

July 2021

COVID-19: A 'Perfect Storm' for the Hospitality Sector

Arthur Huang

University of Central Florida, Arthur.huang@ucf.edu



Part of the [Hospitality Administration and Management Commons](#)

Find similar works at: <https://stars.library.ucf.edu/rosen-research-review>

University of Central Florida Libraries <http://library.ucf.edu>

This Article is brought to you for free and open access by the Rosen College of Hospitality Management at STARS. It has been accepted for inclusion in Rosen Research Review by an authorized editor of STARS. For more information, please contact STARS@ucf.edu.

Recommended Citation

Huang, Arthur (2021) "COVID-19: A 'Perfect Storm' for the Hospitality Sector," *Rosen Research Review*. Vol. 2: Iss. 2, Article 16.

Available at: <https://stars.library.ucf.edu/rosen-research-review/vol2/iss2/16>

COVID-19: A 'PERFECT STORM'

For the hospitality sector

Fear of infection, strict stay-at-home-orders (SAHOs), and mandated business closures have all combined to severely disrupt supply and demand for many businesses. As a result, COVID-19 devastated the hospitality industry in a way unlike any other. Dr. Arthur Huang of the Rosen College of Hospitality Management and his colleagues assessed the effects of state and local intervention policies on the hospitality industry through the early stages of the COVID-19 pandemic.

Since the celebration of the third millennium, and less than a quarter of the way through the twenty-first century, the world has experienced the ravaging effects that viral diseases can have on the economy and health of the human population multiple times.

Examples include SARS (Severe Acute Respiratory Syndrome) in 2003 (800 deaths worldwide), followed by Swine Flu (H1N1) in 2009 (various estimates from 150,000 to 575,000 deaths), Ebola in 2013 (12,000 deaths from only 29,000 cases), and MERS (Middle East Respiratory Syndrome) in 2015 (900 deaths from 2500 cases, but re-emerging periodically).

Then, of course, the most globally deadly and disruptive: COVID-19, appearing first in China in late 2019. The numbers for the most recent pre-COVID event, MERS, taken to South Korea from the Middle East by a single traveler, are much lower than might have been expected; 38 deaths from 186 cases in the initial epidemic in South Korea.

So, what did South Korea do to limit the effects of such a potentially deadly disease as MERS? Among the most effective measures was the rapid response of the South Korean government, introducing

quarantine measures and restricting travel. While many lives were undoubtedly saved and the epidemic limited to a couple of months, the economic cost was estimated at around \$2.6 billion. Fortunately, South Korea was not highly dependent on tourism's contribution to its economy (accounting for about 5% of GDP in 2015), and therefore the economic damage was contained.

But for the U.S., almost any disruption that severely affects the hospitality industry would be more economically devastating, as the sector accounts for some 20% of GDP and employs about 30% of the U.S. labor force (as reported for 2017). In early 2020, as COVID-19 continued to spread, it appeared that the disease may have devastating effects worldwide.

EFFECTS ON HOSPITALITY

For Dr. Arthur Huang and his associates, a critical issue for the hospitality industry's survival would be how it responded to the many initiatives that national and state governments deployed to fight the virus.

In his study, Dr. Huang focused on one of the critical measures of the industry: the non-salaried labor market. The research considers three distinct phases: before the stay-at-home policies, after the stay-



at-home policies, and the release of the imposed restrictions.

Finally, Dr. Huang and the research team identify practical and managerial insights that may be valuable in the recovery of this vital sector.

RESISTANCE, RESILIENCE, AND REOPENING AMID THE COVID-19 PANDEMIC

Hospitality has three essential ingredients for success: people want to go out, they are permitted to go out, and there are hospitality services available that they can enjoy. COVID-19's emergence and rapid global diffusion quickly interrupted all three aspects required for success.

However, while the hospitality and tourism industry could not make a case for being essential, it is a sector capable of rapid recovery once restrictions are lifted and the market returns.

Dr. Huang's report describes this as 'resistance' and 'resilience.' While there

could be no resistance to temporary business closure in the face of a pandemic driven by close human contact, there could be hope that, as in previous closures (such as with SARS and MERS), the industry would show considerable resilience in its ability to recover from such closures quickly.

Dr. Huang cautions against presuming a similar resilient recovery will be seen after a pandemic as profound in its impact as

PUBLIC CONFIDENCE WILL BE AN ESSENTIAL COMPONENT IN THE RATE OF RECOVERY OF BUSINESS REVENUES.

COVID-19 or any possible future pandemic that might have an even greater human and economic cost. Instead, he argues that pre-emptive policies and actions should be 'refined' to reduce the catastrophic effects of a novel disease. By refined, Dr. Huang is referring to the heterogeneous nature of the U.S., with each state having its own unique challenges that must be considered



There were wide disparities between states in terms of lockdown measures.

in dealing with the onset of a threat. To a certain extent, states must be responsible for developing their own plans to reopen businesses as the pandemic is tamed.

These challenges are fundamental and complex; size is one major issue. The state planners in California, for example, must safeguard a population of approximately 39.5 million people, while Wyoming has just 577,000. Adopting extreme one-size-

policies on small businesses in the hospitality sector, Dr. Huang and his colleagues combined anonymized, pan-U.S., non-salaried employment data (from the HomeBase payroll and time tracking service used by many businesses employing less than ten people) with data on COVID-19 cases and deaths, and state-level intervention policies, from March to June 2020.

Nationally, the impact on non-salaried employment, working hours, and the number of business closures were in the range of a 15-30% reduction. Again, all sectors within hospitality were at the higher end, with leisure the worst hit, at close to 30%, followed by food and drink.

Among the non-salaried workforce, there was a high correlation between the number of COVID-19 cases and the negative impact on jobs.

STATE-LEVEL DISPARITY

However, there was considerable variation by state, which is also true for the positive impacts of reopening businesses. The report



DR. HUANG CAUTIONS AGAINST PRESUMING A SIMILAR RESILIENT RECOVERY WILL BE SEEN AFTER A PANDEMIC AS PROFOUND IN ITS IMPACT AS COVID-19.

also highlights that the rate at which the labor market was negatively affected by introducing intervention policies was not necessarily correlated to the positive impact when the guidelines were lifted.



New Hampshire, Hawaii, and South Dakota experienced the highest drop (over 50%) in working hours for the food and drink industry. But when the interventions were lifted, and businesses could reopen, the most positive impact was seen in Delaware, Wyoming, and Montana, with an over 40% increase in working hours.

IMPLICATIONS FOR REOPENING HOSPITALITY BUSINESSES

Once supply-side interventions such as SAHOs and business closure mandates have been lifted, there must be positive stimulation for market demand.

Public confidence will be an essential component in the recovery rate of business revenues, and the demand will increase the labor hours needed. The report describes how business managers may need to reassess priorities, citing the possibility of giving clear signals of sanitation and infection control significantly higher attention than venue aesthetics, for example.

OPPORTUNITIES FOR FURTHER RESEARCH

The observations from this study were made possible by the HomeBase data, but that data was only gathered from the small-to-medium-sized companies which use HomeBase's services. Therefore, data from larger companies and other sectors may not tell the same story.

Similarly, the disparity in the results across the country suggests there are other significant factors involved that were not included in the analysis. For example, the degree to which companies had a digital presence (e.g., Uber Eats) could mitigate the impact on labor hours.

There is evidence that areas with higher social capital have been able to weather the pandemic with a lower human and economic cost; this has been attributed to greater trust and compassion for neighbors and a willingness to voluntarily social distance.

For the high-end hospitality sector, managers should reflect on the findings of Cherry et al. (2020), cited in the researcher's paper, which suggest that the decline in consumer spending during the pandemic was greater in the higher-income areas. Does this mean hospitality businesses need to hit a reset button on all of their strategies? As with all major events, to an extent, only time will tell, but an exploration of purchase intent could be an excellent place to start.

RESEARCHERS IN FOCUS

RESEARCH OBJECTIVES

Dr. Arthur Huang and colleagues have studied the impacts of COVID-19 intervention policies at state and local levels.

CO-AUTHORS

Christos Makridis

Arizona State University, MIT Sloan School of Management
<https://ide.mit.edu/people/christos-makridis/>

Zhishan Guo

Department of Electrical and Computer Engineering, University of Central Florida
<http://www.ece.ucf.edu/~zsguo/>

Mark Baker

Rosen College of Hospitality Management, University of Central Florida

Marcos Medeiros

Rosen College of Hospitality Management, University of Central Florida

REFERENCES

Huang, Arthur et al. (2020) Understanding the impact of COVID-19 intervention policies on the hospitality labor market. *International Journal of Hospitality Management* vol. 91: 102660. Available at: <https://doi.org/10.1016/j.ijhm.2020.102660>

WHO (2021): WHO Coronavirus Disease (COVID-19) Dashboard With Vaccination Data, Available at: <https://covid19.who.int/region/wpro/country/cn>

South Korea: travel & tourism economic impact 2011-2028, Statista. Available at: <https://www.statista.com/statistics/646922/south-korea-economic-impact-of-travel-and-tourism/>

PERSONAL RESPONSE

How hard is it to predict the long-term effects of the pandemic on consumer behavior and the hospitality labor market in the absence of any direct domestic comparisons?

Various factors can affect the long-term effects of the pandemic on consumer behavior. Careful policies and management practices need to be implemented. On the one hand, extreme intervention policies such as stay-at-home orders can take a toll on small hospitality and tourism businesses. On the other hand, companies need to be proactive in following COVID-19 safety guidelines to reduce COVID-19 transmission and regain consumers' trust.

Dr. Arthur Huang



Dr. Arthur Huang is an Assistant Professor affiliated with the Rosen College of Hospitality Management and College of Engineering and Computer Science. With an interdisciplinary background in engineering, social science, and public policy, Dr. Huang received his Ph.D. in Transportation Systems and an M.A. in Urban and Regional Planning from the University of Minnesota and an M.S. in computer engineering from Tsinghua University in China. His research interests include urban computing, human behavior, big data analytics in tourism management, sustainability, and the future of work.

E: Arthur.huang@ucf.edu **T:** +1 407.903.8212
W: <https://hospitality.ucf.edu/person/arthur-huang/>

Mr. Mark Baker



Mark Baker is a research assistant at the Rosen College of Hospitality Management. He has an M.A. in Communication Sciences and Disorders from the University of Florida. His research interests include economic modeling, smart tourism, and the hospitality labor market.

Mr. Marcos Medeiros



Marcos Medeiros is a Ph.D. student at the Rosen College of Hospitality Management. He holds an M.S. in Hospitality Management and an MBA from the I.E. Business School in Spain. His research interests include hospitality finance and travel technologies.