs less attractive to potential workers and thus make these positions even harder to fill – as well as accelerating the trend, especially for large restaurant chains, to simply eliminate the need for these positions by changing the way they serve dine-in customers. [19]

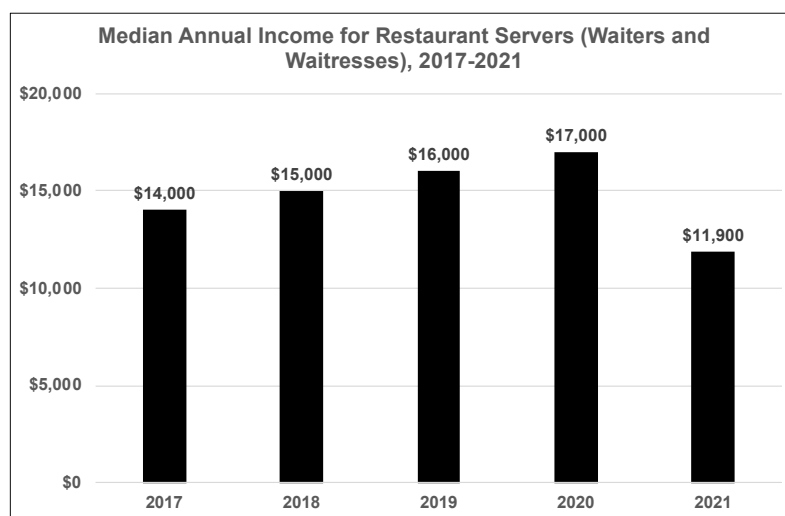


Figure 1. Median Annual Income for Restaurant Servers (Waiters and Waitresses), 2017-2021

*Source Data: U.S. Census Bureau and USA Facts*

Similar findings were also uncovered for bartenders, chefs, and cooks. As seen in Figure 2 (*Median Annual Income for Bartenders, 2017-2021*), the median annual income for this category of restaurant workers started at \$24,000 in 2017 and then increased by over 10% over the next two years, only to fall back to \$24,000 in the pandemic year of 2020 and then fall significantly more in 2021. In fact, bartenders made – on average – \$4,100 less in 2021 than they did in 2020 (an income loss of 20.42%) and \$8,500 less than they did in the pre-pandemic year of 2019 (a whopping income loss of 30.80%)! While the loss of income was not nearly as dramatic for the non-tipped chefs and cooks, the same pattern held true for “back of the house” workers as it did for the tipped wait staff and bartenders working in the “front of the house.”

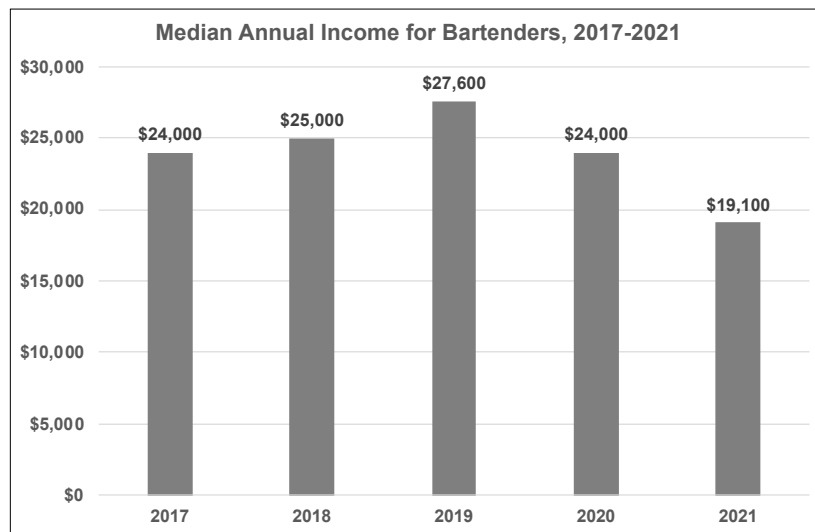


Figure 2. Median Annual Income for Bartenders, 2017-2021

*Source Data: U.S. Census Bureau and USA Facts*

As seen in Figure 3 (*Median Annual Income for Chefs and Cooks, 2017-2021*), this vital category of workers in the restaurant business made less still than wait staff or bartenders, with the *median* annual income for chefs and cooks holding relatively steady at \$20,000 between 2018 and 2020. For the five-year period however, the median income fell by \$1,700 – or 9.09%. And from 2020 to 2021, the income loss was even greater, amounting to, on average, a decline of \$3,000 – a 15% fall in just a year for chefs and cooks! Again, these are numbers that should be closely monitored by those managing restaurants – of every kind *and* at every level, as these positions, which do need significant training upfront and continuing investment in the people in them to assure quality service delivery, seem especially vulnerable today.

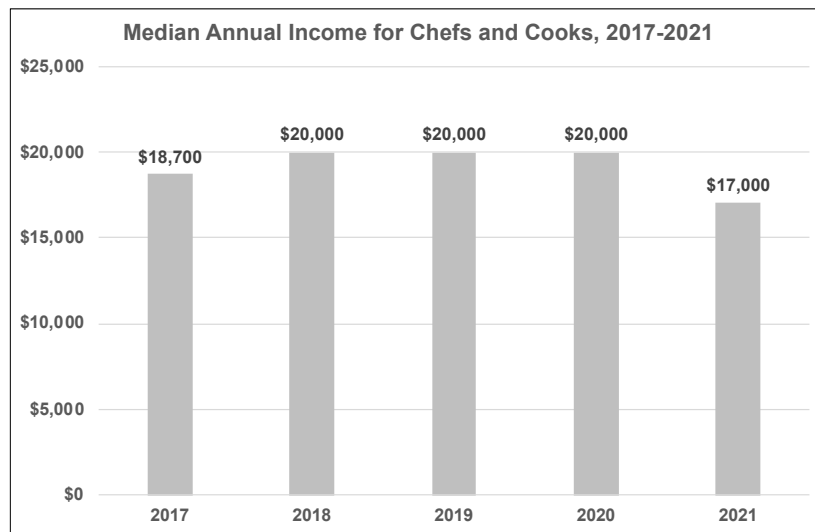


Figure 3. Median Annual Income for Chefs and Cooks, 2017-2021

*Source Data: U.S. Census Bureau and USA Facts*

The one area of the restaurant and food service sector which showed relative wage steadiness was found in the job category of food preparation workers. According to the Bureau of Labor Statistics’ (BLS) definition for these jobs, [20] food preparation workers operate under the direction of chefs, cooks, and managers in doing the “assembly work” necessary to put food on your plate (or more frequently today, in a “to-go” container) and have it “ready” for your consumption. As you can see in Figure 4 (*Median Annual Income for Food Preparation Workers, 2017-2021*), the annual median income figures for these important “cogs” in the restaurant machine stayed relatively flat over the past five years, even as there was volatility among all other restaurant workers and managers. The average median income for food preparation workers stood at just \$12,000 in 2017, and in 2021, remained unchanged – literally! This can be attributable to the fact that so many of these positions being paid at the federal minimum wage (\$7.25 per hour), and in point of fact, by the numbers, many employed in this area are not working a full 40 hours a week. As we will see in subsequent sections, turnover in this critical role in the operation of any restaurant can have serious repercussions, despite the pay for these positions remaining flat – *and* relatively low - over time. However, with more and more restaurants (and particularly fast-food establishments) recently hiking their minimum starting pay to better attract workers in an increasingly competitive labor market, [21] it will be interesting to see how wages in this particular subset of the overall restaurant and food service labor force will trend over the next few years as competitive pressure for individuals that are willing and able to perform these vital roles is seemingly driving wages upward.

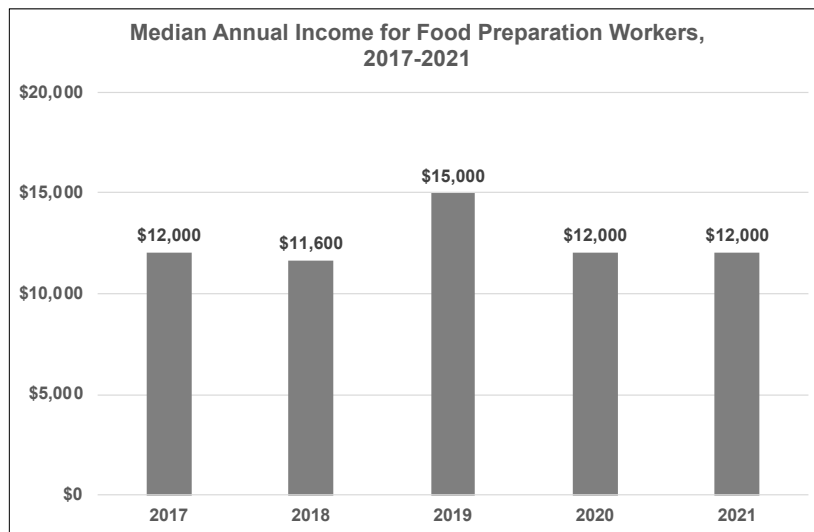


Figure 4. Median Annual Income for Food Preparation Workers, 2017-2021

Source Data: U.S. Census Bureau and USA Facts

Finally, there was an interesting development observed regarding the income levels of those employed as managers in the restaurant and food service sector. As seen in Figure 5 spanning the most recent five year period (*Median Annual Income for Food/Hospitality Supervisors and Managers, 2017-2021*), the average median annual incomes earned by those employed as direct supervisors in restaurants remained relatively steady, while those employed in management above the level of first-level supervision saw their incomes, on average, actually fall over the same period. Specifically, those employed as first-line supervisors of food preparation and serving workers saw their incomes rise by \$2,000 between 2017 and 2021 (a 9.09% increase)

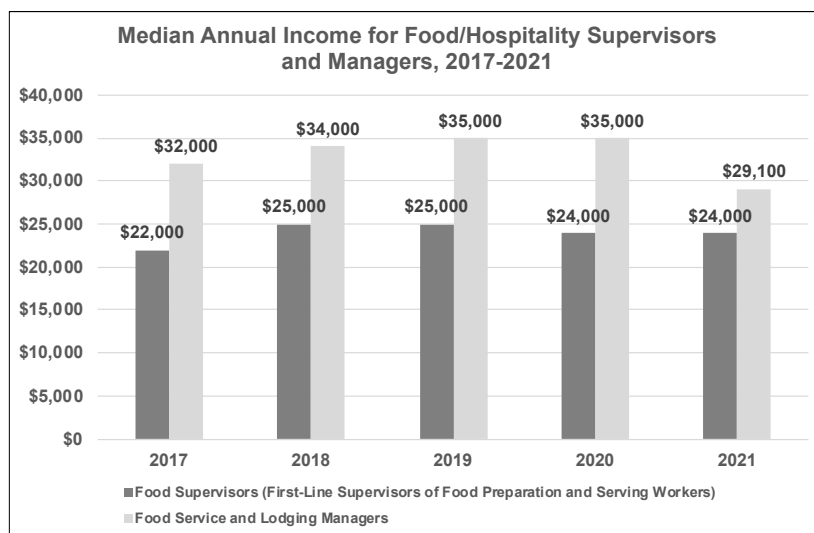


Figure 5. Median Annual Income for Food/Hospitality Supervisors and Managers, 2017-2021

Source Data: U.S. Census Bureau and USA Facts

and remain unchanged from 2020 to 2021. In contrast, food service and lodging managers (which encompasses hotel and motel management according to the BLS' categorization), [20] saw their median incomes fall by \$2,900 (or 9.06%) over the most recent five-year period and decline by a whopping \$5,900 (or 16.86%) between 2020 and 2021. This is certainly an interesting finding

that should be of concern to restaurant and food service management as well as the subject of further research in the years ahead.

It is certainly a rarity in American business for the compensation of mid-level to top management to fall when the pay of front-line management is *actually* on the rise. However, this may be a sign of *just how bad* the talent shortage is in the restaurant and food service sector – and how companies in this area of the economy are using money as the chief means of recruiting and retaining talent! Finally, it is interesting to note again that even those in managerial roles in the restaurant and food service industry today find their annual median incomes significantly below that of the general workforce – management *and* non-management alike. This chronic “underrewarding” of both front-line supervisors and restaurant management in general thus needs to be fully examined, as it speaks to the highly volatile employment situation found across this significant sector in today’s economy.

Overall, the researchers believe that the relative low compensation levels across the restaurant and food service industry is – *and will continue to be* – a significant issue that will need to be addressed moving forward. Compensation is indeed the “elephant in the room” for restaurant and food service management and for them any millions employed outside of the “C-Suite” in such firms. The relatively low pay generally found in this sector of the American economy is not indicative of the size, import, or impact of the industry. Restaurant workers, on average, make *far less* than their counterparts in the rest of the American workforce as a whole. *How much lower you might ask?* Consider that while examining Table 1 (*Median Income Across Occupational Groups in the Restaurant and Food Service Sector, 2017-2021*), the median income levels for all restaurant workers were *well below* the national average compensation for

Table 1. Median Income Across Occupational Groups in the Restaurant and Food Service Sector, 2017-2021.

<b>Median Incomes in Restaurant &amp; Food Service Jobs</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Occ. Average</b>
Restaurant Servers (Waiters and Waitresses)	\$14,000	\$15,000	\$16,000	\$17,000	\$11,900	\$14,780
Bartenders	\$24,000	\$25,000	\$27,600	\$24,000	\$19,100	\$23,940
Chefs and Cooks	\$18,700	\$20,000	\$20,000	\$20,000	\$17,000	\$19,140
Food Preparation Workers	\$12,000	\$11,600	\$15,000	\$12,000	\$12,000	\$12,520
Food Supervisors (First-Line Supervisors of Food Preparation & Serving Workers)	\$22,000	\$25,000	\$25,000	\$24,000	\$24,000	\$24,000
Food Service and Lodging Managers	\$32,000	\$34,000	\$35,000	\$35,000	\$29,100	\$33,020
<i>Annual Median Incomes for Restaurant &amp; Food Service Occupations</i>	\$20,450	\$21,767	\$23,100	\$22,000	\$18,850	\$21,233
<i>5 Year Average Median Income for Restaurant &amp; Food Service Occupations</i>	\$21,233					

Source Data: U.S. Census Bureau and USA Facts

all U.S. workers, both at the start (\$42,363 in 2017) and at the end (\$46,617 in 2021) of the time frame of the present research. In fact, both in 2017 and still in 2021, the average median incomes of all restaurant workers were just a fraction of the compensation of the typical American worker. Even supervisors and managers of the restaurant and food service workforce fell significantly below the national median income levels – for all workers! Across the board, overall, restaurant and food service workers – *and* their management – had median incomes that were less than half of the general workforce in the United States!



Exactly how low – or rather, *how bad* - compensation is for those employed in the restaurant and food service industry in comparison to that of the average American worker? In 2017, the average median income for all employed in the restaurant and food service industry was \$20,450 – or just 48.27 % of the median income nationally. By 2021, that ratio had fallen to 40.43%! And as seen in Table 2 (*Trends in Median Income Across Occupational Groups in the Restaurant and Food Service Sector, 2017-2021*), the dollar and percentage declines in median incomes across the industry have been substantial, especially considering the relatively low bases from which worker incomes fell in this industry compared to average median incomes elsewhere in the American workforce. Especially acute was the fall in median incomes for wait staff (-15%) and for bartenders (-20.42%). Much, but not all this decline, can be traced to the effects of the COVID-19 pandemic. However, the loss of income for these workers—the “tip of the spear” for the hospitality industry—also arises out of all the technological changes and shifting consumer consumption patterns that the pandemic only served to accelerate.

Now, the relatively low pay across the board in the restaurant and food service sector has been a seemingly intractable and vexing problem for workers, for management, and even for public policy makers [22]. Since the COVID pandemic, firms across the restaurant and food service sector have basically been forced into an “arms race” to escalate wages in an attempt to better attract and then retain good employees [23], with varying degrees of effectiveness, but with the “net” effect of increasing operating costs, and hence, prices for consumers. And yet, as you will see, workers – and managers – across this important sector of the American economy are exiting the industry in droves. [24] The researchers will explore the how’s and why’s of all of this in the next two sections of this analysis.

Table 2. Trends in Median Income Across Occupational Groups in the Restaurant and Food Service Sector, 2017-2021.

<b>Restaurant &amp; Food Service Jobs</b>	<b>5 Year Gain/Loss in Median Income (\$)</b>	<b>5 Year Gain/Loss in Median Income (%)</b>
Restaurant Servers (Waiters and Waitresses)	-\$2,100	-15.00%
Bartenders	-\$4,900	-20.42%
Chefs and Cooks	-\$1,700	-9.09%
Food Preparation Workers	\$0	0.00%
Food Supervisors (First-Line Supervisors of Food Preparation and Serving Workers)	\$2,000	9.09%
Food Service and Lodging Managers	-\$2,900	-9.06%
<i>Annual Average Median Income for Restaurant &amp; Food Service Occupations</i>	-\$1,600	-7.41%

Source Data: U.S. Census Bureau and USAFacts

### 3.2. Total Employment in the Restaurant Industry

Looking at total employment in various lines of restaurant work, one gets a sense of the impacts of the COVID-19 pandemic and its intersection with accelerated trends toward automation, self-service, and off-premises consumption. Such trends have had implications for overall employment in the restaurant and food service sector over the past five years, but even more so since the pandemic’s inception during 2020.

As seen in Figure 6 (*Total Employment - Restaurant Servers (Waiters and Waitresses), 2017-*

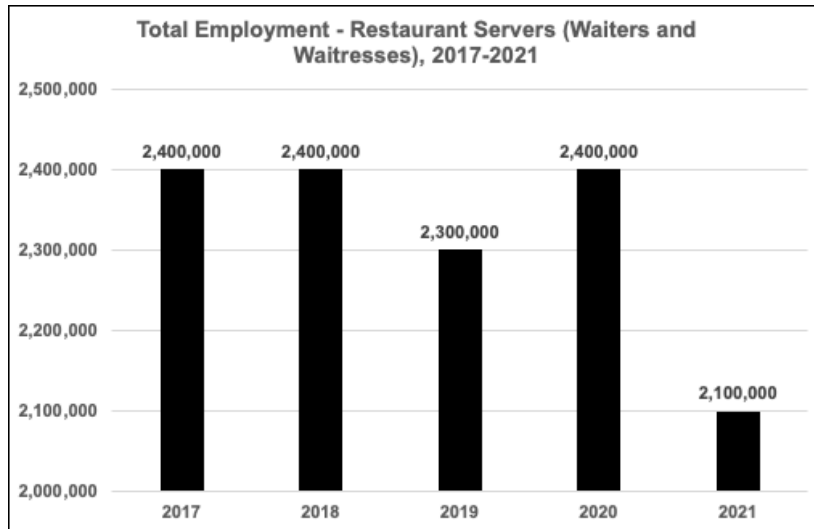


Figure 6. Total Employment - Restaurant Servers (Waiters and Waitresses), 2017-2021  
 Source Data: U.S. Census Bureau and USA Facts

2021), the total number of people employed as wait staff held fairly steady from 2017-2020 at approximately 2,400,000. Then, in 2021, there was a precipitous decline of 300,000 waiters and waitresses in the restaurant industry - fully 15% of those employed as such in just a single year following the COVID-19 pandemic!

A similar decline can be seen in Figure 7 (*Total Employment - Bartenders, 2017-2021*) below, as the number of bartenders fell from a peak of well over half a million (525,600) in 2018 to 479,700 in 2021 - a decline of 45,900 workers – or 9.57%. The number of people employed as bartenders did not fall dramatically from 2020 to 2021 as was the case with wait staff during this period. In fact, the number of bartenders fell by a scant 1,200 workers – just a small fraction (.25%) of the 480,900 employed as such in 2020!

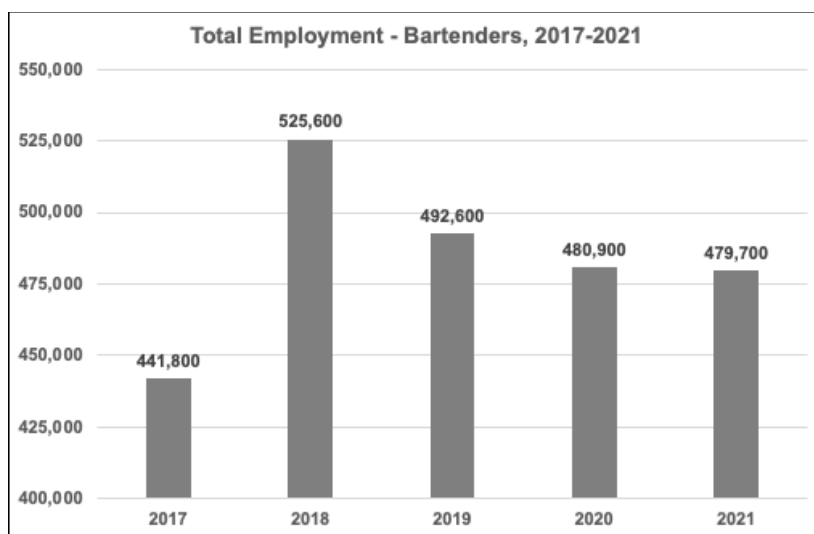


Figure 7. Total Employment - Bartenders, 2017-2021

*Source Data: U.S. Census Bureau and USA Facts*

This is indeed an interesting phenomenon, as it is reflective of the fact that just as restaurant food consumption trends changed in the wake of the pandemic, so too has restaurant alcohol consumption. While the former had a negative impact on the employment of waitstaff, the latter meant almost literally no change in the overall employment levels for bartenders. This could be reflective of both strong alcohol sales during the in-person dining experience, [25] as well as the push many restaurants, both large and small, have made to make take-out and delivery of alcoholic beverages an important part of their offerings [26] – even to perhaps deleterious societal and personal effects. [27] And for both waitstaff and bartenders, with more and more restaurant sales coming from takeout and delivery, [28] more and more of these “front of the house” restaurant jobs have shifted – and will continue to shift – to serving these takeout customers, as opposed to in-house diners.

In the “back of the house,” the overall trend in employment was far different. No matter precisely *where* restaurant customers may consume the food that these workers prepare – whether in-store or at home, strong restaurant sales are keeping the demand for these critical jobs rather robust, despite the overall turmoil evidenced in the food service sector. As seen in Figure 8 (*Total Employment - Chefs and Cooks, 2017-2021*), over the entire five-year period,

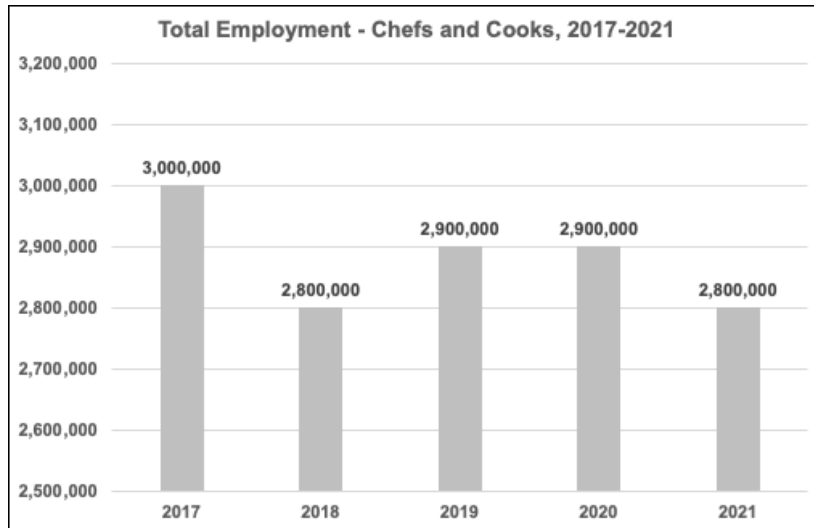


Figure 8. Total Employment - Chefs and Cooks, 2017-2021

*Source Data: U.S. Census Bureau and USA Facts*

the number of chefs and cooks in the restaurant and food service sector only declined by 200,000 workers – or 6.67% from 2017-2021. Furthermore, in the wake of the pandemic the total number of people employed as chefs and cooks in restaurants only fell by 100,000 – or 3.45% year-over-year from 2020 to 2021. Additionally, as seen in Figure 9 (*Total Employment - Food Preparation Workers, 2017-2021*), the demand – *and* absolute need for – those employed as food preparation workers that help to, in essence, make any kind of restaurant and/or food service establishment “tick,” stayed surprisingly steady, with an overall loss of only 100,000 jobs between 2017 and 2021 (a decline of just 8.33% for the five-year period). Quite remarkably, in direct contrast to other job categories in the restaurant industry, there was no significant change in employment levels in this area between 2020 and 2021.

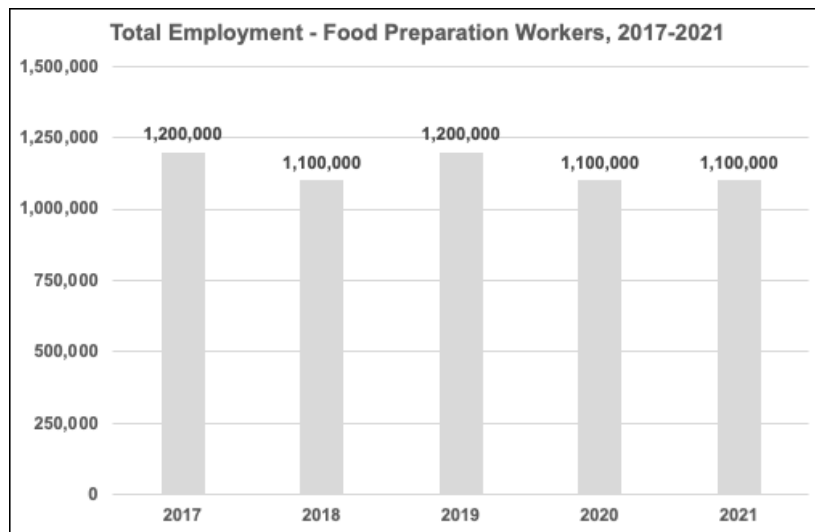


Figure 9. Total Employment - Food Preparation Workers, 2017-2021

Source Data: U.S. Census Bureau and USAFacts

Again, the relative steadiness in the food preparation area overall, both in terms of those actually cooking the food and those supporting that work, stands in stark contrast to the relative volatility seen in “front of house” operations. This is further evidence of just how much the restaurant industry is changing from considering in-house dining as a first choice, both from a consumer choice and an operational perspective to a multipronged, multichannel strategy, with take-out and delivery becoming increasingly important ingredients to almost all restaurants’ success. [29]

When it comes to those individuals employed in the managerial ranks of the restaurant and food service sector, there was an interesting dichotomy witnessed across the totality of the restaurant and food service sector. As seen in Figure 10 (*Total Employment - Food/Hospitality Supervisors and Managers, 2017-2021*), there has been a bifurcation in the managerial ranks in restaurants and other food service establishments. This is due to the fact that while there has been a rather amazing degree of stability in terms of the number of managers employed at levels above those directly supervising front *and* back of the house, with *literally* no change in the total number of food service and lodging managers between both 2017 and 2021 and between the pandemic year (2020) and the year after (2021), this has certainly not been the case with those who are working as first-line supervisors. Indeed, while there was stability in terms of supervisory personnel between 2020 and 2021 (again, owing to the overall maintenance of demand for restaurant food, even if it was consumed in different places and in different ways than pre-COVID-19), overall, for the five-year period between 2017 and 2021, there was a net loss of well over 100,000 such jobs in the restaurant and food service industry. And in fact, there was a decline of 20.34% in terms of those specifically employed as first-line supervisors in this sector over the five-year period under review!

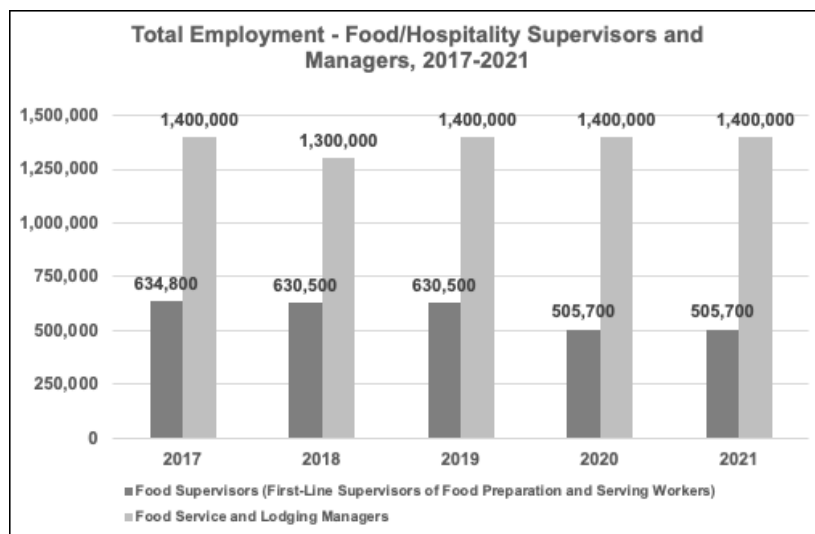


Figure 10. Total Employment - Food/Hospitality Supervisors and Managers, 2017-2021

Source Data: U.S. Census Bureau and USAFacts

This decline in front-line supervisors may be attributable to any number of factors, including the overall trend toward greater degrees of self-management and “management by metrics” for front-line workers, along with the shift of more personnel from supervisory work to direct operations across not just this industry, but many, many others today [30]. Finally, as the number of wait staff has particularly declined in recent years – and with restaurants downsizing their serving space [31] – and often shifting floor space to better serve their takeout and delivery business, [32] so too has the need for first-line supervisors on the restaurant floor as well. By any measure, this was a significant decline in terms of front-line management jobs in the restaurant industry that contrasts with the remarkable overall stability in terms of the numbers of managers employed *above* the immediate supervisory level. This development will certainly warrant both further research *and* managerial attention moving forward.

### 3.3. Employment “Churn” in the Restaurant Industry

The restaurant industry has had a chronic turnover problem. In fact, it has historically had turnover rates exceeding not just those of most facets of the service sector, but indeed the restaurant industry has one of the highest rates of turnover of *any* occupational group in the American economy.

This new measure will be referred to as “*Churn Rate*.” The Churn Rate is the percentage of workers in an occupational area who leave their job – *for whatever reason* - over the course of a year. The Churn Rate thus encompasses the overall percentage of workers who choose to switch to another occupation, quit and take a similar job, or simply leave the full-time employment workforce (whether to pursue their own business, to retire, for health or family reasons, etc.). In the present analysis, the research will determine annual churn rates for each of the six categories of restaurant and food service workers under review, along with presenting the trends in overall “churn” across the industry between 2017 and 2021, the most recent five-year period for which Census data is currently available.

The present analysis revealed that the Churn Rates across all front-line food service workers – restaurant servers (waiters and waitresses), bartenders, food preparation workers, and chefs and cooks – averaged 25.4% annually between 2017 and 2021. By way of comparison, the

researchers’ analysis of the complete Census data on over a hundred major occupational areas showed that, on average, American companies saw Churn Rates averaging 17.11% annually during this same time period. This translates into management across the restaurant and food service sector having to deal with employee churn that is almost a third higher than that experienced on average across all other American business sectors! In practical terms, this means that the management of firms of all types and sizes in this field must deal with the challenge of employee turnover on a constant basis, facing the increasingly difficult human resource issue of finding – and paying – qualified personnel who want to work in this field. [33] Restaurant and food service managers must also deal with very practical operational problems that accompany so many workers constantly churning through positions throughout their enterprise. Such difficulties are translating into growing customer dissatisfaction with the service – *or lack thereof* – that they now experience in restaurants – from fast food establishments to the highest of high-end restaurants, especially since the onset of COVID-19 in early 2020. This presents a very real strategic challenge for all management across the restaurant industry and the entirety of the wider – *and very important to us all* - food service sector. [34]

As seen in Figure 11 (*Workers Leaving Their Current Employment in Restaurant and Food Service Occupations Annually, 2017-2021*), the Churn Rate for front-line workers in restaurant and food service occupations was high across the board, before, during, and after the pandemic year of 2020! Three of the four major front-line occupational groups in this area saw marked increases in their turnover rates between 2017 and 2021: Restaurant servers (waiters and waitresses), increasing from 26% in 2017 to 33% in 2021; Bartenders, surging from 17% in 2017 to 32% in 2021; and Chefs and cooks, moving from 16% in 2017 to 21% in 2021. The sole occupational area in this sector to stay relatively steady in the industry was that of food preparation workers, who began and ended this five-year period with a 27% turnover rate – with a pandemic in the middle that saw their Churn Rate approach a third of all people employed in this field in 2020! Restaurant management must therefore account for “churn” among employees across the board, representing a significant concern going forward. And while “back of the house” workers will likely continue working as in the past no matter what changes occur as restaurants of all stripes and sizes move toward a future that increasingly depends on preparing foods for takeout and delivery – even through the so-called “ghost kitchens” (delivery only restaurants), which are growing rapidly and even seeing “name brand” restaurant chains preparing foods “off brand” or under a different brand altogether! [35]

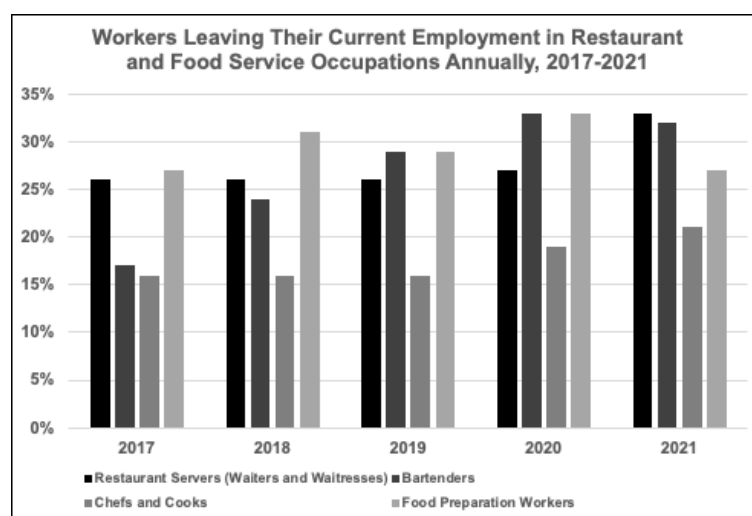


Figure 11. Workers Leaving Their Current Employment in Restaurant and Food Service Occupations Annually, 2017-2021

Source Data: U.S. Census Bureau and USA Facts

As seen in Figure 12 (*Food/Hospitality Supervisors and Managers Leaving Their Current Employment in Field, 2017-2021*), the Churn Rates for front-line supervisors and restaurant/food service managers have been consistently different – *sharply different* – over the most recent five-year period. Those employed as first-line supervisors in the restaurant and food service sector consistently saw their Churn Rates around one third to nearly one half higher than that experienced by managers higher up in their organizations. Overall, supervisors in this sector had a Churn Rate averaging 23.2% between 2017 and 2021, whereas their counterparts in higher management (location managers and above) averaged 16.2% over this same period – a rate 30% lower than those manging on the frontlines!

In the prior section, the researchers discussed their finding that there had been a loss of over 100,000 such supervisory jobs in the restaurant and food service sector over the five-year period being studied – fully 20% of such positions! The changes taking place in restaurants and all

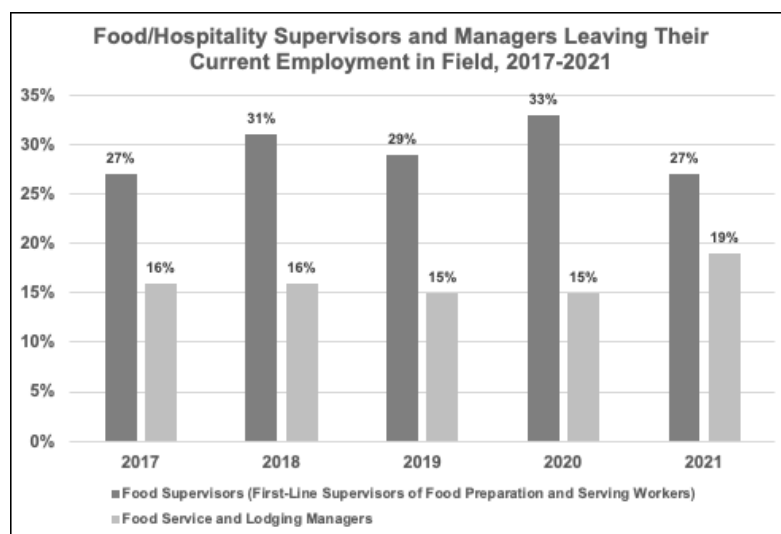


Figure 12. Food/Hospitality Supervisors and Managers Leaving Their Current Employment in Field, 2017-2021

Source Data: U.S. Census Bureau and USA Facts

food service businesses today – from increased use of automation and technology to prepare, serve, and even deliver foods – certainly threaten to change the job of these front-line managers and increase stress on the individuals in these positions. [36] In time, the researchers believe that is likely that all of this will combine to worsen the trend of far higher turnover at the “tip of the spear” of management across all food service businesses and make supervisory turnover prevention/retention a top priority for mid-to-upper management of these organizations, especially as there is newfound concern for the health and wellbeing of those engaged in restaurant supervision due to the stress involved in such roles, which make them even less attractive jobs to fill and to retain good people in! [37]

Now, consider just how staggering the levels of turnover are among these occupational groups in the restaurant and food service sector, comparing each employment category individually. In 2021, there were approximately 2.1 million workers employed as restaurant servers (meaning waiters and waitresses). This is down from approximately 2.4 million back in 2017, meaning right at 300,000 fewer people were working as waiters and waitresses just within a span of five years! Further, as seen in Figure 13(*Total "Churn" of Restaurant Servers (Waiters and*

*Waitresses) Leaving Their Current Employment, 2017-2021*), even as the total number of people working as restaurant servers fell precipitously, the Churn Rate in this job category rose dramatically. In fact, the total annual “churn” among servers rose from 624,000 leaving their serving jobs in 2017 to approach almost 700,000 in 2021 – even as there were 300,000 fewer people doing these jobs in total! The rising Churn Rate among wait staff is a product of the interplay of not just technology and changing restaurant models, but also the low pay for most waiters and waitresses, with most such work being done on a low hourly wage plus tips model of compensation. [38, 39] With a virtual consumer rebellion brewing against tipping culture and heightened tip expectations, [40] this will only serve to increase employee stress levels and the difficulties of management to find and retain good wait staff.

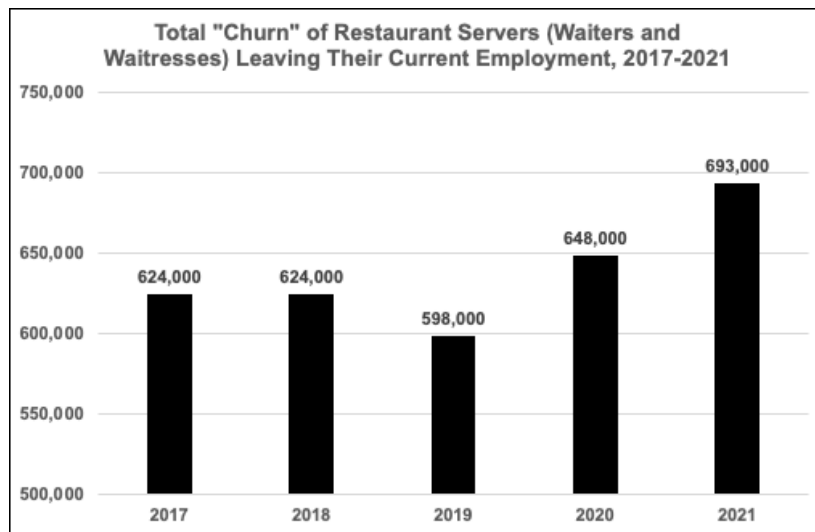


Figure 13. Total "Churn" of Restaurant Servers (Waiters and Waitresses) Leaving Their Current Employment, 2017-2021

Source Data: U.S. Census Bureau and USA Facts

This phenomenon is repeated across the restaurant and food service sector, as *all* front-line restaurant occupations have seen their Churn Rates increase over the most recent five-year period for which such employment and turnover data has been made available by the Census. And as the pattern repeats, the challenge for restaurant and food service management to attract and retain employees only grows more formidable with each passing year.

To better understand this relationship, consider the specific job category of bartenders. The number of people employed as bartenders actually increased from 441,800 in 2017 to 479,700 in 2021, a gain of over 37,000 jobs – or 8.57%, even while the median income of barkeeps fell from \$24,000 to \$19,100 over the same five-year time frame! As seen in Figure 14 (*Total "Churn" of Bartenders Leaving Their Current Employment, 2017-2021*) however, the Churn Rate grew from 17% in 2017 to 32% in 2021 – an 88% increase! And in practice, this meant that the annual churn of bartenders more than doubled annually from 2017 (when just over 75,000 workers left their bartending jobs) to well-over 150,000 in 2021!

We must also consider technology’s effects as the role of human bartenders is increasingly challenged by robots that can perform the mixing job on a routine basis. Such robotic technologies are not just for show or novelty, but for efficiency and profits as they proliferate in use across the restaurant and hotel industries [41]. Still, the growth of jobs among human



bartenders might say something about the growing consumption of alcohol in the United States overall [42] – and the social roles that real, live bartenders play in serving customers that no machine can replace – *yet!*

In the employment categories encompassing those working in “back of the house” jobs in the restaurant and food service sector, namely chefs and cooks, along with food preparation

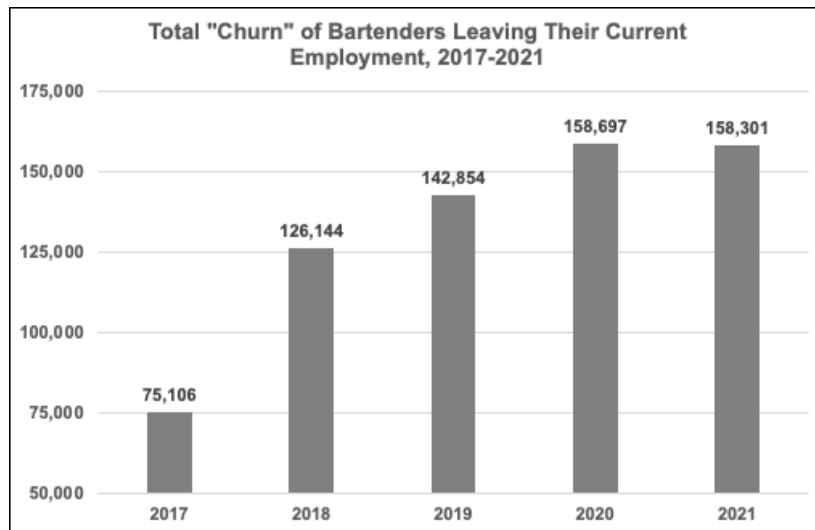


Figure 14. Total "Churn" of Bartenders Leaving Their Current Employment, 2017-2021

Source Data: U.S. Census Bureau and USA Facts

workers, the trend is for an overall erosion in the number of people employed in such vocations. In fact, the total number of chefs and cooks fell 200,000 over the five-year time span under review (from 3 million to 2.8 million), and likewise, those employed as food preparation workers declined by a like percentage, falling 100,000 from the 1.2 million total in this job category in 2017. As a significant percentage of restaurants – of all sizes and types – follow industry trends toward more automation and a greater emphasis on efficiency in their operations, one can expect this trend to continue and perhaps accelerate. [43] This is especially true in light of today’s widespread staffing shortages in the back of the house of restaurants and food service businesses across the board which forces employers to have to offer higher pay and benefits to be able to find and retain qualified help in their operations. [44]

And yet, for the similarity of their plights (and relatively low pay overall), the Churn Rates for these two categories of back of the house restaurant and food service workers are quite different – and telling. As seen in Figure 15 (*Total "Churn" of Chefs and Cooks Leaving Their Current Employment, 2017-2021*), the churn of chefs and cooks took a big jump from 2019 to the pandemic years of 2020 and, to a lesser extent, 2021. In digging deeper into the data for those last two years for which data is available, the researchers found that well over half a million chefs and cooks left their positions, with many not simply changing where they worked, but doing other forms of chefs' jobs and/or leaving for a different career entirely. With the automation trends affecting back of the house operations working against them, these numbers are likely to only accelerate into the future. In contrast though, as seen in Figure 16 (*Total "Churn" of Food Preparation Workers Leaving Their Current Employment, 2017-2021*), the Churn Rate for the less skilled – and lower paid – food preparation workers did not have a dramatic change over the five-year period observed. In fact, the Churn Rate for this category of restaurant worker actually

fell significantly between 2020 and 2021. Further research using the Census data in a manner similar to that used in the present study will determine if this 18.2% decline in churn seen in 2021 among food preparation workers is an anomaly – or the beginning of a trend toward restaurants seeing far more volatility – and churn – among their higher skilled

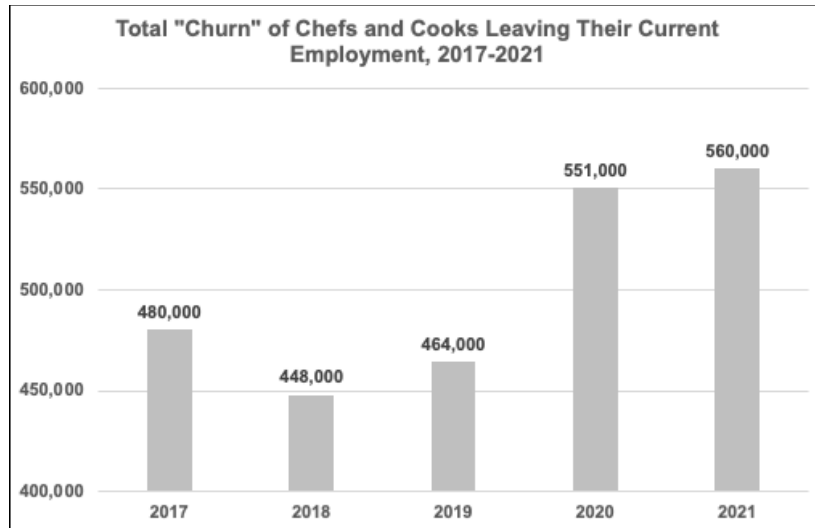


Figure 15. Total "Churn" of Chefs and Cooks Leaving Their Current Employment, 2017-2021

Source Data: U.S. Census Bureau and USA Facts

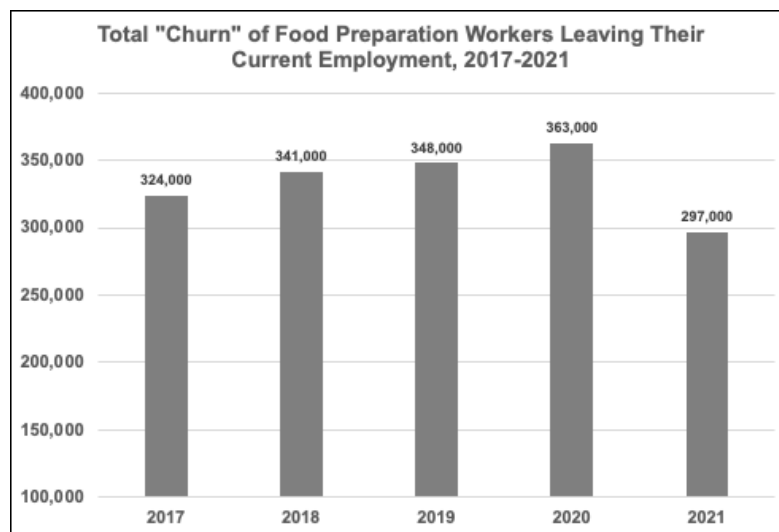


Figure 16. Total "Churn" of Food Preparation Workers Leaving Their Current Employment, 2017-2021

Source Data: U.S. Census Bureau and USA Facts

(and compensated) chefs and cooks than in the food preparation workers that support their work, both pre and post-cooking.

Finally, a wide gap in the Churn Rates between the general status of first-line restaurant and food service managers and their counterparts at higher levels of the organization – away from the “front-lines” of what can be one of the more challenging managerial tasks out there – was a

surprising result uncovered in the present analysis. The total churn of these two administrative categories of restaurant and food service management is detailed in Figure 17 (*Total "Churn" of Food Service Supervisors and Managers Leaving Their Current Employment, 2017-2021*). In looking behind the numbers, one would have expected there to be significantly higher churn for first-line supervisors in this field than that of managers at higher levels of restaurant and food service businesses. However, this was not the case on a percentage basis, as Churn Rates held relatively steady for both lower and higher-level managers between 15 and 25 percent. And yet, as seen clearly in this chart, on a real basis, in terms of numbers, there was certainly far more movement among those managers situated above the “front lines” of restaurant and food service companies.

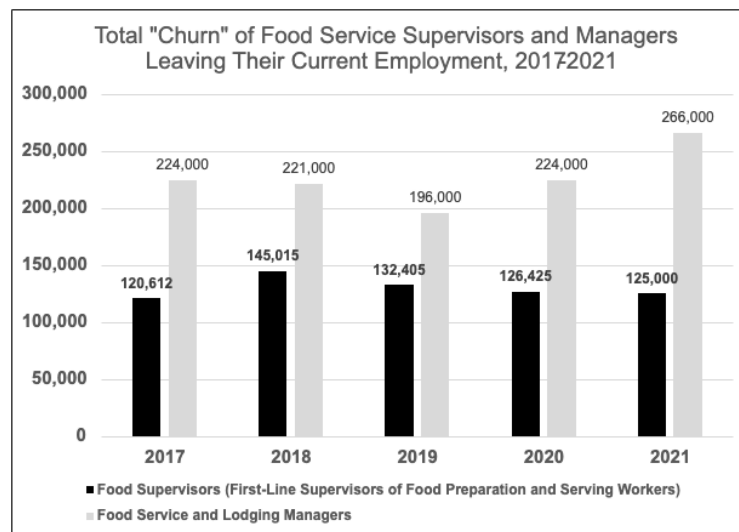


Figure 17. Total "Churn" of Food/Hospitality Supervisors and Managers Leaving Their Current Employment, 2017-2021

Source Data: U.S. Census Bureau and USA Facts

From a practical perspective, as is the case across many, if not most industries, middle and upper-level managers may indeed find themselves more marketable and “in play” to switch between companies that are similar – or even quite different than their own, but which are still within the general sphere of the restaurant and food service business – than direct supervisors. And yes, those “assistant managers” and “kitchen or floor supervisors” may have much more incentive to stay with their present employer than those who are already at higher levels of management, simply because they aspire to be location, regional managers, or even corporate executives with their present organization by “putting in the work” as a front-line supervisor – at least for a while – and hence the relative stability in terms of the aggregate amount of churn among supervisory personnel. However, in analysis that goes beyond the present research, the Census data revealed a sharp rise that really began in 2019, before the onset of COVID, of middle and higher-level management not just leaving their current employers, but switching industries, retiring, or leaving full-time employment to pursue “something else” - whatever that may be (i.e., buying a restaurant franchise, becoming a consultant, or simply retiring). This is certainly a trend that will indeed need closer scrutiny in future research, both by this study’s authors and others, as the loss of managerial talent and knowledge is a critical issue for today’s organizations.

#### 4. IMPLICATIONS AND FUTURE RESEARCH DIRECTIONS

This research sheds light on the changing environment of the restaurant industry and the specific shifts witnessed during the onset of the COVID-19 pandemic and in its aftermath. As both the U.S. and global economies continue their recovery from this economic upheaval, the restaurant and food service industry remains in flux with high turnover rates, job insecurity, and challenges from automation technologies. This research revealed key concerns for restaurants and food service businesses with respect to low employee retention, substantial differences in pay across job categories within the sector, and revelatory findings regarding Churn Rates both for the industry and for the broader American economy.

Restaurants have already begun implementing changes to their business models to place more emphasis on deliveries and pick-up orders and as well as embracing more partnerships and endorsement deals with meal delivery services. [45] Meal delivery services operate under an Online-to-Offline (O2O) business model and allow consumers to purchase meals for delivery from restaurants which work closely with third-party platforms such as Uber Eats, Grub Hub, and Door Dash [46]. As the global shutdown occurred during the COVID-19 pandemic and in-person restaurant dining dwindled significantly, the popularity of such meal delivery services grew. The increasing prevalence of O2O services in the restaurant and food service sector necessitates that researchers better understand this unique business paradigm, especially given the precarious nature of employee pay and turnover in the restaurant business in general.

Future research efforts should explore the complex relationships between meal delivery services and their restaurant partners to uncover specific parameters which lead to the most successful partnerships. In particular, sanitization standards, corporate social responsibility, and the environmental impacts of restaurant industry practices have come further into the limelight since the onset of the pandemic. [47] Researchers should aim to uncover consumer sentiments regarding these issues to understand their willingness to patronize meal delivery services in lieu of dining in restaurants and vice versa. Further, understanding emotional and hedonic components of consumption in the arena of meal delivery services as well as in-person dining would be an insightful direction for future research. The importance of such research is evidenced by the impending technology automations which will allow for more streamlined meal delivery services in the future.

Additionally, future research may seek to uncover the growing prevalence of “ghost kitchens”—spaces intended exclusively for online order fulfilment via meal delivery services. [48] The operational logistics of ghost kitchens versus their full service dine-in restaurant counterparts are substantially more bare bones, and the findings of the present research study suggest that ghost kitchens will only grow in popularity if restaurant industry employment trends continue to favor back-of-house employees.

And finally, the state of compensation levels in the restaurant and food service sector – and what to do about it from a competitive, economic, and yes, public policy perspective is well beyond the scope of the present research. However, the relatively low pay across the board for restaurant and food service workers – *and* for management – is a significant driver behind the turnover and constant churn that we see in this important sector of the American economy and that has been the subject of this research effort. Restaurant and food service pay will certainly be the subject of intense interest for all who are in – or touch (*which effectively means all of us*) - the industry and drive much future research in this area. And yes, change – and research that will help drive the debate – in companies and even in government – will be critical to helping resolve the issue that is indeed driving the high churn – and the operational and value chain difficulties that are an

outgrowth of the constant state of flux that characterizes the restaurant and food service sector in America today.

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