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15th Global Forum on Tourism Statistics

Measuring the Activities and the Impact of the Sharing Economy

JLL Research Paper:

Developing New Methodologies to Track Home Sharing

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Abstract: Home sharing has grown rapidly and the proliferation of alternative accommodations for leisure and business travellers is here to stay. In major gateways such as New York and London, home sharing demand represents more than 10% of hotel market activity, yet reliable statistics related to this travel segment are few and far between. There is a critical need for the tourism sector to adopt new statistical methodologies to track and measure the impact of this—often opaque—travel segment. Developing new and statistically reliable metrics to better understand home sharing has implications for tourism bodies, travel companies, hotel owners/operators and regulators alike. In the research paper that follows, JLL presents methodologies for how to survey and measure home sharing supply and demand and quantify the impact of this segment of the tourism industry.

Developing New Methodologies to Track Home Sharing

Introduction: Home sharing has grown rapidly, yet reliable statistics related to this travel segment tend to be sparse. JLL's paper presents its methodology to track and quantify home sharing supply, traveller demand, market share vis-à-vis the traditional hotel market, and induced demand. While discussion around cities' regulatory measures regarding home sharing activity often take centre stage, the focus of JLL's paper is to address the need for new statistical methodologies to track and measure the impact of this travel segment. A sounder understanding of the market, and more consistency about how the space is tracked across cities and countries are prerequisites for leading the dialogue surrounding the home sharing market, and developing effective polices to manage its growth as part of an overall tourism development strategy.

## What is home sharing? How does it compare to the traditional hotel market?

The concept of the sharing economy has evolved significantly during the past ten years, building on the peer-to-peer economy which allows individuals to offer a product or service to a network of people through an online platform. One of the key attributes of the sharing economy is that travellers can find personalised products and services at competitive rates.

The travel and tourism sector has quickly adopted this concept, and we have seen an increase in the prevalence and number of home sharing sites such as Airbnb, VRBO, HomeAway and Onefinestay. The change of travellers' behaviour has also accelerated the rapid expansion of this sector. The new generation of travellers desire a more personal travel experience, and often state their desire to feel more connected to the local community. However, JLL's research suggests that much of the activity is driven by travellers' search of more economical accommodations versus traditional hotels while travelling.

To affirm the significance of the home sharing market when it comes to travel and tourism, it is important to look at its sheer size. Airbnb, the largest home sharing provider, was valued at US$10 billion in 2014, and rose to a US$31 billion valuation based on a funding round completed in the first quarter of 2017. The increase in valuation is indicative of investors' belief in the future trajectory of the sector. This private market valuation places Airbnb ahead of numerous public global hotel companies such as Hilton Worldwide, InterContinental Hotels Group and Hyatt Hotels Corporation.

As of November 2018, Airbnb's website states that the platform offers over five million listings, with an average of over two million people staying in an Airbnb unit per night. This compares to the hotel market which spans approximately 17.5 million rooms, according to STR Inc. This paper will address how to draw comparisons between these numbers, given that home sharing listings do not represent "fixed" inventory and tend to be occupied on considerably fewer nights than the average hotel room.

Comparison of Company Value
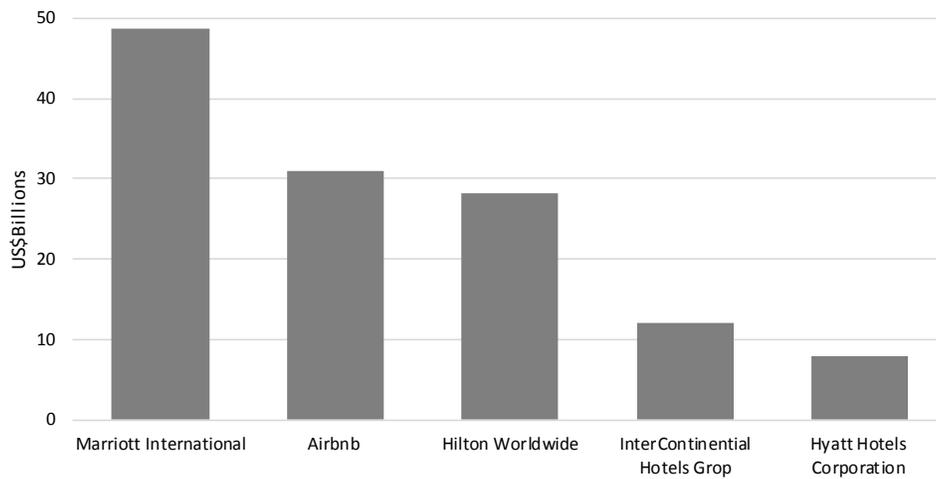
Note: company value for Airbnb is based on the most recent funding round of $31 billion from March 2017; the figures for the public hotel companies pertain to their enterprise value as of October 2018
Source: Public documents, JLL

What makes tracking activity in the home sharing sector different?

As discussed in the previous section, home sharing has taken a mass-market position in the travel and tourism sector. While occupancy and room night trends in traditional hotels are well captured by renowned industry data sources such as STR Inc., there tends to be much ambiguity when it comes to demand related to home sharing units and alternative accommodations.

There are few well-established public or subscription-based data resources that provide key information about the shared accommodation sector. But while some data science and consulting companies have been formed to track home sharing supply and demand data, there are still gaps in data at the city by city level, and insufficient conclusions as to the impact.

And given the nuances of the sector, more characteristics related to the supply and demand need to be tracked as compared to the traditional hotel market. These include i) number of listings in each city; ii) the type of listing (full unit / private room within shared unit / shared room, etc.); iii) the number of nights the unit is made available for a booking and the number of nights it is occupied; and, iv) the price charged, etc.

Given the fast growth of this market, there is a critical need for the tourism sector to adopt new statistical methodologies to track and measure the impact of this—often opaque—travel segment, which JLL explains in this paper.

Estimating the size of the home sharing market

When it comes to the home sharing market, supply fluctuates as much as demand, which makes the tracking more complex. As such, conducting primary research and surveying both demand and supply is the most comprehensive solution for tourism organizations to employ.

To assess the shared accommodations market, JLL engaged an independent research company to estimate the market size in New York, San Francisco, London, Paris and Sydney. To arrive at a representative and complete estimate of the size of the home and vacation rental market, JLL conducted two separate surveys, to measure both the supply and demand for home and vacation rental stays. Below is a description of JLL's approach with regard to the two surveys:

Home sharing *supply* survey

JLL assembled a panel of 500+ residents in each of the five markets, who were asked about their previous behaviour in terms of letting their housing unit on home rental sites such as Airbnb, and their future plans. The sample size was deemed a sufficiently sized base from which to gross up the behaviours, usage, figures to the entire population of households within the five cities.

Questions included the number of nights the unit(s) was made available for rental on a home sharing site, the number of the nights the unit was booked/occupied, the average party size, the average price charged, and the motivations for making one's housing unit available for rental, etc.

Home sharing *demand* survey

For New York, JLL also conducted a survey of demand for alternative accommodations units. Here, JLL surveyed approximately 800 individuals residing in the United States, United Kingdom, France and Australia who had recently travelled to New York. The number of individuals surveyed were spread proportionally across the countries based on the proportions of visitor arrivals of those countries. The four counties represent 84% of visitor arrivals to New York, according to NYC & Company, and where thus deemed a representatively sized sample.

Section 1: Home sharing supply survey

Observation 1: Prevalence of urban residents renting out their living unit

The survey results revealed that 7% of residents in top global gateway cities have made their living unit available on a home rental site. For those who have not previously made their unit available, 8% of those are thinking about joining the fray going forward. For those who have made their unit available on a home rental site, the survey suggests they'd like to become more active. The metrics are summarized in the below:
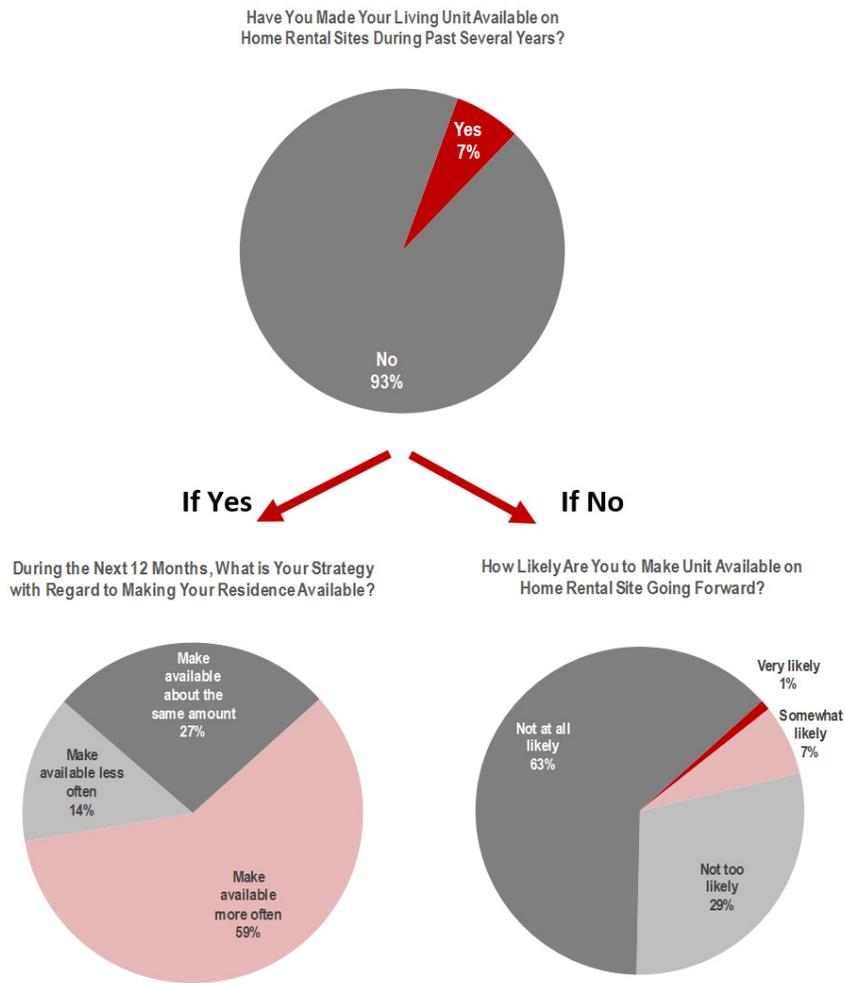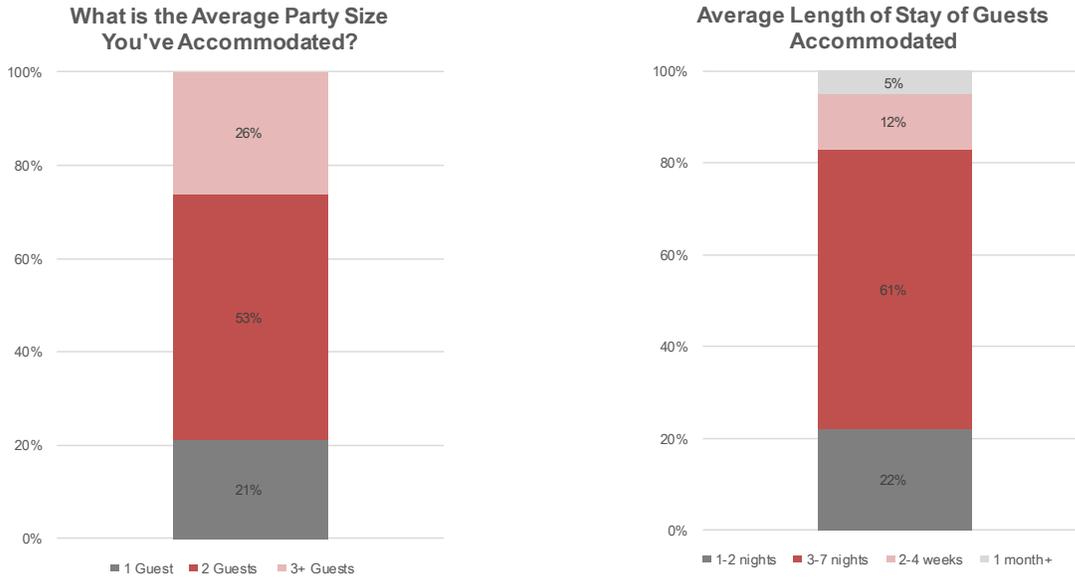

Source: JLL

Observation 2: Party size accommodated

Nearly 80% of parties accommodated have more than two guests, suggesting high proportion of leisure travellers.

***Observation 3: Average length of stay accommodated***

The most common length of stay is 3-7 nights—longer than average business trip, again indicative of high proportion of leisure usage.

Source: JLL

Observation 4: Understanding host motivations

To better understand this travel segment, JLL surveyed home sharing hosts on their motivations for making their living unit available to travellers. As the graph that follows depicts, the main reason for making one's residence available on home rental sites is to make extra money.
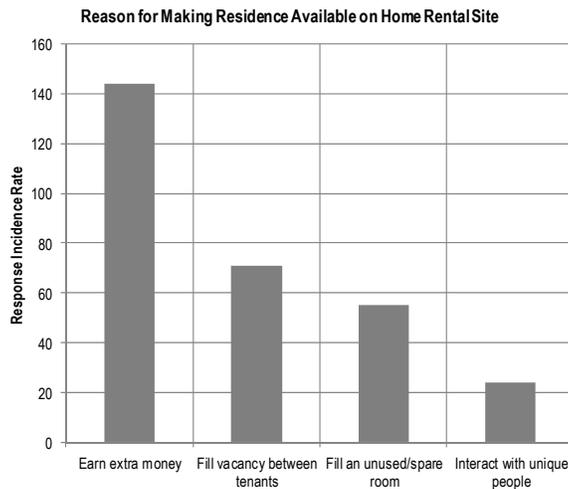
Source: JLL

In a separate question, JLL also asked hosts to what extent happenings at the city level inform their strategy with regard to making their units available. Around 75% of those who have made their units available consider local happenings such as conventions, sporting events, concerts/festivals, etc. when setting pricing and availability.

This speaks to the "accordion" of supply and suggests an efficient economic model and that alternative accommodations can help equalize demand surges. And the existence of the home sharing model may defer some instances of new hotels getting built just for a seminal event such as the Olympic Games.

Observation 5: Understanding host type

In addition, to develop a thorough understanding of the home sharing market supply, cities should also establish the proportion of host that make their living unit available on the majority of nights (i.e. hosts that are professional operators), vs. occasional hosts who only make their living unit available on home sharing sites on an occasional basis. For brevity, JLL's analysis on this point is not depicted in this report.

Section 2: Evaluation of the demand survey

Observation 1: Understanding the motivation of shared accommodation users

'Lower cost' is the primary motivations of visitors to New York who have used home and vacation rentals vs. staying in a traditional hotel. Only a small share of respondents indicated that they booked a vacation or home rental due to hotels being sold out. This suggests that a significant portion of home and vacation rental guests do not necessarily view hotels as a substitute; the responses suggest that they generally do not first check hotel availability and then consider home and vacation rentals as a secondary option.


Motivation to Use Alternative Accommodations in New York
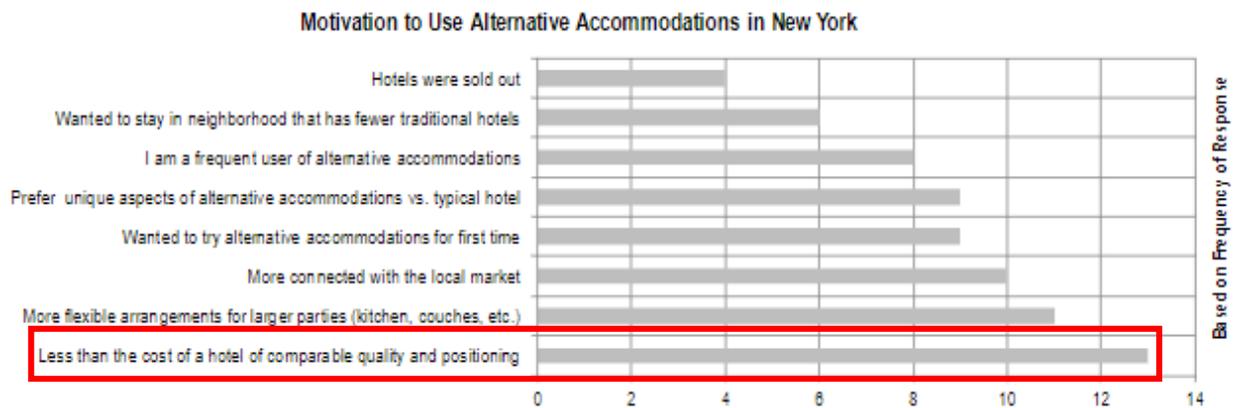
Source: JLL

Observation 2: Travel motivation of shared accommodation of users

A large majority of shared accommodation users were found to be leisure travellers, which the purpose of their trip is sightseeing. This confirmed our observation from supply survey where users are mostly leisure travellers.

Purpose of Trip to New York Where You Stayed in Alternative Accomodation
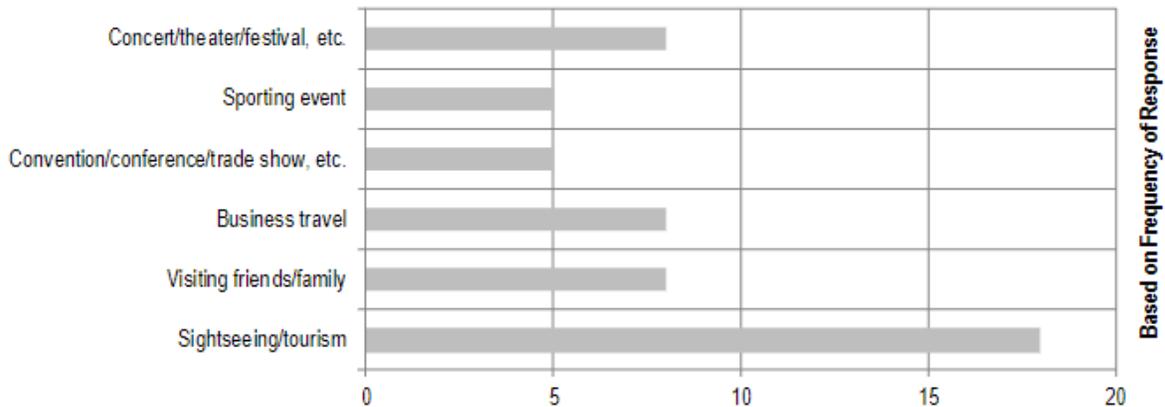
Source: JLL

Observation 3: Estimating share of induced demand

Another important factor in assessing the impact of home sharing activity in a given market is estimating the proportion of room nights which are *induced*, which refers to travellers who would not have made the trip if it was not for the option of staying in a home sharing unit or alternative accommodation.

One method to isolate the share of demand that is induced is by asking travellers where they would have stayed had they not booked a home sharing unit. Another option is to ask travellers why they stayed in a home sharing unit, where JLL's research has shown that as little as 6% of travellers indicated that they booked a home sharing unit due to hotels being sold out. This suggests just how many home sharing guests do not view the traditional hotel market as being in the same sphere.

JLL's research generally finds that the share of induced demand represents 30% to as high as 50% of total home sharing demand, as is illustrated by the below case study generated from a research initiative that JLL collaborated on with the Hawaii Tourism Authority.

Market Size and Impact

JLL

Case study: How much travel demand does home sharing induce?

Airbnb has publicly stated that 30-40% of people staying on Airbnb would have otherwise not made the trip (or stayed with friends and family instead)

During your most recent visit to Hawaii, what was the average rate you paid per night for the home or vacation rental in which you stayed?

Less than $100	
$100 - $199	
$200 - $299	
$300 - $300	
$400 - $499	
$500 - $599	
$600 - $600	
$700 - $799	
$800 - $899	
$900 - $999	
$1,000+	

% of responses
0%   5%   10%   15%   20%   25%   30%   35%   40%

61% of all respondents paid *less* than the state-wide hotel average daily rate. JLL concluded that this share represents *induced* demand—demand that would likely not have traveled to Hawaii without the option of alternative accommodations

Median nightly rate paid for home or vacation rental is $200 according to visitors surveyed

BAIRD

- **Management teams acknowledging Airbnb impact during high demand periods.** Management teams have begun to acknowledge that Airbnb's increasing popularity has constrained ADR growth a bit, particularly during large, well-publicized events (e.g., marathons, concerts). Airbnb appears to induce some incremental demand, and a unit booked on Airbnb is not necessarily a one-for-one cannibalization of a hotel room; however, the rise in popularity of Airbnb appears to be a net negative for hotels.

HAWAI'I TOURISM
AUTHORITY

Source: JLL

Various local governments have imposed regulations on home sharing hosts. Cities such as New York, Amsterdam, Berlin and Paris have limited the number of rental days for shared accommodations. In these instances, we generally could not measure a concurrent boost to hotel operating performance, which again confirms our survey findings that shared accommodation brings induced demand.

Section 3: Estimating the size of the home sharing market

The prevalence of home sharing activity varies greatly by city and market type. Thus, it is important to apply these research methodologies to estimate market size in the world as a whole, at the country level, and at individual cities' level, as the prevalence of the business model will lead to differing impact and policy setting.

Market size in major international tourist hubs

In the five global gateway markets that were at the core of JLL's supply and demand survey detailed previously, JLL found that home sharing occupied room nights represent over 10% of hotel occupied room nights. JLL generally found that the denser the home sharing market, the higher the hotel occupancy, which speaks to induced demand and shows that home sharing is not having detrimental impact on traditional hotels. Also, when looking at major travel markets across the United States, JLL found that the number of home sharing listings shows relatively high (0.72) correlation to international traveller arrivals.

Global market size and market share

Based on the survey responses and JLL's knowledge of the hotel market, the conventions industry and the travel and tourism market as a whole, we took the below steps to estimate the total room nights of home sharing room nights:

1) Number of guest arrivals for a one-year period (publicly stated by Airbnb) as starting point
2) Divided by average guests per home sharing booking based on JLL's research
3) Multiplied by average length of stay of home sharing booking based on JLL's research
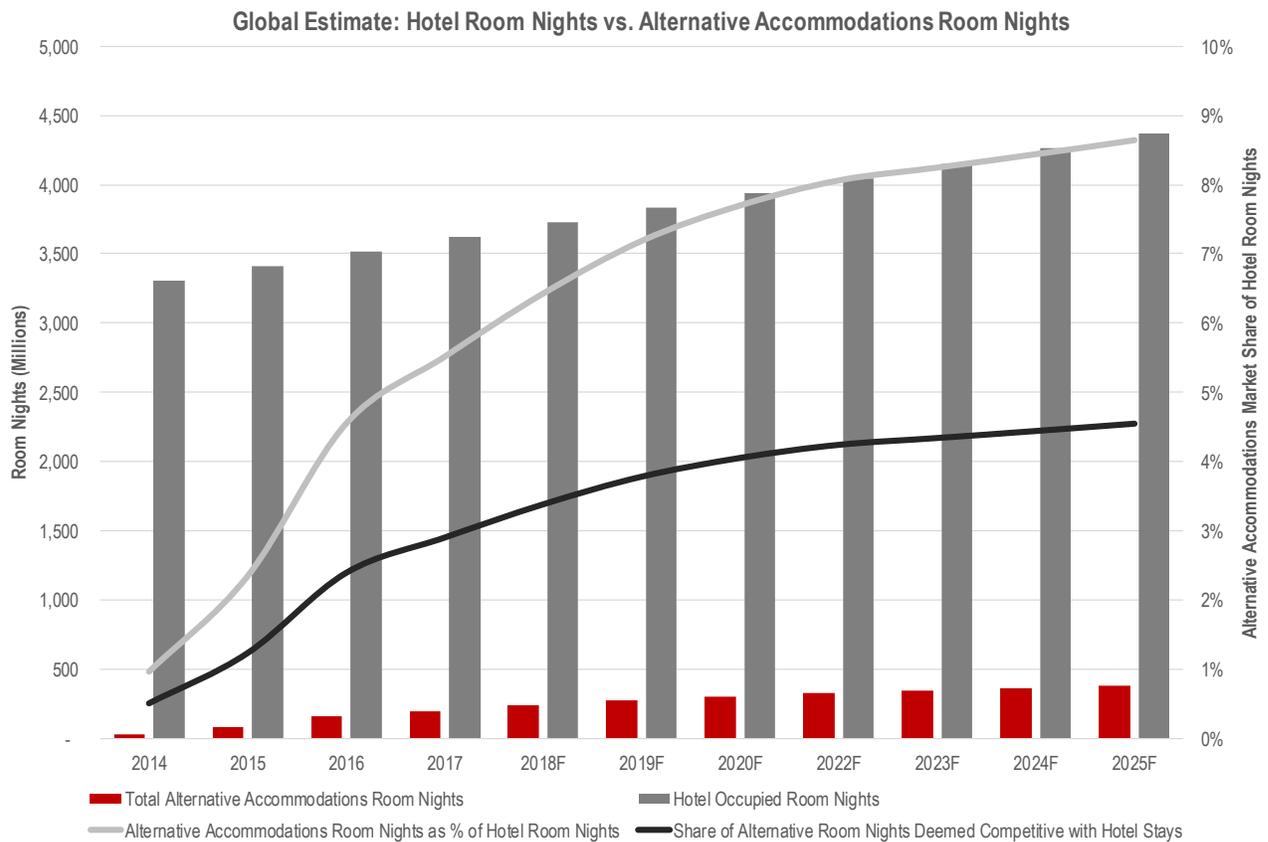
JLL thereby estimated the number of home sharing room nights globally for 2018, and applied the projected future growth through 2025 based on the previous trajectory, and assuming a slowdown in growth based on the responses of the supply survey.

Then, to put the home sharing market in context with the hotel market (in terms of hotel room nights), we plotted the global number of hotel room nights accommodated based on figures from STR Inc., a company which tracks hotel operating performance. We then projected future hotel room nights at an assumed 3% annual growth rate as hotel demand and GDP growth tend to correlate closely.

We then endeavoured to estimate market share of home sharing versus traditional hotels. To do this, we removed the non-congruent home sharing accommodations types (i.e. shared room) and also subtracted the estimated proportion of home sharing demand that is deemed to be *induced.*

Our results show that globally, home sharing demand competitive with traditional hotels accounts for an estimated 3.4% of total hotel room nights. This is expected to increase to 4.5% by 2025.

And when tracking the total home sharing market, including travellers that stay in a home sharing unit that is not congruent with a hotel room, and counting demand that would not have made the trip had it not been for the lower-cost shared accommodations unit, the global market share is estimated at 6.4% of the hotel market today, and 8.6% by 2025. It should be noted that the share of activity in major gateway markets such as New York and London is notably higher.

Global Estimate: Hotel Room Nights vs. Alternative Accommodations Room Nights

Legend:
- Total Alternative Accommodations Room Nights
- Hotel Occupied Room Nights
- Alternative Accommodations Room Nights as % of Hotel Room Nights
- Share of Alternative Room Nights Deemed Competitive with Hotel Stays

Source: JLL

Conclusion: Utilizing more complete statistics and data series to measure impact of home sharing and inform policy setting

Millions of travellers have utilized home sharing units when visiting other cities and countries. Some of these stays take demand from traditional hotels, while the shared accommodation sector also induces net new travel to tourism destinations. With both demand and supply ebbing and flowing, the home sharing sector can equalize hotel supply pressures during high-demand periods. However, the sector can bring on issues such as over-tourism, debate over tax generation and conflicts between home sharing providers and local government.

The travel industry and government bodies can adopt the two-prong, survey-driven approach to estimate activity from both a supply and demand standpoint, and size this according to the traditional hotel market. A sounder understanding of the market, and more consistency about how the space is tracked across cities and countries are prerequisites for leading the dialogue surrounding the home sharing market, and developing effective polices to manage its growth as part of an overall tourism development strategy.

Author biographies

Lauro Ferroni, Senior Vice President, JLL

Current Responsibilities

Lauro Ferroni serves as the head of hotel research for JLL's Hotels & Hospitality Group where he spearheads the group's research platform and directs strategy and output among the firm's regional research leads based in the Americas, EMEA and Asia Pacific.

His responsibilities include driving the group's capital markets research and analytics, monitoring key industry performance and hotel development indicators, hotel investment volume and developing custom analytics to inform clients' strategies and position the firm as a thought leader. Mr. Ferroni has also formulated methodologies to track the size and impact of the home sharing market, and advises leading hotel and tourism industry organizations on how to approach home sharing from an impact and policy standpoint.

Experience

As a member of the global research team, Mr. Ferroni has driven the completion of numerous research initiatives related to the hotel and travel markets and has been quoted in The Wall Street Journal, Forbes, The New York Times, Reuters, Bloomberg and Investor's Business Daily. Mr. Ferroni moderated a panel on home sharing at the Travel and Tourism Research Association annual meeting in June 2018 in Miami.

Education and Affiliations

Mr. Ferroni holds a Bachelor of Science degree from Cornell University's School of Hotel Administration.

Eva Chan, Vice President, JLL

Current Responsibilities

Eva Chan is currently vice president of the EMEA Hotels & Hospitality Group research team. She is responsible for delivering research reports – both on a global and regional basis, providing market leading research on the future of hospitality trends to clients. In addition,

Eva supports the EMEA transaction and valuation teams and work closely with management to provide insight and knowledge to enhance business strategies.

Experience

Eva began her career with PricewaterhouseCoopers in Hong Kong under the firm's graduate program. She later joined Morgan Stanley in Japan as an associate in the fixed income department. Prior to joining JLL, Eva was the commercial analyst at Michels & Taylor Ltd – a hotel asset management company in London, managing more than 80 assets across Europe.

Education and Affiliations

Eva graduated from the University of Toronto with a Bachelor of Commerce degree. She also holds a Master of Science in International Hotel and Tourism Management from Oxford Brookes University. She speaks English and Chinese (Mandarin and Cantonese).

About JLL'S Hotels & Hospitality Group

JLL is an investment management and professional services company that specializes in real estate. JLL's Hotels & Hospitality Group spans 350+ hospitality, hotel and tourism-focused professionals located in 20 countries around the world. JLL's activities and strategies are supported by a globally connected research platform which is led by real estate advisors, economists, statisticians and consultants. JLL's Hotels & Hospitality Group clients span hotel brand companies, operators and managers, hotel asset owners, tourism organizations, destination marketing organizations, and cities and municipalities. A Fortune 500 company, JLL is headquartered in Chicago.