University of Massachusetts Amherst ScholarWorks@UMass Amherst

Travel and Tourism Research Association: Advancing Tourism Research Globally

# The Impact of National Differences on Government Response to COVID-19 and Hotel RevPAR

Swechchha n. Subedi University of South Carolina - Columbia

Marketa Kubickova University of South Carolina - Columbia

Follow this and additional works at: https://scholarworks.umass.edu/ttra

Subedi, Swechchha n. and Kubickova, Marketa, "The Impact of National Differences on Government Response to COVID-19 and Hotel RevPAR" (2021). *Travel and Tourism Research Association: Advancing Tourism Research Globally*. 10.

https://scholarworks.umass.edu/ttra/2021/grad\_colloquium/10

This Event is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Travel and Tourism Research Association: Advancing Tourism Research Globally by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

# The Impact of National Differences on Government Response to COVID-19 and Hotel

# RevPAR

## Introduction

In early 2020, the world got hit hard by COVID-19 (Coronavirus Disease 2019) pandemic which had a deleterious effect on every aspect of human life. Due to government mandated restrictions on movements (ranging from partial to full) and increased health concerns, hotels were overwhelmed by the increase in booking cancellations. According to American Hotel and Lodging Association (AHLA), 2020 was the worst year on records, with financial losses greater than 9/11, 2008 recession and SARS epidemic combined, and net loss of 478,245 hotel employees from prepandemic levels (AHLA, 2021).

At times of crisis, the role of the government becomes imperative because of the highly segmented nature of the industry and inability of the private sector to undertake certain functions (Shone et al. 2016). Therefore, only the government has the legitimate power to create conducive environment for the industry to thrive (Devine & Devine, 2011). However, while dealing with COVID-19, governments have varied substantially over when and what measures they adopt (Hale et al., 2020), as some countries have been able to control the pandemic better while others have not (Fukuyama, 2020).

Even though the impact of crisis has been extensively studied in hospitality literature, the role of national differences, such as political, economic, and cultural difference, in the recovery process remains under-researched, and little is known about the tourist behavior when occurred during pandemic (Lee et al., 2012). Therefore, the study sets out to explore the impact of national differences on government response to COVID-19, and the overall impact of such differences on the hotel RevPAR (revenue per available room). RevPAR was selected as a measure of hotel performance as it reflects both occupancy and average daily rate and is the single most important operating ratio in hotel management (Kim et al., 2006). The finding of this research is expected to show that 'one size fits all' approach to crisis management is not effective as national differences play significant role in risk perception and individual decision-making process.

## **Literature Review**

The political system can be viewed as a delimited (having precise boundaries) and fluid (ever changing) system of steps in decision making, working within an environment (Easton, 1953). The environment includes economic systems, cultural systems, and political systems, also known as supra-system (Dlakwa, 2004). David Easton's model of political system postulates that changes in the social or physical environment surrounding a political system acts as inputs towards the political system; the political system processes the inputs and puts out decisions and actions as output (Easton, 1953, 1965). Therefore, difference in government response to COVID-19 among countries can be explained from the difference in the severity of the pandemic, and the political, economic, and cultural environment unique to each country.

Travel decision-making is a complex process which involves risk and uncertainty (Sirakaya & Woodside, 2005). The extent to which individuals are prone to risk aversion is a function of psychological factors (Cahyanto et al., 2016) and national culture orientation (Kim & Mckercher, 2011). Studies have shown that Hofstede's national dimensions (uncertainty avoidance, long-term orientation, individualism, masculinity, indulgence, and power distance) play significant role in customer travel intention and travel behavior. For example, people from high uncertainty avoidance culture are less risk tolerant and more likely to take risk reducing measures, such as shorter trips, fewer destination with a trip and travel in larger groups (Crotts & Litvin, 2003; Kozak et al., 2007; Money & Crotts, 2000). Similarly, significant differences have been found amongst the travelers from individualistic culture compared to collectivist culture (Kim & Lee, 2000; Meng, 2010) with greater hedonistic tendencies on parts of the individualistic tourists (Litvin & Kin, 2003).

During crisis, consumers become price sensitive, limit their expenditure, look for cheaper substitutes and invest in indispensable needs (Naidoo et al., 2010; Papathedorou & Arvanitis, 2014). The changes in consumer behaviors and impact of crisis can be reflected in hotel performance, varying by country (Chen et al. 2005; Enz et al., 2011; Kim et al., 2006; Song at al., 2016). For example, in the week following 9/11, occupancy rate fell by 41.8% and RevPAR fell by 62%, compared to the same period in 2000 (Stafford et al., 2002). In April, at the peak of the pandemic, RevPAR in United States dropped by 80% compared to 2019, and by the end of 2020, it plateaued at 50% range of 2019 levels (AHLA, 2021). Since the travel demand continues to lag normal levels, the room revenue in 2021 is anticipated to still be 34% below 2019 levels (AHLA, 2021).

Based on the literature review, the study utilizes the conceptual framework depicted in Figure 1.



Figure 1: Conceptual Framework

# Methodology

The study collected data from fifteen countries (Japan, Germany, United States, China, Russia, Brazil, Spain, Canada, Australia, Switzerland, Russia, Italy, France, United Kingdom, Thailand) from January 1<sup>st</sup> to August 20<sup>th</sup>, 2020. Government response (GR),measured by Government

Response Index, provides a systematic way to track cross-national and cross-temporal response of governments to COVID-19 (Hale et. al., 2020). Economic environment (EE), measured by Economic Freedom Index, reflects access of citizens to fundamental rights to control his/her own labor and property, divided into four pillars: rule of law, government size, regulatory efficiency, and market openness. Political environment (PE), measured by Democracy Index, offers a snapshot of the state of democracy and including five broad categories: electoral process and pluralism, civil liberties, the functioning of government, political participation, and political culture. National culture (NC) was measured by Hofstede's national culture dimensions: individualism (IND), uncertainty avoidance (UAI), indulgence (IDG), power distance (PDI), masculinity (MAS), long-term orientation (LTO). The revenue per available room (RevPAR) data was attained from STR. The COVID-19 data is the daily new number of cases acquired from World Health Organization report. EE and PE measures were converted using Croes and Kubickova (2013) method and SPSS was utilized to perform regression analysis to test the relationships of the above-mentioned variables.

#### Results

The results indicate that the average RevPAR in 2020 during the period was \$36.81, only 42.1% of 2019 level during the same period.

	n	Mean	Std			
Revenue per available room (RevPAR) (\$) 2019	3,480	87.46	34.91			
Revenue per available room (RevPAR) (\$) 2020	3,495	36.81	31.31			
Government Response (GR) <sup>a</sup>	3,495	49.21	27.84			
Economic Environment (EE) <sup>b</sup>	3,495	0.77	0.1			
Political Environment (PE) <sup>c</sup>	3,495	0.70	0.23			
Individualism (IND) <sup>d</sup>	3,495	58.39	24.31			
Uncertainty Avoidance (UAI) <sup>d</sup>	3,495	65.93	20.05			
Indulgence (IDG) <sup>d</sup>	3,495	52.73	20.15			
Power Distance (PDI) <sup>d</sup>	3,495	55.80	18.66			
Masculinity (MAS) <sup>d</sup>	3,495	58.73	15.59			
Long-term Orientation (LTO) <sup>d</sup>	3,495	54.60	23.19			
Number of COVID-19 cases (COVID)	3,495	3,446.61	9,871.32			
<sup>a d</sup> Scale 1-100 (1 = the lowest) <sup>b c</sup> Scale 0-1 (0 = the lowest)						

Table 1: Descriptive Statistics

The regression analysis shows that COVID-19 cases, PE, EE, and some national culture dimensions have significant relationship with GR (Table 2).

**Table 2:** Multiple Regression Analysis (Government Response)

	Unstan Coef	dardized ficient	Standardized Coefficient	t	Sig	R	$\mathbb{R}^2$
	В	Std. Error	β				
Constant	-21.019	14.557		-1.444	.149	.347	.121
COVID	.001	.000	.284	15.902	.000		
PE	53.890	9.176	.447	5.873	.000		
EE	37.140	9.284	.130	4.000	.000		
IND	.076	.032	.066	2.405	.016		
LTO	.036	.036	.030	.993	.321		
MAS	022	.044	012	509	.611		
IDG	435	.054	315	-8.062	.000		
PDI	.929	.131	.623	7.109	.000		
UAI	504	.054	363	-9.313	.000		

Note: Dependent Variable: GR

The regression analysis shows that COVID-19 cases, GR, PE, EE, and all national culture dimensions have significant relationship with RevPAR (Table 3), explaining 57.5% of the variance in RevPAR.

	Unstan	dardized	Standardized	t	Sig	R	$\mathbb{R}^2$
	Coef	ficient	Coefficient				
	В	Std. Error	β				
Constant	77.198	4.246		18.182	.000	.758	.575
COVID	.000	.000	.032	2.709	.007		
GR	820	.013	729	-	.000		
				62.266			
IND	.176	.024	.136	7.336	.000		
LTO	.233	.028	.173	8.290	.000		
MAS	209	.031	104	-6.781	.000		
IDG	.145	.031	.093	4.716	.000		
PDI	212	.035	126	-6.099	.000		
UAI	105	.020	067	-5.227	.000		

**Table 3:** Multiple Regression Analysis (RevPAR)

Note: Dependent Variable: RevPAR

## Discussion

The analysis shows that there is a positive significant relationship between PE and GR indicating that the government of highly democratic countries have higher response to the virus. Similar pattern is also observed between EE and GR. These relationships are as expected because, along with restrictions, GR also includes income support, debt relief, investments in vaccines and healthcare. While the impact of restrictions (e.g., limiting non-essential travel, banning visitors from selected destinations, businesses shutdowns, curfews) are directly felt on hotel performance, impact of other responses might not. Therefore, there is a negative correlation between GR and RevPAR (-.729).

The positive relationship of IND and IDG, and negative relationship of UAI with RevPAR indicates that the people from individualist and higher indulgent cultures have higher risk-taking behavior, while people from countries with higher uncertainly avoidance culture tend to avoid travel when risk is higher. The results support previous findings that risk perception is influenced by cultural differences (Crotts & Litvin, 2003; Kozak et al., 2007; Quintal et al., 2010). While RevPAR dropped by 42% in 2020 compared to same period in 2019, the numbers of COVID-19 cases was positively correlated to RevPAR.

# **Conclusion and Limitation**

In conclusion, the national differences have significant impact on hotels' RevPAR, and such difference should be taken into consideration while formulating recovery strategies across destinations.

The limitation of the study involves short time frame and the constructs used. Future studies should focus on methods that can take time series data into account during the analysis.

# References

- American Hotel & Lodging Association. (2021, January). *AHLA's State of The Hotel Industry* 2021.
- Cahyanto, I., Wiblishauser, M., Pennington-Gray, L., & Schroeder, A. (2016). The dynamics of travel avoidance: The case of Ebola in the US. *Tourism Management Perspectives*, 20, 195-203. https://doi.org/10.1016/j.tmp.2016.09.004
- Chen, M. H., Kim, W. G., & Kim, H. J. (2005). The impact of macroeconomic and nonmacroeconomic forces on hotel stock returns. *International Journal of Hospitality Management*, 24(2), 243-258. https://doi.org/10.1016/j.ijhm.2004.06.008
- Croes, R., & Kubickova, M. (2013). From potential to ability to compete: Towards a performance-based tourism competitiveness index. Journal of Destination Marketing & Management, 2(3), 146-154. https://doi.org/10.1016/j.jdmm.2013.07.002
- Crotts, J. & Litvin, S. W. (2003). Cross-cultural Research: Are Researchers Better Served by Knowing Respondents' Country of Birth, Residence, or Citizenship? Journal of Travel Research, 42(November), 186-190. https://doi.org/10.1177/0047287503254955
- Devine, A., & Devine, F. (2011). Planning and developing tourism within a public sector quagmire: Lessons from and for economy perspective. Journal of Sustainable Tourism, 24(12), 1674–1690. https://doi.org/10.1016/j.tourman.2010.11.004
- Dlakwa, H.D. (2014). Concepts and Models in Public Policy Formulation and Analysis. Nigeria: Pyla-Mak Service.
- Easton, D. (1953). *The Political System: An Inquiry into the State of Political Science*. New York: Alfred A. Knopf. https://doi.org/10.2307/2126540
- Easton, D. (1965). A Systems Analysis of Political Life. New York. Wiley. https://doi.org/10.1177/106591296702000316
- Enz, C. A., Kosová, R., & Lomanno, M. (2011). The impact of terrorism and economic shocks on US hotels. *Cornell Hospitality Report*, 3-14.
- Fukuyama, F. (2020). The Pandemic and Political Order. Foreign Aff., 99, 26.

- Hale, T., Petherick, A., Phillips, T., & Webster, S. (2020). Variation in government responses to COVID-19. *Blavatnik school of government working paper*, *31*.
- Kim, C., & Lee, S. (2000). Understanding the Cultural Differences in Tourist Motivation between Anglo-American and Japanese Tourists. Journal of Travel & Tourism Marketing, 9(1/2), 153-170. https://doi.org/10.1300/J073v09n01\_09
- Kim, S. S., & McKercher, B. (2011). The Collective Effect of National Culture and Tourist Culture on Tourist Behavior. *Journal of Travel and Tourism Marketing*, 28(2), 145-164. https://doi.org/10.1080/10548408.2011.545744
- Kim, W. G., Ma, X., & Kim, D. J. (2006). Determinants of Chinese hotel customers' esatisfaction and purchase intentions. *Tourism management*, 27(5), 890-900. https://doi.org/10.1016/j.tourman.2005.05.010
- Kozak, M., Crotts, J. C., & Law, R. (2007). The impact of the perception of risk on international travelers. *International Journal of Tourism Research*, 9(4), 233-242. https://doi.org/10.1002/jtr.607
- Lee, C. K., Song, H. J., Bendle, L. J., Kim, M. J., & Han, H. (2012). The impact of nonpharmaceutical interventions for 2009 H1N1 influenza on travel intentions: A model of goal-directed behavior. *Tourism Management*, 33(1), 89-99. https://doi.org/10.1016/j.tourman.2011.02.006
- Litvin, S. W., & Kar, G. H. (2003). Individualism/ Collectivism as a Moderating Factor to the Self-image Congruity Concept. *Journal of Vacation Marketing*, *10*(1), 23-32. https://doi.org/10.1177/135676670301000103
- Meng, F. (2010). Individualism/Collectivism and Group Travel Behavior: A Cross-cultural Perspective. International Journal of Culture, Tourism, and Hospitality Research, 4(4), 340-351. https://doi.org/10.1108/17506181011081514
- Money, R. B., & Crotts, J. C. (2003). The effect of uncertainty avoidance on information search, planning, and purchases of international travel vacations. *Tourism Management*, 24(2), 191-202. https://doi.org/10.1016/S0261-5177(02)00057-2
- Naidoo, P., Ramseook Munhurrun, P., & Ladsawut, J. (2010). Tourist satisfaction with Mauritius as a holiday destination. *Global Journal of Business Research*, 4(2), 113-123.
- Papatheodorou, A., & Arvanitis, P. (2014). Tourism and the economic crisis in Greece: Regional perspectives. *Région et développement*, *39*, 183-203.
- Quintal, V. A., Lee, J. A., & Soutar, G. N. (2010). Risk, uncertainty and the theory of planned behavior: A tourism example. *Tourism management*, 31(6), 797-805. https://doi.org/10.1016/j.tourman.2009.08.006
- Shone, M. C., Simmons, D. G., & Dalziel, P. (2016). Evolving roles for local government in tourism development: A political small countries. *Tourism Management*, 32(6), 1253-1261. https://doi.org/10.1080/09669582.2016.1184672
- Sirakaya, E., & Woodside, A. G. (2005). Building and testing theories of decision making by travellers. *Tourism management*, *26*(6), 815-832. https://doi.org/10.1016/j.tourman.2004.05.004
- Stafford, G., Yu, L., & Armoo, A. K. (2002). Crisis management and recovery how Washington, DC, hotels responded to terrorism. *The Cornell Hotel and Restaurant Administration Quarterly*, 43(5), 27-40. https://doi.org/10.1016/S0010-8804(02)80054-4