

Research note

COVID-19 and the future of work in the hospitality industry

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ABSTRACT

The COVID-19 pandemic has significantly disrupted the hospitality industry. This research combines different data to examine the US labor market trends during COVID-19. It is found that low-preparation jobs in leisure and hospitality are the hardest hit and slow to recover. The pandemic has highlighted growing issues in workplace safety, skill gaps, technology adoption, and work reorganization in the hospitality industry. This paper develops two propositions about preparing hospitality workers for the future of work and providing flexible work arrangements.

1. Introduction

The COVID-19 pandemic has caused unexpected, abrupt changes to the hospitality industry, highlighting specific workforce vulnerabilities. The impact of technology adoption, shrinking labor pools, and workplace risks are likely to be accelerated by the COVID-19 crisis. Current projections suggest that 24% of COVID-induced layoffs may be permanent (Barrero et al., 2020). This paper analyzes anonymized data about US job postings and employment levels to understand the differential impacts of COVID-19 by industry, job zone, and income group. The present study aims to serve as a methodological reference for analyzing the impact of external shocks (e.g., COVID-19) on the hospitality industry's labor market and labor supply in the US and other international contexts. Based on the analysis and findings, two propositions on hospitality workers' training and work arrangements are developed.

2. Job trends analysis

Two US national data sets are examined: job postings data from Burning Glass Technologies, Inc. and employment data extracted from payrolls and earning data (The Economic Tracker, 2020; Chetty et al., 2020). The study period is from March 1st through September 11th of 2020. The research questions are: (1) How are the hospitality job trends different from other industries? (2) How are low-income workers' jobs affected by COVID-19? (3) What are the implications for workforce development in the hospitality industry?

Fig. 1 shows the average job posting percent changes (compared with

January 2020) in major industries. The leisure and hospitality (L&H) job postings declined by 45%–65% during April–May 2020 due to the national stay-at-home and business closure policies. After these policies were lifted around mid-May, all industries began to recover. L&H job postings were still down by 30%–45% in September 2020, the lowest among all industries. Industries that involve jobs requiring more specialized skills (e.g., manufacturing and finance) are more resilient.

Differences in job postings are further examined across industries. Given the normality of the data confirmed by non-significant Shapiro-Wilk tests, one-way ANOVA is performed. A statistically significant difference is identified ($F(4185) = 3.973$, $p = .004$). Tukey's post hoc test revealed significant difference between L&H (medium $M = -26\%$) and education and health services ($M = -13\%$) job postings percentage changes ($p = .022$), and between professional and businesses services ($M = -25\%$) and education and health ($M = -13\%$) job postings percentage changes ($p = .044$). L&H job postings were the lowest during 2020 due to COVID-19 compared to all industries. Fig. 1 highlights the slow recovery of the L&H job postings.

Fig. 2 displays the employment percentage changes (compared to January 2020) across industries. The L&H employment remains about 25% lower than January 2020, while other industries have approximated their prior-pandemic levels. Such results are confirmed by a one-way ANOVA test, which reveals statistically significant differences in employment levels by industry ($F(3,604) = 134.5$, $p < .001$). The mean employment percentages change for the L&H industry ($M = -29\%$) is significantly lower than transportation and utilities ($M = -11\%$), professional and businesses services ($M = -6\%$), and education and health

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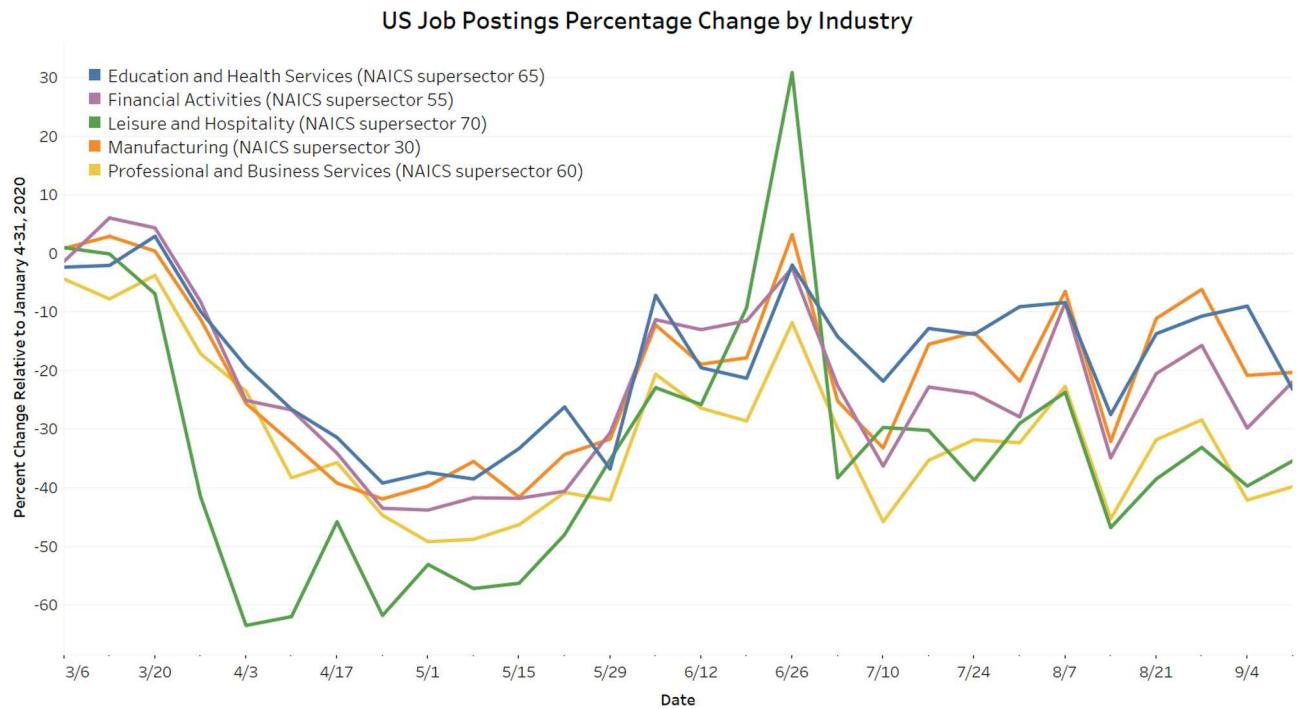


Fig. 1. Changes in national job postings by industry (3/6/2020–9/11/2020).

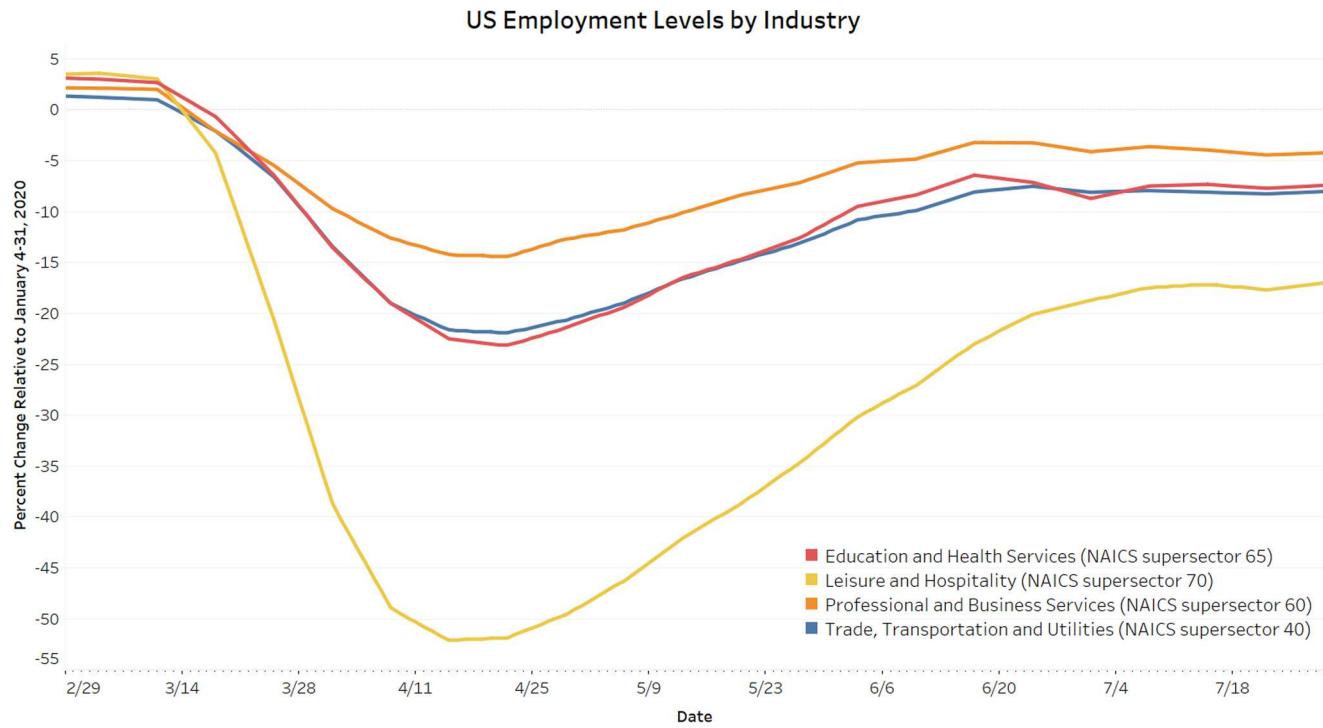


Fig. 2. Changes in employment levels by industry in the US (2/29/2020–7/29/2020).

services ($M = -11\%$). It further confirms that the hospitality labor market is more severely disrupted than other major industries by COVID-19.

The job trends by job zone are illustrated in Fig. 3. Job zone is categorized based on the required preparation at work (1 means low and 5 means high) (O*Net Online, 2020). The peaks and troughs of Zone 1 jobs follow a cyclical pattern, likely impacted by policy mandates and COVID-19 outbreaks forcing the opening and closure of hospitality

organizations. The front-line hospitality workers might have been among the most vulnerable to such changing conditions. Since data on zone 2, zone 4, and zone 5 exhibit significant departure from normality, a Kruskal-Wallis test (McKnight and Najab, 2019) revealed a significant difference ($\chi^2(4) = 18.99$, $p = .001$). A mean rank of 104.3 was found for zone 1, 121.9 for zone 2, 97.3 for zone 3, 72.1 for zone 4, and 81.9 for zone 5. The mean ranks indicate that job positions that require some preparation (e.g., customer service) or little to no preparation (e.g.,

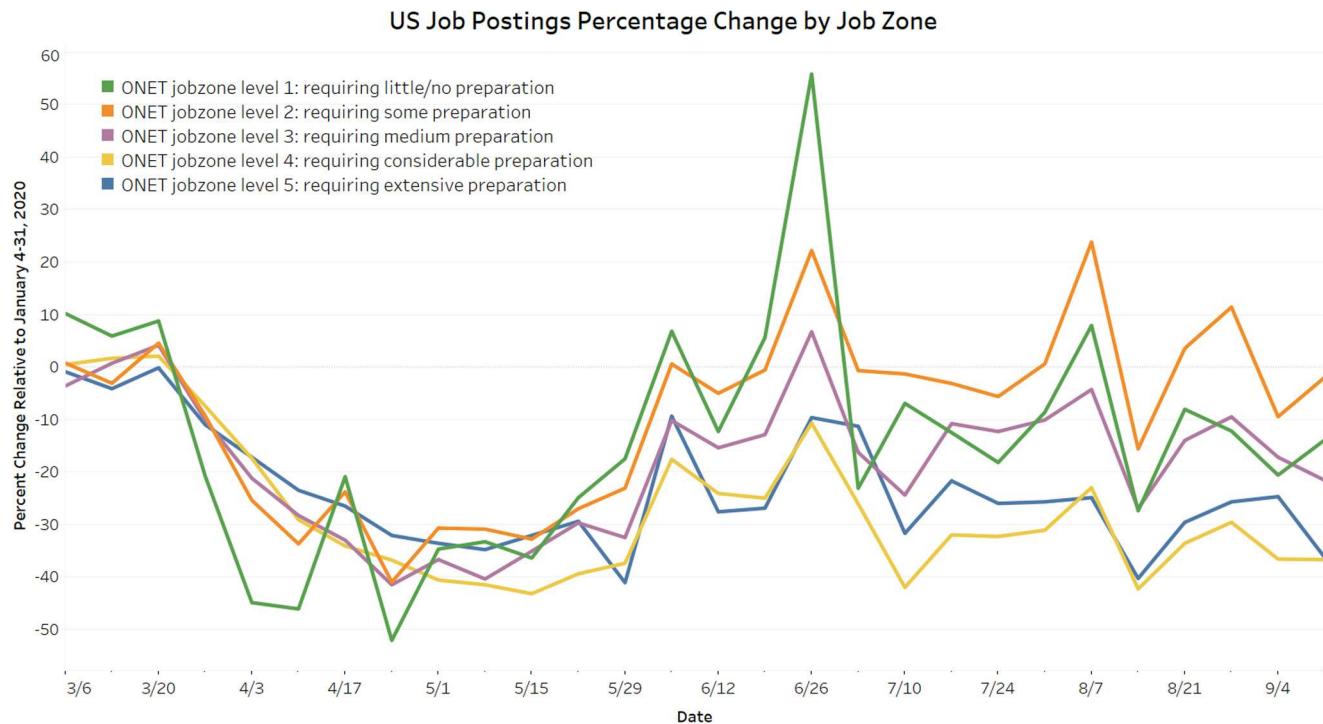


Fig. 3. Changes in employment levels by job zone in the US (3/6/2020–09/11/2020).

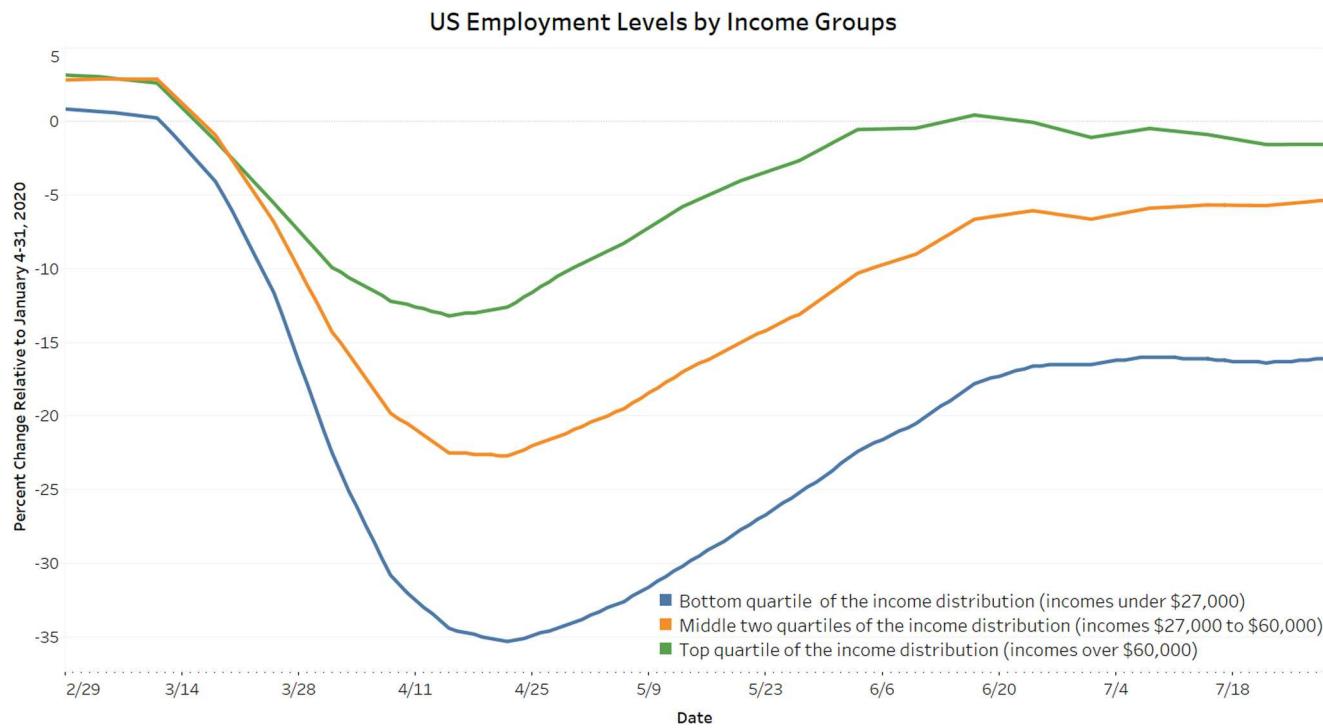


Fig. 4. Changes in employment levels by income groups in the US (2/29/2020–7/29/2020).

dishwashers and baristas) were less demanded during 2020 amid the COVID-19 restrictions. Although a 55% increase in labor demand occurred during late June of 2020, a sudden drop was noted immediately from September 2020, possibly due to the rise of COVID-19 cases identified right after the reopening.

Employment levels by workers' income distribution are illustrated in Fig. 4. While employment for all income quartiles declined since the outbreak of COVID-19, workers in the bottom-income distribution

(<\$27,000) receive this most impact (-32%) compared with the middle-income quartile (-18%) and top-income quartile (-10%). This fact is concerning as COVID-19 has exacerbated the low-income workers' economic conditions, with significant social ramifications. In addition, by cross-comparing job postings (Fig. 1) and employment levels (Fig. 2), it is evident that a proportional increase did not necessarily follow the surge in L&H job postings in employment. The lack of correspondence between job postings and employment levels could be

due to: (a) employees' shifts to other industries, (b) resistance to returning to work due to the risk of contagion, or (c) an insufficient number of job openings.

3. Socioeconomic implications

COVID-19 has disrupted the labor market, and workers with lower-preparation positions and lower-income levels are disproportionately affected. Business closure and capacity control have taken an unintended toll on the hospitality labor market. Many entry-level jobs eliminated during the pandemic may not return, accelerating the pace of predicted shifts in the hospitality industry. Mass unemployment will likely give way to increased automation, a further shrinking of the labor pool, the rapid exit of the aging workforce, and increased stigmas toward hospitality employment as short-term work (Bowen and Morosan, 2018; Society of Human Resources Management, 2015; New American Economy, 2020). Historically, the hospitality industry has been aware of impending challenges in its workforce but is often slow to adopt or make significant changes to meet or rise above these barriers (Mejia, 2018).

Furthermore, hospitality businesses that pivoted into new concepts (e.g., takeout only) or adopted new technologies (e.g., contactless payment) are primed for long-term survival. Nevertheless, the adaptations may mean fewer available jobs, combined duties, or demand for higher-level skills. Some demographics may see a slower recovery in terms of employment, compounded by socioeconomic factors such as race, gender, health and education levels, and citizenship (Vassou et al., 2017). Immigrant workers who make up a large portion of the hospitality industry are at increased risk of illness, injury, and exposure to the virus, unlawful employment practices, human rights abuses, and other forms of systemic mistreatment (Sönmez et al., 2020). Changes to immigration policies will likely further shrink a slim labor pool, especially in the foodservice industry (New American Economy, 2020).

4. Two propositions

Proposition 1. Increase and streamline the training of transferable soft skills for hospitality workers.

Our analysis of multiple datasets confirms the decline in employment and job postings in the hospitality industry in the initial stages of COVID-19. Consequently, many hospitality workers will likely seek employment in other industries amid job loss and hiring freezes. For the foreseeable future, identifying and emphasizing soft skills that transcend industries might be an effective strategy for addressing mass unemployment within the hospitality industry. Figs. 2 and 4 show that professional and business services are more resilient to shocks such as COVID-19 with more stable, higher-paid positions. Many hospitality workers can make cross-industry career moves through systematic training programs cultivating blends of technical skills and highly transferable soft skills; further research on evaluating transferable soft skills across industries is worth developing. A shift in hiring standards based on skill sets rather than specific job functions or workers' backgrounds would also be required.

The design and delivery of soft skill training and learning require multi-stakeholder collaborations. For instance, governments and universities should collaborate on designing and assessing effective soft skill training programs based on empirical evidence and developing experiential-learning and problem-solving pedagogies. To maximize its benefits, such soft skill training efforts should also be open, free, and accessible to broader populations, especially vulnerable workers (e.g., low-income front-line employees). The soft skill training programs should also provide an immersive experience to facilitate effectiveness assessment, monitoring, and formative evaluation (e.g., Citizen Science). Simultaneously, hospitality workers' soft skill development strategies could be enriched with technological tools (e.g., mixed reality, digital dashboards). Future design-based research should empirically examine the impact of soft skill training in facilitating hospitality

workers' career transitions through quantitative and qualitative analysis.

Proposition 2. Implement flexible work arrangements that respond to the changing hospitality labor market.

The decline in hospitality employment due to COVID-19 shows that traditional hiring schemes may only work well in relatively stable labor markets. As the hospitality labor market has been impacted by constant technological changes (e.g., machine learning and automation) and is vulnerable to external shocks, employee hiring and HR retention practices need to be adapted. A flexible work arrangement that may respond to the dynamic labor market and the conditions of hospitality workers is the employee sharing model (ESM) (De la Mora Velasco et al., 2021; Marica, 2020; Lyutov, 2018). Based on the principle that two or more employers can share the same worker based on skills knowledge compatibility, ESM could balance the needs of human resources across organizations (within and cross-industries). Enterprises in China, Germany, Japan, and the US have applied the ESM to cover their need for human resources by absorbing employees who were suspended by other employers (Matsui et al., 2020). Therefore, ESM could be applied strategically in the face of drastic hospitality labor market changes. Compared with contemporary employer-employee relationship schemes such as the sharing economy and the gig economy, ESM can potentially provide greater work stability and better protect workers' rights and benefits in the increasingly volatile labor market (Crommelin et al., 2020). The success of ESM will require multiple employer partnerships, robust P2P platforms, fair agreements, and policy frameworks aimed at protecting employees and employers' rights (De la Mora Velasco et al., 2021). Alternative work arrangements (including the ESM) warrant further theoretical development and empirical examination.

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