

BRE

BRF



Jamie Lane Sr. Research Director Jack Corgel Research Director Bram Gallagher, Ph.D. Sr. Economist

EXECUTIVE SUMMARY:

The U.S. lodging industry is facing its largest decline in demand in history, but the industry is far from dead. Given the circumstances under which the industry has been challenged, and the solutions on the horizon for those challenges, the lodging industry may be out of the hole in a matter of three years.

Travel, especially the return of business travel, is a major factor in hotels' recovery. When business travel resumes, we believe it will do so in full force. It may look different and potentially include additional family members such as working spouses or school-aged children completing virtual learning during the traditional workday, but group and business travel has not ended in the U.S.

Although many office-using professions are able to maintain productivity through heavy reliance on telecommunication, economic evidence for in-person interaction will drive post-COVID group hotel demand. From every \$1 invested in business travel, firms realized \$12.50 in incremental revenue. Additionally, Oxford Economics found that elimination of business travel reduces profits by 17% in the first year.

A more remote workforce will demand more opportunities to connect in person with colleagues, clients, and others in their network, and conferences and conventions are ripe to benefit from the increased demand. The desire for face-to-face communication and other humanistic features of traveling to interact with people will drive a strong recovery for business travel during the post-COVID-19 period.

INTRODUCTION

CBRE

During the months since the COVID-19 pandemic began the stock price of Zoom Video Communications, Inc. (ZM) elevated from around \$60 to about \$530. During the same period, the average office and hotel REIT has lost 35% and 55% of its value, respectively. These facts should come as no surprise to the large segment of the population now conducting business meetings and social events using Zoom. The company has advanced telecommunication technology enough to make human connections online marginally better and more convenient experiences than over other platforms. Does this mean the 'zooming' will continue to dominate or fade during the post-COVID-19 era?

A search on the topic of home-based telecommunications replacing face-to-face communication yields a consensus view that it will not fade, but instead offers a viable alternative. Yet, all business and social meetings are not the same. While some require physical interactions to achieve their purpose, others do not.

This topic becomes a critical issue for the travel industry. The paragraphs to follow review relevant literature regarding the impact of COVID-19 on the lodging industry and the future of travel, particularly business travel, in the presence of improving homebased telecommunications. A prediction emerges from this review that most business travel will return to pre-COVID-19 levels.

THE STATE OF THE U.S. HOTEL MARKET

Human nature is to be on the move. We long to go on vacation with friends and family, experience new places, network with colleagues or potential clients. Since March 2020, this innate need and desire of the American people has been put on pause, and rather abruptly, due to fear, uncertainty, corporate travel restrictions or hotel closures.

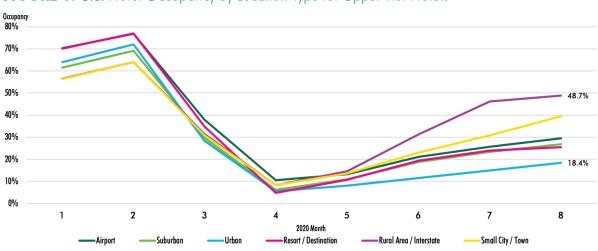
In April and May we saw a spike in demand as the country began to slowly reopen and we expected small group meetings to return soon after, but as cases increased over the summer and demand slowed, it became clear that corporate travelers will not be bringing as much demand as we'd hoped for in the fall.

But most of these factors have an end in sight.

Given the short-term nature of travel restrictions and relatively strong economic recovery we're predicting, we expect a quicker and stronger bounce back from this recession than the lodging industry experienced following the Global Financial Crisis (GFC), with occupancy reaching pre-COVID-19 levels in 2023.

CBRE

Drive-to leisure and resort locations have already begun to recover, but distress remains in urban markets. Rural or small-town locations are attracting the most demand for upper tier hotels, reaching 49% occupancy (Figure 1) and marking only a 7.6% decline in year-over-year average daily rate (ADR) change. The gap between weekday and weekend occupancy at upper tier hotels is widening, showing us that leisure travel is returning, albeit slowly, but business or weekday travel continues to lag.





Source: Kalibri Labs, CBRE Hotels Research, September 2020.

Over Labor Day, roughly the same amount of people made trips by car this year as they did last year, according to Arrivalist. However, before Labor Day occupancy in leisure markets was still down 20%, and since Labor Day drive-to trips are down just 10%. Trips by air are still severely depressed and, as of the beginning of October, were still down 70% compared to 2019. Like hotels, most of the demand for air travel is happening over the weekend, supporting the theory that business travel remains restricted.

Full-service hotels are experiencing Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) declines of over 131%. For those properties that are closed, the rate of opening is stalling, especially at the upper end. More than 20% of luxury properties are still closed, and more than 50% of New York City rooms are closed.

Revenue per available room (RevPAR) in markets like New York City, San Francisco, Chicago or Washington, D.C. remain over 80% below 2019 levels, which is largely unchanged since April 2020. These urban markets are also experiencing only 15% occupancy and a nearly 35% decline in year-over-year ADR change. A key driver of recovery in these urban markets will be the return of corporate demand, which made up almost 50% of demand for upper tier properties in 2019. CBRE

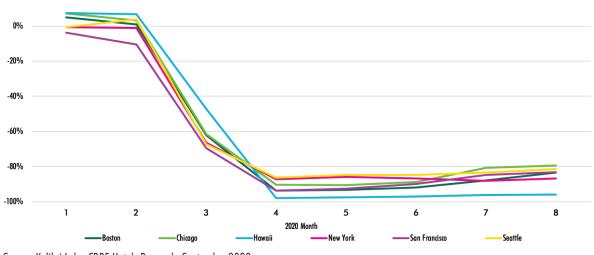


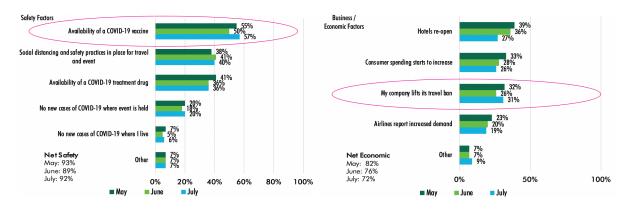
Figure 2: U.S. Hotel Y-o-Y Change in RevPAR by Market

Source: Kalibri Labs, CBRE Hotels Research, September 2020.

WHAT'S PREVENTING THE MARKET FROM RECOVERY?

A July survey from Freeman and the Atlanta Convention & Visitors Bureau revealed that more than 50% of respondents expect to attend in-person B2B events again in the spring of 2021. The same survey yielded different results in May - prior to a resurgence in COVID-19 cases in July - with more than 50% of respondents expecting to return to in-person events in winter of 2020.

Safety concerns are primarily keeping businesspeople from traveling. The same July survey revealed that more than 90% of respondents considered safety factors to be the most influential milestone determining their decisions on when to attend in-person business events. Moreover, the availability of a COVID-19 vaccine influences more than 50% of respondents' timelines. Additional concerns included the following: safety practices in place for travel and the event (40%); the availability of a COVID-19 treatment drug (36%); no new cases of COVID-19 where the event is held (20%); and no new cases of COVID-19 where the respondent lives (6%).





Aside from safety, business or economic factors influenced 72% of respondents in July. The top business factor impacting respondents' decision on attending in-person B2B events was their company's existing travel ban (31%). Other considerations included hotels reopening (27%); consumer spending increasing (26%); and airlines reporting increased demand (19%).

Areas with high density are experiencing the most severe challenges to occupancy and demand. This can likely be attributed to human desire to avoid dense areas for health reasons and a lack of in-person business events in urban cores.

Managers and owners are also experiencing negative cash flow with fixed costs outpacing profits. Convention hotels, where group and business meetings are vital, are seeing record low occupancy accompanied with nearly estimated minimal \$600 per room per month in fixed costs. This leads to a high actual "burn rate" of \$1,000 to \$3,000 per room per month for many properties today as owners and operators are not able to reduce all expenses.

CONSTRAINTS ON TRAVEL

Two important barriers inhibiting all forms of travel are fear and frugality. Both forces were at work during the recessionary period following, and arguably attributable to, the 9/11 disasters. Frugality dominated in the GFC. Following each of these downturns, travel for leisure purposes returned to prior levels within a reasonably predictable, short time frame. Business transient travelers were close behind, but group travel lagged.^[1]

Again, the U.S. hotel industry struggles with an unexpected, pronounced human withdrawal from many forms of travel. The COVID-19 pandemic elicited both fear and frugality among populations. The year 2020 brought new travel inhibitors. Civil unrest will likely create temporary travel fears affecting visits to some city locations. Regulatory and voluntary shelter-in-place actions, however, could have more widespread and permanent travel implications, as the result of the 'home' being not only home but also becoming the office and supplanting other destinations.

The behavioral experience of enhanced working, shopping, and participating in social events using home-based telecommunication raises questions about whether the most affected members of the population will ever return to pre-COVID-19 travel behaviors. At the forefront of concerns is a possible structural change in the necessity for business travel. Our outlook calls for an industry recovery, measured by nominal RevPAR reaching 2019 levels by 2024 – 2026 for upper tier hotels. While the path of the virus presents a clear downside, there is a strong upside story as well.



ECONOMIC IMPORTANCE OF BUSINESS TRAVEL

Employees of U.S. businesses travel for a variety of purposes including meetings with existing and prospective customers/clients, attendance at trade shows and conferences, and business and activities with colleagues. While the necessity of travel to see customers/clients might be questioned as a response to competitive forces, the true test of how much benefit is derived from making investments in business travel comes from rate-of-return analyses.

Oxford Economics (2009) conducted a detailed study of the rate of return on investments to firms from business travel based on surveys of up to 500 managers. From every \$1 invested in business travel, firms realized \$12.50 in incremental revenue. In addition, Oxford found that elimination of business travel reduces profits by 17% in the first year.

An insight as to how rates-of-return may be generated from business travel comes in a recent study of labor productivity gains from short-term labor mobility. Piva, et. al. (2018) use data on international business trips across various business sectors to estimate productivity gains from expenditures on business travel. The study has the following conclusion:

"The results suggest that mobility through business visits is an effective mechanism to improve productivity, as we estimate that raising expenditures on business visits by 10% increases productivity by 0.2–0.5%. This effect is about half as large as the corresponding measure found for investing in R&D."

Executives and business travelers estimated that 28% of business would be lost without in-person meetings. While most people have adapted to virtual business, we predict that once travel starts up again the competitive nature of business and sales will spur on in-person meetings again.



FUTURE BUSINESS TRAVEL PREDICTIONS: AN UNCONVENTIONAL APPROACH

Because of the unique circumstances in 2020, the usual methods of prediction statistical analysis of historical data and paired comparisons against similar prior events - have questionable applicability. Instead, we developed predictions about the return of business travel from a review of professional and academic studies covering a range of topics related to the relationship between travel and technology.^[2] The issues are framed here along the lines of the following questions:

- 1. Will the rise of remote work offerings increase demand for travel?
- 2. How economically important are investments in business travel?
- 3. What are the issues with home telecommunications and, can they be overcome by improved technology?
- 4. Is home telecommunication a substitute or complement to business travel?

CBRE Research expects that there will be lasting changes to how people work as a result of shifting work patterns from the pandemic. We expect a doubling of those working remotely at least part-time by 2030 and that more than 10% could be working remotely full time. This compares to 28% of people in a recent CBRE survey who said they would prefer to work fully remote.

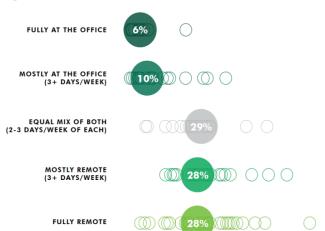


Figure 3: When the COVID crisis is over, where would you prefer to work?

While density changes will cushion the negative impact to office, we see this shift as a positive impact for the lodging industry. The ability to work from anywhere provides the ability to live anywhere, which is showing up in apartment market trends as people move away from dense cities. However, once the pandemic ends, and it will end, these

Source: CBRE Research, August 2020.



employees will need to come back and visit the office to collaborate with co-workers and build culture. In fact, as part of the same CBRE survey the top two reasons to come back to the office once the COVID crisis is over are for team connection/community and to collaborate face-to-face. In a recent example, Citizen M, a newer hotel chain based out of the Netherlands, is betting on this by just recently signing a deal to build a 240-room hotel adjacent to Facebook's campus, and should benefit from their workforce moving remote.

ISSUES RELATED TO HOME TELECOMMUNICATION - CAN TECHNOLOGY HELP?

Home telecommunication existed well before regulatory and voluntary stay-in-place actions became necessary to control the spread of the COVID-19 virus. Accordingly, a substantial body of literature amassed is chronicled by Heller (2010), who provides an excellent review of studies evaluating the advantages and disadvantages of working at home with the aid of telecommunication technology. The papers published since this review generally amplify the findings from earlier studies, although from recent surveys by Tull et.al. (2020) regarding stay-at-home experiences, a new set of personal problems were discovered including greater health anxiety, financial worry, and loneliness.

The advantages of home telecommunication over face-to-face meetings are apparent (e.g., time savings and elimination of travel stress). There are disadvantages, however, centering on interpersonal issues highlighted in Heller's review that create serious barriers to wholesale, long-term adoption of telecommunication in place of face-to-face communication. Three interpersonal issues are among the most researched through human experiments. These include:

- 1. Communication inefficiency caused by the absence of non-verbal cues.
- 2. Hinderances to relationship-building and trust.
- 3. Misinterpretations of meanings that lead to conflicts among participants.

FROM SEPTEMBER 18, 2020 WALL STREET JOURNAL INTERVIEW WITH NETFLIX FOUNDER AND CO-CHIEF EXECUTIVE, REED HASTINGS.

WSJ: What elements of the Netflix culture are tougher to maintain now that so many employees are working from home?

MR. HASTINGS: Debating ideas is harder now.
WSJ: Have you seen any benefits from people working from home?
MR. HASTINGS: No. I don't see any positives.



Both home telecommunication and face-to-face communication have comparative advantages for accomplishing different business purposes. Several studies pursued the question of comparative advantage including Danstadli et. al. (2012) who conduct surveys that directly address the purposes for each mode of business communication. This study and others find that home telecommunication provides a useful purpose for exchanging information, but does not fulfill the needs of firms for creative thinking and making new business connections. The research suggests that the interpersonal issues surrounding home telecommunication may not be as detrimental with straightforward information exchange as they are for creative thinking and new business development. And no studies were discovered to confirm that technological advancements in telecommunications will eventually overcome the interpersonal issues that arise by not meeting face-to-face.

While some are transitioning to full-time remote, the majority of workers will be working with more flexible arrangements. CBRE estimates that almost 75% of workers will work remotely at least part-time. This increased flexibility to blend work and leisure will extend existing trips and the rush to return to the office will fade, as workers continue to work remotely from their destination and extend their stay through the weekend. It is probably too early to call it a trend, but we are already seeing an expansion of length of stay, especially at the lower end of the industry, but stays increase some in small cities and rural areas at the upper end.

HOME WORKING WILL LIKELY STIMULATE MORE BUSINESS TRAVEL

These trends aren't as controversial as they were in some part before the pandemic and are already showing up in the data today. The major shift possible is around group and convention travel, which is still at all-time lows and has barely begun to see any life. A more remote workforce will demand more opportunities to connect in person with colleagues, clients, and others in their network and conferences and conventions are ripe to benefit from the increased demand.

Major conferences have already seen unbelievable growth over the past decade. Dreamforce, which is Salesforce's annual conference, went from 20,000 to 170,000 attendees in just seven years. SXSW saw over 400,000 people attend in 2019. Now imagine a new version in major cities throughout the country, or more regular smaller conferences that give attendees a chance to network or a reason to head back to the city on a regular basis. This can only further grow group demand.



The history of research on the effect of telecommunication on face-to-face encounters confirms what seems obvious – telecommunications substitute for face-to-face communication. Early studies suggesting that telecommunication may complement business travel by stimulating more face-to-face meetings were largely dismissed as counterintuitive. Recently, papers have appeared that revisit the complement theory reporting a statistical link between adoption of telecommunication and greater business travel. Mokhtarian (2003) reviews many published works that address the conceptual and empirical questions of complementarity.

The tracings of exactly how telecommunications translate into more face-to-face meetings remains somewhat vague – use cases are thin. Yet, the empirical evidence is strong that both forms of communication experienced rapid growth during recent decades at the aggregate level and 'on the ground' surveys and longitudinal research positive correlations suggest that more telecommunication breeds more travel. One answer to explain these aggregate results lies in the old saying "all boats rise with the rising tide." Strong income growth has enabled more travel along with technological advancements. But for physical travel to keep pace, the relative prices must maintain some degree of constancy.

Choo et. al. (2007) model the complex relationship between telecommunication and travel. They built their conceptual model and performed empirical analysis with the intent to hold all else constant while isolating the 'complementary' factor. The overarching conclusion from this study is,

"Our empirical results strongly support the hypothesis that telecommunications and travel are complementary. That is, as telecommunications demand increases, travel demand increases, and vice versa."

During economic downturns or periods when travel costs are excessive (e.g., due to energy price spikes) complementarity breaks down.

CBRE

CONCLUDING THOUGHTS

The studies referenced in this article are among many covering topics related to travel and telecommunications. The ones used in this analysis are among the most recent and relevant to questions about the return of business travel in the near-term (hopefully) post-COVID-19 era. The following bullet points summarize the selected research:

- 1. Business travel has large revenue elasticity and profit implications potentially instigated by labor productivity gains. The financial benefits of home telecommunication are likely far smaller unless travel costs are excessive, or the economy is in recession.
- 2. Technological innovations have not yet minimized the interpersonal deficiencies associated with home telecommunications.
- 3. The complementary hypothesis home telecommunications stimulates greater business travel and vice versa – seems to hold as a statistical phenomenon, yet, the behavioral mechanisms for tracing how telecommunications manifest in travel remain ill-defined.
- 4. Face-to-face communication and other humanistic features of traveling to interact with people will drive a strong recovery for business travel during the post-COVID-19 period.

Over the past two decades, consumers have shifted spending towards services and experiences over things. The virus makes many services unattainable at the moment, but once fear eases, CBRE predicts that preferences towards services and other experiential retail will revert back to long-term trends, and we will see continued new demand for the service economy. That, combined with the structural changes happening within the office market, are going to be a strong positive for the lodging industry in the long run.

REFERENCES:

CBRF

Choo, et.al., 2007, "Telecommunications and travel demand and supply: Aggregate structural equation models for the US," *Transportation Research Part A-Policy and Practice* 41(1), 1-24.

Danstadli, J. M. et. al., 2012, "Video Conferencing as a Mode of Communication: A Comparative Study of the Use of Videoconferencing and Face-to-Face Meetings," *Journal of Business and Telecommunications* 26(1), 65-91.

Heller, R. A., 2010, *Cost-Benefit Analysis of Face-to-Face and Virtual Communication: Overcoming the Challenges*, Cornell University ILR Monograph.

Mokhtarian, P. L., 2003, "Telecommunications and Travel: The Case for Complementarity," *Journal of Industrial Ecology* 6(2), 43-57.

Oxford Economics, 2009, The Return on Investment of U. S Business Travel.

Piva, M., et.al., 2018, "Business Visits, Knowledge Diffusion and Productivity," *Journal of Population Economics* 31, 1321-1338.

Salomon, I., 1985, "Telecommunications and Travel: Substitution or Modified Behavior?" *Journal of Transport Economics and Policy* 19(3), 219-235.

Tull, M.T. et. al., 2020, "Psychological Outcomes Associated with Stay-at-Home Orders and the Perceived Impact of COVID-19 on Dailey Life," *Psychiatry Research* 289, 1-6.

^[1] Group travel includes both business and institutional (e.g., statewide public school teachers' conference).

^[2]The existing literature I found applies to business travel, both transient and group. No studies were discovered about non-business group travel.



FOR MORE INFORMATION, PLEASE CONTACT:

Jamie Lane

Senior Research Director Economics & Forecasting +1 404 812 5254 Jamie.Lane@cbre.com Follow Jamie on twitter: @Jamie Lane

Jack Corgel Research Director CBRE Hotels Research Jack.Corgel@cbre.com

Bram Gallagher, Ph.D. Sr. Economist CBRE Econometric Advisors +1 404 504 7900 Bram.Gallagher@cbre.com

TO LEARN MORE ABOUT:

CBRE Econometric Advisors and our sector forecasts please visit our website: *www.cbre-ea.com*

Subscribe to our Monthly Newsletter: *Hospitality Market Update*

CBRE Hotels Research and our data tools please visit our website: *pip.cbrehotels.com*

REIMAGINE YOUR HOTEL IN 2021 AND BEYOND

As hotels begin to cautiously re-open, owners and operators must reimagine their strategies to ensure future profitability. CBRE Hotels offers a comprehensive solution designed for owners and operators seeking data-driven insights and strategic guidance to sustain a profitable future for their hotels.

ACCESS COMPLIMENTARY RESOURCES AND PREMIUM TOOLS >>>

Disclaimer: Information contained herein, including projections, has been obtained from sources believed to be reliable. While we do not doubt its accuracy, we have not verified it and make no guarantee, warranty or representation about it. It is your responsibility to confirm independently its accuracy and completeness. This information is presented exclusively for use by CBRE clients and professionals and all rights to the material are reserved and cannot be reproduced without prior written permission of CBRE.