Airbnb's Network Effect Offers Investors a Unique Stay

An early look at Airbnb's market opportunity, competitive position, stewardship, and valuation ahead of its impending IPO.

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Airbnb's Rare Network Advantage in a Rapidly Growing Industry Worth a Premium Valuation

Ahead of its anticipated IPO in 2019-20, we see Airbnb's current market capitalization ranging between $53 billion ($180 per share) and $65 billion ($221 per share), based on a peer-based and DCF-derived exit multiple approach, 70%-110% higher than the $31 billion the company fetched at its most recent funding round in July 2017 and above the valuation of any hotel operator. Our valuation implies an enterprise value to 2019 EBITDA multiple range of 28-32 times (with an assumption of $3 billion in net cash), a premium to the 18 times awarded on average to other companies with online marketplaces. We believe a premium is warranted based on several attractive features Airbnb offers investors, including (1) a powerful and rare network advantage that should drive continued share gains in a rapidly growing alternative accommodations market; (2) an opportunity to expand its network and addressable market with vertical extension into hotel, experiences, corporate, and transportation; and (3) strong profitability prospects driven by the company's high consumer awareness that allow it to leverage top-line growth. We believe Airbnb's IPO should be on the radar screens for investors seeking exposure to a company positioned to gain share in the nearly $700 billion global online travel market that we estimate will grow 9.4% annually on average over the next five years.

Key Takeaways

- We expect Airbnb's core alternative accommodations market to experience 16.6% online industry growth annually on average the next five years, above the 9.4% lift we expect for total online travel.
- Airbnb's platform of 250 million monthly visitors and 5 million listings drives a network effect advantage, positioning it for attractive long-term growth.
- Airbnb's network advantage allows it to reach 45% online booking share of the alternative accommodation market in 2022 versus the 30% portion we estimate it held in 2017.
- We expect Airbnb to expand into hotel, experience, and transportation verticals the next few years, and for these markets to make up 19% of its total bookings in 2022 from 3% this year.
- Increased competition and alternative accommodation regulation present headwinds to Airbnb's long-term growth, mitigating its healthy competitive position.

Companies Mentioned

Name/Ticker	Economic Moat	Moat Trend	Currency	Fair Value Estimate	Current Price	Uncertainty Rating	Morningstar Rating	Market Cap(Bil)
Airbnb	Narrow	Stable	USD	180-221	N/A	N/A	-	53-65
Expedia EXPE	Narrow	Stable	USD	180.00	126.66	High	★★★★	19.00
TripAdvisor TRIP	Narrow	Stable	USD	56.00	59.35	High	★★★	8.00
Booking Holdings BKNG	Narrow	Positive	USD	2,300.00	2,020.00	High	★★★	98.00

Airbnb's Extraordinary Success Booked by the Right People With the Right Idea at the Right Time
Conceptualized in August 2007 as an alternative option to hotel lodging, we calculate Airbnb now is the largest player in the $150 billion alternative accommodation booking market with a high-teens share, up from just a roughly 4% share in 2014. We estimate that roughly half of the market's bookings occur online, of which Airbnb has around 35% online share today versus around 10% in 2014 (we detail the company's competitive positioning later in the report).

The idea of room sharing was not a new one when Airbnb got its start. In fact, staying in another's home during travel was often used in the first part of the 20th century, until the hotel industry took hold in the 1950s, as U.S. middle income class growth ramped up post war and the Eisenhower Interstate Highway Plan made travel more accessible. Further, companies like Craigslist and VRBO (Vacation Rentals By Owner) can trace their beginnings back to the 1990s when each offered ways to share rooms and homes with others.

Despite private accommodations not being a new notion, we believe Airbnb's amazing success can be traced to four things—its differentiated content, an improved user experience, the skill set of its three founders, and sheer timing.

Exhibit 1 We See Airbnb's Success Tied to Its Content, User Experience, Founder Skills, and Timing

Differentiated Content
- Unique and urban versus full home and hotels

Improved User Experience
- Design skill set and technology advancements

Founder Skill Set
- Design and engineering

Timing
- Technology, economic, and demographic

Source: Morningstar

When Airbnb launched it offered differentiated content, as illustrated by its affordable shared rooms in urban markets versus full homes in vacation locations that were hosted on VRBO, while listing a wider array of unique content (i.e. treehouses, igloos, tepees, yurts) than Craigslist. The company also improved the user experience over Craigslist, benefiting from the design and engineering expertise of its founders, which was also aided by the timing of technology advancements. Two of Airbnb's founders, Brian Chesky and Joe Gebbia, brought with them strong design backgrounds, while founder, Nathan Blecharczyk, was already a successful coder in his high school years, which enabled him to engineer the concepts developed by his cohorts (we assess the founders' backgrounds in more detail in the stewardship section). Importantly, technology advancement opened an opportunity to improve the user experience that existed in the online alternative accommodation space at the time when Airbnb was established. To illustrate, Amazon Web Services (launched in 2006) allowed the founders to outsource data center processing needs at a lower cost than it would have been to build, enabling them to focus time and capital on the user experience. Additionally, the launch of the iPhone in 2007 began to allow for accessible search of places across the world at any moment, helping drive Airbnb's mobile platform and expand the marketplace.

The timing was also right for the Airbnb concept from an economic and demographic standpoint. Coming out of the Great Recession people were looking for cheaper travel options and ways to generate income, which room-sharing on Airbnb's platform offered. Also, millennials were seeking an alternative to the commoditized nature of many hotels, preferring to experience the local culture of a destination, which was provided by the neighborhood-hosted listings on Airbnb's network.

But this impressive growth didn't come without early struggles or even immediate commitment by its founders. As a means to pay rent in San Francisco, Chesky (CEO) and Gebbia (CPO) decided to rent out three air mattresses for $80 a piece per night during a designer conference in August 2007 that had led to full occupancy at the surrounding hotels. But it wasn't until a few months later that the two decided that AirBed and Breakfast (the company's original name) was a concept to which they should fully dedicate their time. During its first year, the founders launched a website a few times with little sustained traction and at one point funded the company by selling boxes of limited edition Obama O's (an idea thought up by the founders) to hosts using the AirBed and Breakfast platform.

Things turned for the company when it received a $20,000 accelerator (at a $333,000 valuation) from Y Combinator in November 2008, followed by invaluable business training from its founder, Paul Graham, in early 2009. Around this time is when Airbnb as it is known today took shape. For one, the founders removed the previous requirements of hosts needing to rent out only air mattress (no renting of beds), while also being present and serving breakfast only during events that led to sold out hotel occupancy. Shortly after, another key event occurred for Airbnb when it received seed funding from the well-respected firm Sequoia Capital (at a valuation of $2.4 million) in April 2009, which not only gave validation for the company but also important mentorship from investment guru Greg McAdoo for the young executives. From this point, Airbnb's growth ramped with nights booked growing 800% in 2010 to 700,000 cumulative nights by November of that year, followed quickly by 1 million and 2 million total cumulative nights at the start of 2011 and by the middle of 2011, respectively.

Exhibit 2 Airbnb's Road to Growth Was Rapid

Aug-07	Nov-08	Jan-09	Apr-09	Nov-10	Feb-11	Jun-11	Dec-17
AirBed and Breakfast Concept	Y Cooperation Accelerator	Y Combinator Business Training	Sequioa Venture Seed Funding	700,000 Cumulative Nights Booked	1 Million Cumulative Nights Booked	2 Million Cumulative Nights Booked	$2.6 Billion in 2017 Revenue

Source: Morningstar, PitchBook, Company Reports

Today, Airbnb has amassed significant revenue (reaching $2.6 billion last year, according to Bloomberg), and we believe it faces an opportunity for attractive long-term growth in the $1.6 trillion global travel booking market. That said, Airbnb's core alternative accommodation industry faces room-sharing law and safety challenges that could impede its trajectory. We discuss these factors in the following section.

Alternative Accommodations Return to Prominence, but Headwinds Remain

Although the alternative accommodations market represents a sizable $150 billion in bookings this year, it is hardly a new concept. Room-sharing has existed since travelers first sought shelter at the Lascaux caves in France, considered the first known example of offering lodging to different tribes somewhere around 38,000 B.C. to 15,000 B.C. (wouldn't that be a cool Airbnb listing). Room-sharing remained the prominent option for accommodations into the Medieval period when English travelers stayed at inns that were private homes. In fact, it wasn't until the year 705 that Nishiyama Onsen opened in Japan and was later officially recognized by Guinness Book as the first hotel. More than a 1,000 years later, the first accommodation to call itself a hotel opened in 1774 in London under the name of Grand Hotel.

Around the middle part of the 20th century the timing was right for the development of the modern hotel chains that exist today, as advancements in transportation and prosperity opened travel to more income classes, as illustrated in Exhibit 3. At this time, Eisenhower's Highway Act was being implemented, increasing access to underpenetrated parts of the United States. The first commercial jet airlines were coming to market, further expanding the travel economy. Additionally, middle income classes in industrialized countries were expanding, and working benefits like shorter hours and vacation time were instituted. To address the increased travel demand, brands like the Holiday Inn (first opened in 1952) and J.W. Marriott (opened in 1957) saw rapid expansion, opening similar room concepts across the country.

Exhibit 3 Transportation and Prosperity Advancements of Mid-20th Century Supported Modern Hotel Development

1945	1952	1956	1957
World War Ends; Middle Income Class Growth & Improved Worker Benefits	First Commercial Jet Service; First Holiday Inn	Interstate Highway System Authorized	First J.W. Marriott

Source: Morningstar

More recently, there has been some trend shift away from the commoditized branded hotel room that disrupted the travel industry during much of the second half of the 20th century, toward more unique experiences. For one, the hotel industry began presenting boutique hotel brands like Kimpton (now owned by narrow-moat InterContinental) in the 1980s, which offered the security and amenities of a traditional hotel but with more design variation. Then in the mid-1990s, accommodation platforms like Craigslist and VRBO were launched, opening the experience of apartments and vacation homes to travelers. As the Internet, cloud, and mobile technologies evolved, it unlocked the opportunity for a company like Airbnb to increase the accessibility of unique places to stay, while also offering a different social interaction than a traditional hotel. Over the past several years, hotels have continued to respond to the desire for unique travel accommodations and experiences with the launch of soft and lifestyle brands that adhere to the local atmosphere and select-service hotels that offer social spaces and quality rooms with reduced hotel amenities like restaurants and spas.

Today, the alternative accommodations market is large and growing. As illustrated in Exhibit 4, we estimate that around $150 billion in private accommodation bookings will occur this year, up from roughly $100 billion in 2014. Over the next five years, we see this vertical growing bookings 10% annually on average, compared with the 11% averaged the past three years, to exceed $220 billion in 2022. Meanwhile, the percent of alternative accommodation bookings occurring online will ramp to nearly 65% in 2022 from the high-40% rate we believe took place in 2017, representing nearly a high-teens annual growth rate on average over the next five years.

Exhibit 4 We Expect the Alternative Accommodations Market to See Healthy Bookings Growth Over the Next Five Years

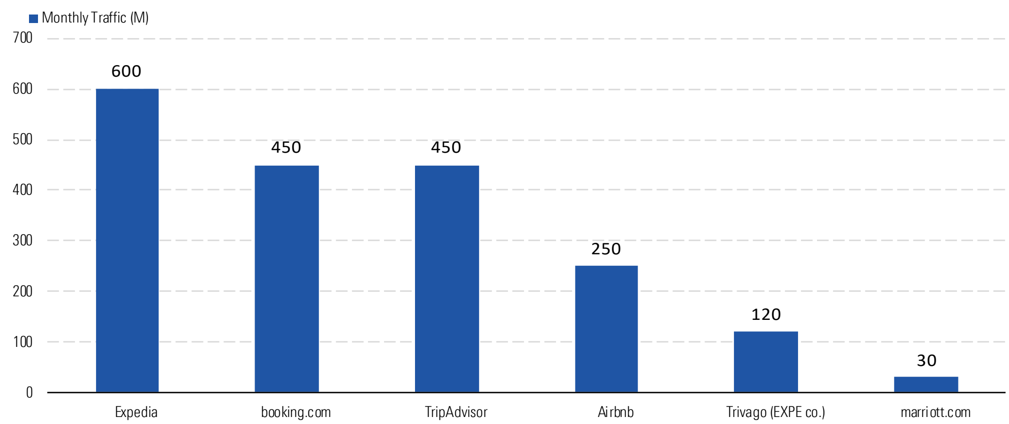
Alternative Market

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Bookings	102.23	113.14	125.59	139.7	154.23	170.28	185.93	202.91	221.48
yoy growth		10.7%	11.0%	11.2%	10.4%	10.4%	9.2%	9.1%	9.2%
Online Bookings	37.60	45.87	55.5	66.61	78.59	92.74	107.58	124.79	143.51
yoy growth		22.0%	21.0%	20.0%	18.0%	18.0%	16.0%	16.0%	15.0%
penetration	36.8%	40.5%	44.2%	47.7%	51.0%	54.5%	57.9%	61.5%	64.8%

Source: Morningstar

We expect online growth of the alternative accommodations market to be supported by improved user experiences and demand for unique experiences. As shown in Exhibit 5, the Airbnb, booking.com (owned by Booking Holdings), and HomeAway (owned by Expedia) platforms generate industry-leading traffic that allows them to continuously test and quickly implement changes to the website that increasingly match the right space to the right person at the right time, leading to higher conversion rates.

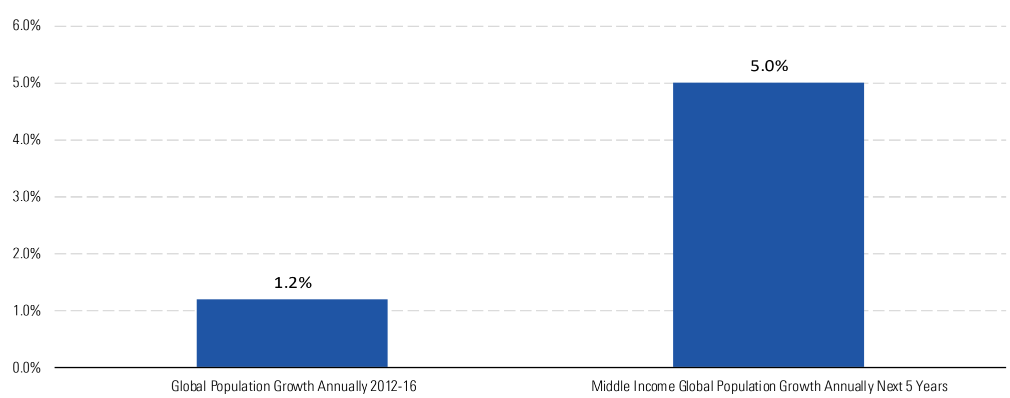
Exhibit 5 Critical Mass Traffic Scale of Booking, Expedia, and Airbnb's Networks Help Drive Ongoing User Experience Improvement



Source: Morningstar, SimilarWeb, Company Filings

Demand for alternative accommodations (and all of travel) will also be buoyed by the rapid growth in the global middle-income class. According to a study published in February of this year, Brookings determined that the 3.2 billion people were in the global middle-income class in 2016, or around 43% of the world's total population (according to World Bank data). The study went on to conclude that 160 million individuals would join the middle-income class on average each year for the next five years, representing around 5% yearly growth, well above the roughly 1.2% global population lift witnessed the past few years (according to World Bank data), as shown in Exhibit 6, resulting in the majority of world's citizens reaching this status for the first time ever in 2020 (with the other half made of lower- and upper -class citizens).

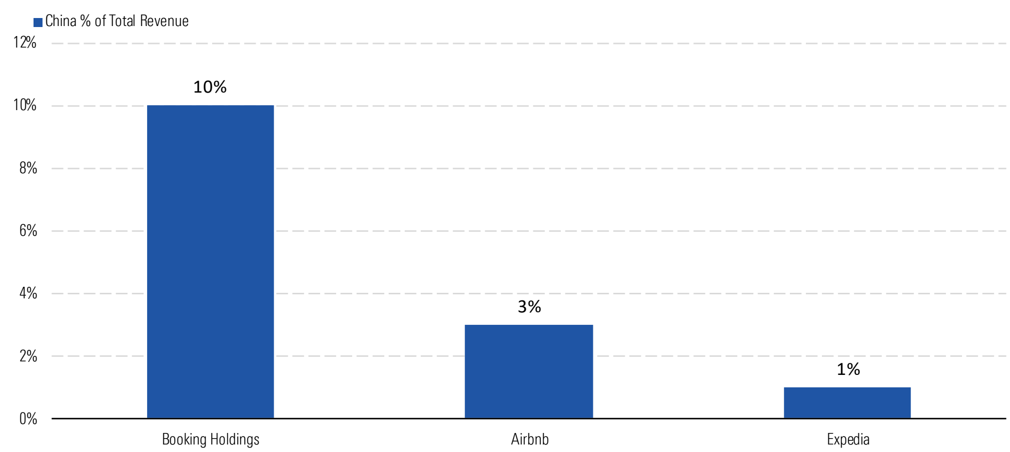
Exhibit 6 Global Middle Income Class Growth Will Support Alternative Accommodation Market Growth the Next Several Years



Source: Brookings, World Bank

In particular, China is expected to be a meaningful portion of global middle-class growth over the next several years. To illustrate, Brookings estimates that 350 million of the next 1 billion to join this income level over the next six years will come from China. And importantly, Airbnb has a growing presence in the country with 120,000 active listings as of November 2017 (around 2%-3% of the company's total listings) and around 5 million Chinese guest arrivals (made up of roughly 3 million and 2 million domestic and outbound travelers, respectively) on the platform over a trailing 12-month period ending November 2017 (around 4% of Airbnb global traveler stays during that time), which equals the travelers from the country using the room-sharing network the previous eight years combined. Assuming an average daily rate in China that is 25% below the consolidated average for Airbnb results in the company getting around 3% of its total revenue from the country, which is already higher than the roughly 1% we estimate for Expedia but well below the 10% we calculate Booking Holdings receives.

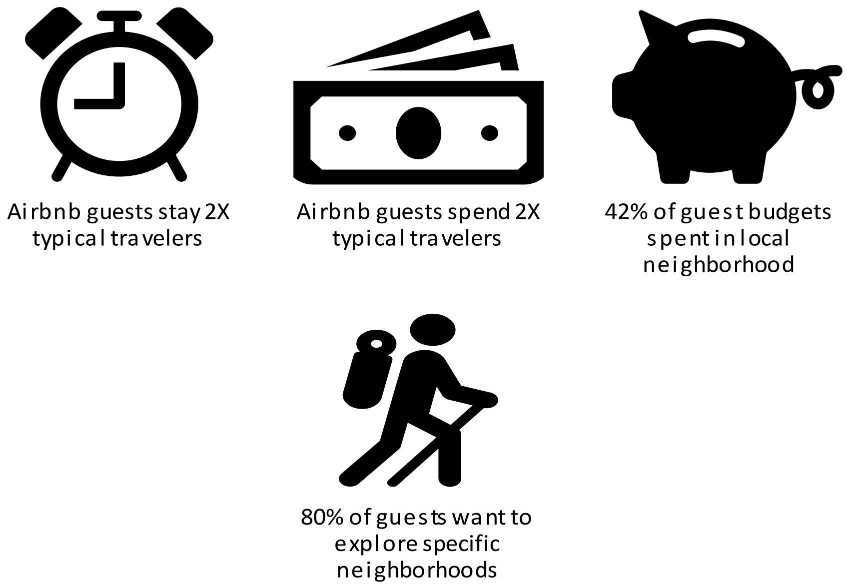
Exhibit 7 Airbnb Has a Growing Presence in China, Although It Trails Booking Holdings



Source: Morningstar

A further argument for the expansion of the peer-to-peer rental market that Airbnb addresses is that it has a positive economic impact on the surrounding neighborhood. As illustrated in Exhibit 8, Airbnb claims its travelers stay twice as long and spend twice as much as a typical visitor, with 42% of its guest budgets occurring in the neighborhood of the accommodation. Further, there is support that many Airbnb guests are incremental travelers, as nearly 80% of the company's travelers say they want to explore a specific neighborhood, which traditional hotel accommodations might not provide, with around three fourths of Airbnb listings being outside the main hotel district.

Exhibit 8 Airbnb Users Stay Longer, Spend More, and Can Provide Economic Benefit to Local Neighborhoods



Source: Airbnb, Microsoft Office Icons

As a result, Airbnb has published studies across a handful of cities highlighting the positive impact to the surrounding area. For instance, its paper on New York highlights over 400,000 Airbnb guests visiting the city and spending $632 million between 2012-13, of which over $100 million was spent in outer boroughs that might not have seen tourism otherwise. While this impact to local neighborhoods is positive, it pales in comparison to the roughly 36 million hotel room nights travelers booked in New York City in 2016, according to Smith Travel Research.

Despite any incremental spend local businesses might enjoy from Airbnb lodging, the increasingly large alternative accommodations market faces ongoing headwinds from opposition that is concerned with the industry's impact on society (resident quality of life), safety (adhering to codes), and economics (cost of living). While Airbnb can and does provide a positive social connection, it also fosters an environment where strangers who might not be as respectful of the living quarters are in near-proximity to full-time residents, resulting in an unintended lower resident quality of life. Safety is another real concern when rented units aren't verified as being up to code on such things as structure, fire, or carbon monoxide standards. But probably the biggest push-back on room-sharing is the negative cost of living impact it can have on inhabitants by allocating supply to tourists at the expense of residents.

Although Airbnb has come to rental-term agreements with many cities, most all destinations have restrictions on room-sharing, and many areas are pushing for stricter laws or enforcement, as illustrated in Exhibit 9.

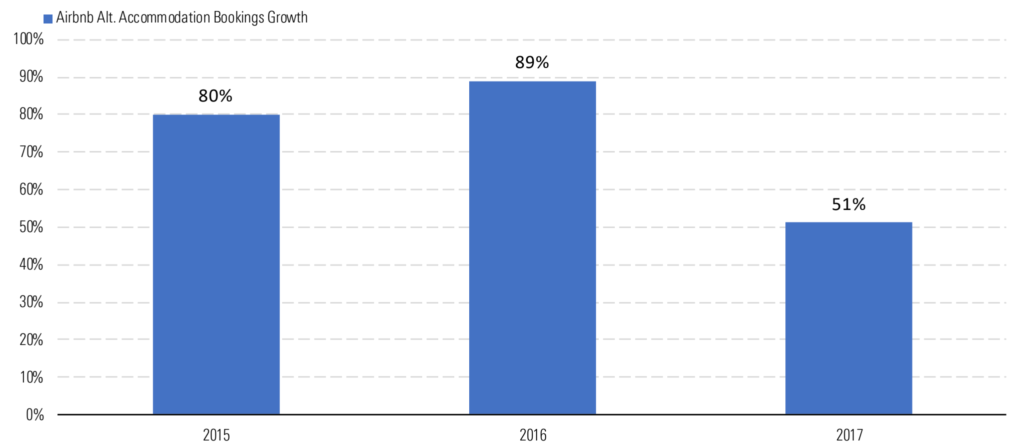
Exhibit 9 All of Airbnb's Top Markets Have Enacted Anti-Sharing Regulations the Past Few Years

	Estimated % of Airbnb listings	Date of Recent Action	Direction of Recent Action	Days Allowed to Rent, Host Not Present	Days Allowed to Rent, Host Present	Register	Other
China (country)	2.7%	Mar-18	Stricter	365	365	Yes	Airbnb complies with existing hotel regulation that requires both guests and hosts to share information with authorities.
London	1.8%	May-15	Looser	90	90	No	Initial 1970s law required hosts to register and capped rental days to 90 per year. Now one can get approval to rent more than 90 days.
Paris	1.2%	Dec-17	Stricter	120	120	Yes	Law goes into effect requiring registeration of listings. Ongoing legal battle between Paris and Airbnb with the city threathening to pull vast majority of platform's listings claiming they aren't registered.
New York	1.1%	Oct-16	Stricter	0	365		Existing anti-room-share law amended making it illegal for individuals to advertise apartments with three or more units for rent for fewer than 30 days if the resident was not present.
Sydney	0.7%	Jun-18	Stricter	180	365		Government passes bill allowing landlords ability to ban Airbnb's in their buildings. Guest/hosts pay fines and face bans up to 5 years if commit 2 breaches of code of conduct (i.e. disruption) within 2 years.
Rio	0.6%		Loose	365	365		No established law.
L.A.	0.6%	May-18	Looser	0	120	Yes	City Council approved recent requirements allowing hosts to get an extension above 120 days if good standing citizens and have approval of all neighbors within a 100 feet.
Rome	0.5%	Jun-17	Stricter	365	365	Yes	Law goes into effect requiring hosts to obtain a license from the government and report guests to the local police. A 21% tax is applied to the rental rate.
Berlin	0.5%	Mar-18	Looser	90	365	Yes	New law overturns prior 2016 ruling that banned most all short-term rentals. Hosts now need permits from borough location governments. Fines increased 5x to EUR 500k for not complying.
Barcelona	0.3%	May-16	Stricter			Yes	Law goes into effect banning multiple listings and requiring hosts to obtain a license and report guests to government. Government is no longer issuing new licenses.
Toyko	0.1%	Jun-18	Stricter	180	180	Yes	Law goes into effect requiring listings to pass safety and background checks. Airbnb removed around 80% of its listings in June 2018 for failing to comply.

Source: Morningstar, Statista, Inside Airbnb, Airbnb, Various Media Reports

These room-sharing regulations are a partial driver behind the 51% bookings growth we estimate Airbnb chalked up in 2017, which would be a marked deceleration from the 89% growth we believe occurred in 2016, as illustrated in Exhibit 10.

Exhibit 10 We Believe Increased Regulation Is Driving Airbnb's Recent Booking Growth Deceleration



Source: Morningstar

The most famous legal battle is taking place in New York, which we estimate is around 1% of Airbnb's 5 million-plus global listings. The city has long had laws against short-term rentals to support affordable housing for its residents. Specifically, it is illegal for individuals to advertise apartments with three or more units for rent for fewer than 30 days if the resident was not present. Various studies have concluded that many Airbnb listings were not abiding by the law, resulting in a negative impact on resident cost of living. In 2013, the New York Attorney General's office subpoenaed Airbnb to obtain some listing records from the company, finding that 72% of the platform's listings in the city were in violation of state law. In 2016, a study conducted by Share Better (an organization of hotel unions, elected official, and affordable-housing advocates) concluded that illegal listings on Airbnb reduced the city's rental supply by 10%. This study was followed up by a McGill University report that found the median long-term rent in New York increased by 1.4% over the September 2014-August 2017 timeframe, due to thousands of illegal units on Airbnb that had removed supply from residents. Airbnb claims that these studies offer inaccurate conclusions, which is tough to know given the company limits the sharing of host data to protect their privacy. Airbnb also states that it doesn't dispute that cities with housing issues like New York should have a policy of one listing per host and claims to have removed all people that had multiple listings, although this can be tough to police and verify. Finally, Airbnb claims to have offered to collect a hotel tax in New York but has been refused, signaling that the two sides are still far from any resolution.

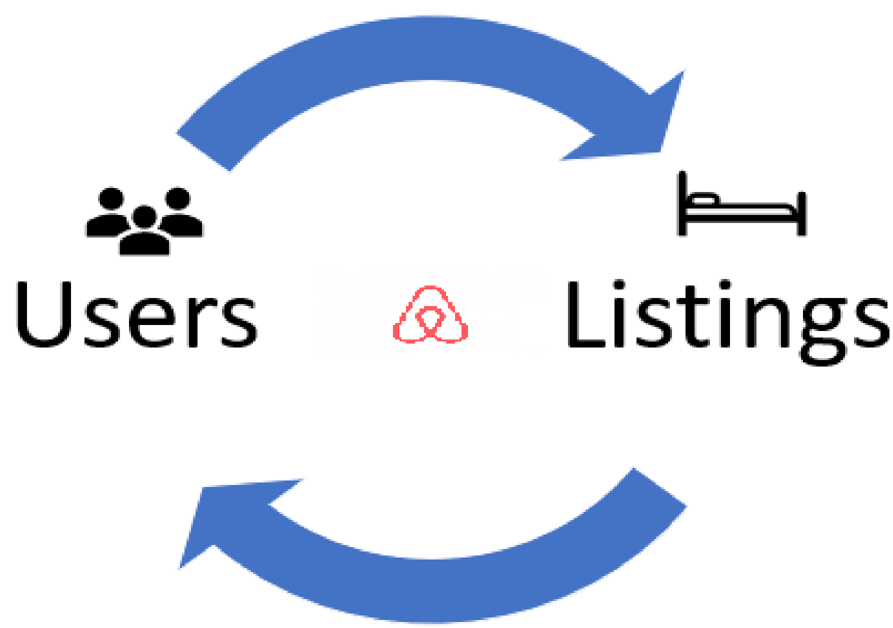
Still, it appears to us that Airbnb wants to have a positive influence on all neighborhoods, evidenced by the company's community compact that was launched in 2015 to work with cities to address affordable housing. And Airbnb is finding success, having inked 500 tax agreements and collecting $500 million in hotel tax, according to CEO Chesky's comments at the Recode conference May 30, 2018. One example of working with cities is in San Francisco, another area with housing affordability issues. Here a settlement was reached where only full-time residents that were registered and shared listing information could rent out rooms for no more than 90 days a year on Airbnb. Although Airbnb has said that its presence in San Francisco is smaller now than it was before the agreement was inked in 2017 (Airbnb has only around 5,000 listings according to Inside Airbnb, as of July 2018, or just 0.1% of the company's total 5 million global listings), it is important that an agreement was reached that will create a positive presence for the company in the city.

We don't anticipate the debate over room-sharing will disappear and expect the government's focus with persist, as is currently visible in cities like Paris (where the government is threatening to remove the vast majority of Airbnb content for not legally registering) and New York (where a multi-year legal battle between Airbnb and the city continues).

Airbnb Hosts a Profitable Network Advantage for Investors to Book a Stay

Like narrow-moat companies Booking Holdings, Expedia, and TripAdvisor, we surmise that Airbnb has developed a two-sided marketplace network effect that it is able to properly monetize, thereby driving a narrow economic moat for the company. As defined in Morningstar's book "Why Moats Matter," network effects are observed when the value of a particular good or service increases for both new and existing users as more customers use that good or service. Airbnb's network advantage was established by attracting private accommodation owners to post their dwellings (supply side) on the company's platform, which in turn attracted more travelers (demand side) subsequently enticing more supply, creating a virtuous cycle that increases value for both new and existing users (hosts and guests).

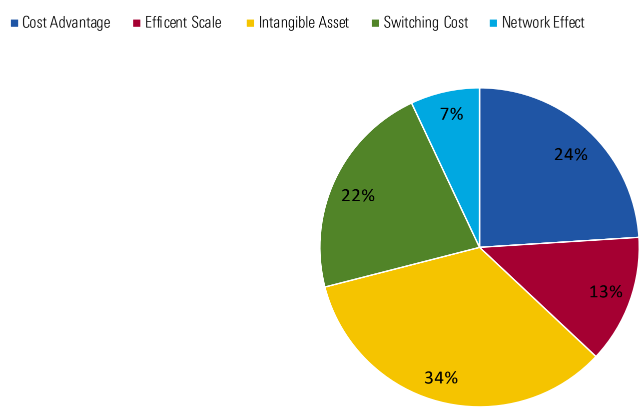
Exhibit 11 Airbnb's Platform Increases in Value as More Content and Traffic Is Added, Driving a Network Effect



Source: Morningstar, Microsoft Icons, Airbnb Logo

As outlined in our October 2017 Select report, "Economic Moat Source Series: Network Effect," network effects are the rarest of the five competitive moats (intangible assets, cost advantage, switching cost, efficient scale, and network effect) recognized by Morningstar. To illustrate, in that report we highlighted that network effects were just 7% of the five competitive moats Morningstar awarded to nearly 1,500 companies last fall, less than any other competitive barrier, as shown in Exhibit 12.

Exhibit 12 Network Effect Is the Rarest of Competitive Advantages Across Morningstar's Coverage Universe



Source: Morningstar

Further, in this report, we detailed that the reason the network effect advantage is rare is that companies operating in industries seeking such a moat often face a "chicken and egg" dilemma. In the case of Airbnb, travelers aren't incentivized to use the platform if there isn't much rental choice, and hosts aren't likely to post listings if the platform isn't being visited by potential guests. Getting past this hurdle often involves meaningful time and expense.

In the case of Airbnb, it had to launch its platform a few times to generate an increased amount of interest, while resorting to aggressive marketing tactics like door-to-door communication and innovative engineering (links to Craigslist and Google AdWords that generated free or lower-cost advertising) before reaching critical mass scale. Even when Airbnb launched its website for a third time on Aug. 11, 2008, it still only had 800 listings with an undisclosed amount of bookings. However, continued investment into the platform and word-of-mouth drove an inflection point where the network of hosts and guests entered into a virtuous cycle. By March 2009, the company had 2,500 listings with 10,000 users, and by the end of 2010 around 700,000 cumulative nights had been booked on Airbnb, reaching 1.6 million by May 2011. Today, Airbnb has over 5 million listings with around 250 million unique visitors, which compares well to travel marketplace peers, as shown in Exhibit 13, which generated a leading 30% online booking share last year in the alternative accommodations booking vertical, as illustrated in Exhibit 14.

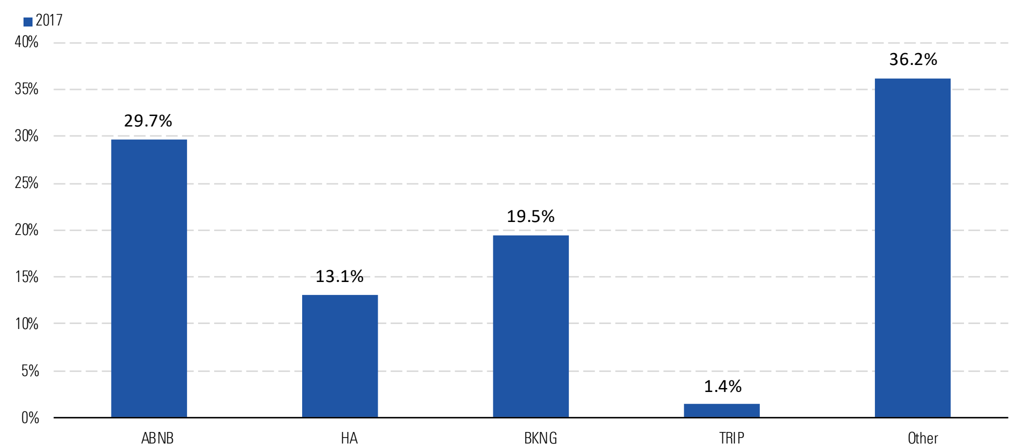
Exhibit 13 Airbnb's Platform Experiences a Large Amount of Traffic and Accommodations, Supporting a Network Effect Advantage

Q1:2018

	Accommodations	Traffic (M)
Airbnb	5,000,000*	250
Booking	28,200,000*	600
Expedia	2,100,000	450
TripAdvisor	2,000,000	450

Source: Morningstar, SimilarWeb, Company Filings
*Airbnb and Booking accommodations are a room figure versus Expedia and TripAdvisor mostly a property figure

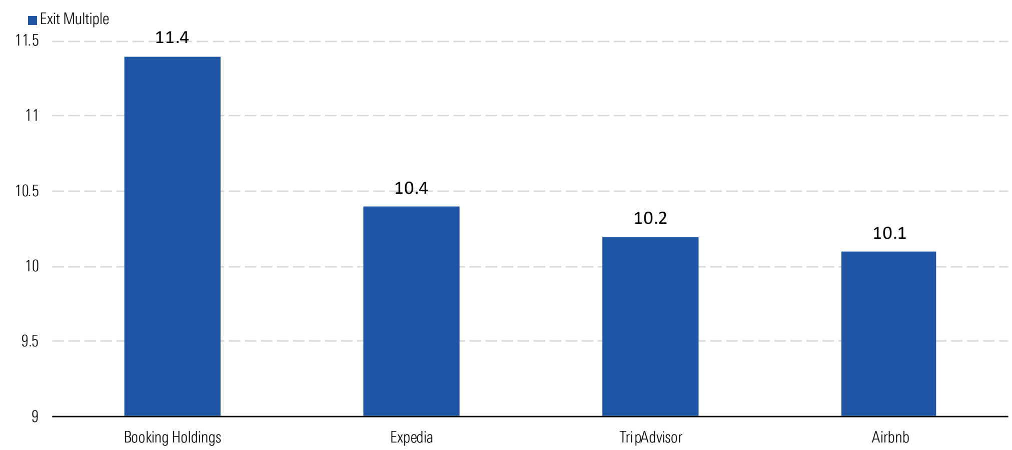
Exhibit 14 Airbnb's Network Advantage Generates a Leading Online Alternative Accommodations Booking Share



Source: Morningstar, Company Filings

Still, we believe that network advantages are currently stronger at the two largest online travel agencies, narrow-moat Booking and narrow-moat Expedia, and even at meta-semi-online-travel-agency narrow-moat TripAdvisor, which is reflected in our exit multiples for the peer group.

Exhibit 15 Our Exit Multiples Harmonize With Our View of Relative Company Network Advantage Position



Source: Morningstar

This is because these companies have a more complete offering of travel content (supply) and higher levels of traffic (demand). That said, the Airbnb name has strong awareness in the marketplace, witnessed by the high amounts of traffic going direct to its website (62% versus a range of 15%-42% for its peers) and number of countries where it is a top 10 travel app (its 82 countries trails only Booking's 113), which we believe will aid the company's continued expansion outside its core private accommodation vertical and into other segments, although with some limitations, which we discuss in detail in the following section of this report.

Exhibit 16 Although Airbnb's Network Is Not as Built Out as Key Peers, Its Leading Direct Traffic and Mobile App Presence Position Its Platform for Future Expansion

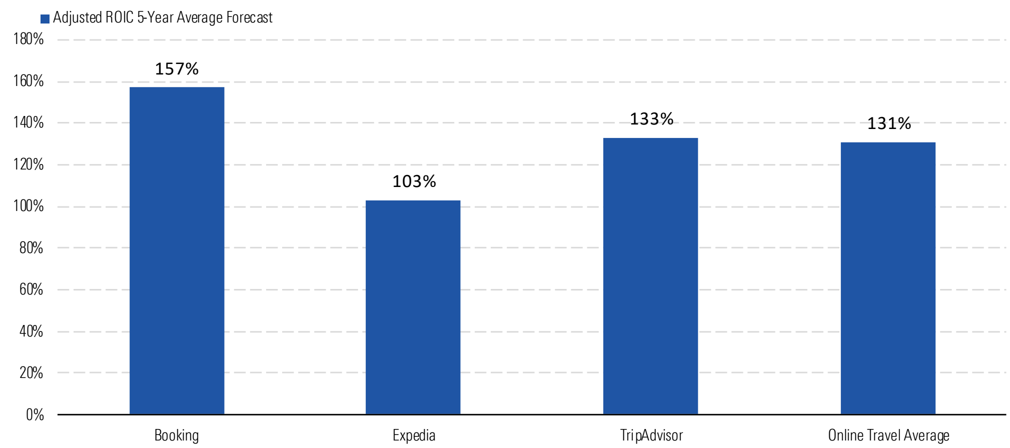
Q1:2018

	Accommodations	Experiences	Bookable Restaurants	Reviews	Traffic (M)	Direct Traffic % Total	# Countries Top 10 App
Airbnb	5,000,000*	Limited	Limited	Yes	250	62%	82
Booking	28,200,000*		42,000	150,000,000*	600	41%	113
Expedia	2,100,000	25,000	No	40,000,000	450	42%	20
TripAdvisor	2,000,000	940,000	45,000	630,000,000	450	15%	27

Source: Morningstar, SimilarWeb, App Annie, Company Filings
*Booking's reviews are over the last 14 months versus cumulative for peers
*Airbnb and Booking accommodations are a room figure versus Expedia and TripAdvisor mostly a property figure

Not only do we believe Airbnb holds a network effect (based on its platform increasing in value as more users and listings are added), but we also think this advantage should lead to excess economic returns for at least the next decade. As substantiated in our October 2017 report on network effects, in order for a network advantage to be a moat source the company must be able to properly monetize the platform. As seen in Exhibit 17, we forecast Booking Holdings, Expedia, and TripAdvisor to average adjusted ROIC of 131% over the next five years, showcasing the strong economic profits within online travel network effects, which we believe should also ensue for Airbnb.

Exhibit 17 We Expect the Online Travel Universe to Generate Strong Economic Profits



Source: Morningstar

Further, in our support of our contention, our moat source report also highlighted the superior financial performance of network effect moats relative to other competitive barriers as measured by ROIC, ROE, and margins, showing the immense power of this advantage.

Exhibit 18 Network Effect Moats Showcase Superior Financial Performance Relative to Other Advantages on Average

All figures are Medians	N	ROIC (TTM)	ROIC Trailing 3 Yr	ROE TTM	ROE Traling 10 Yr	Op. Margin Trailing 10 Yr	Net Margin Trailing 10 Yr
Network Effect	103	**11.4%**	**12.0%**	**17.6%**	**17.8%**	**19.9%**	**13.0%**
Intangible Assets	503	11.2%	11.7%	17.1%	16.7%	**14.5%**	**9.7%**
Switching Cost	316	10.5%	10.8%	15.2%	15.7%	15.6%	10.6%
Cost Advantage	352	10.0%	10.9%	14.8%	16.2%	15.1%	9.9%
Efficient Scale	194	**7.1%**	**7.1%**	**11.1%**	**11.5%**	18.0%	10.3%

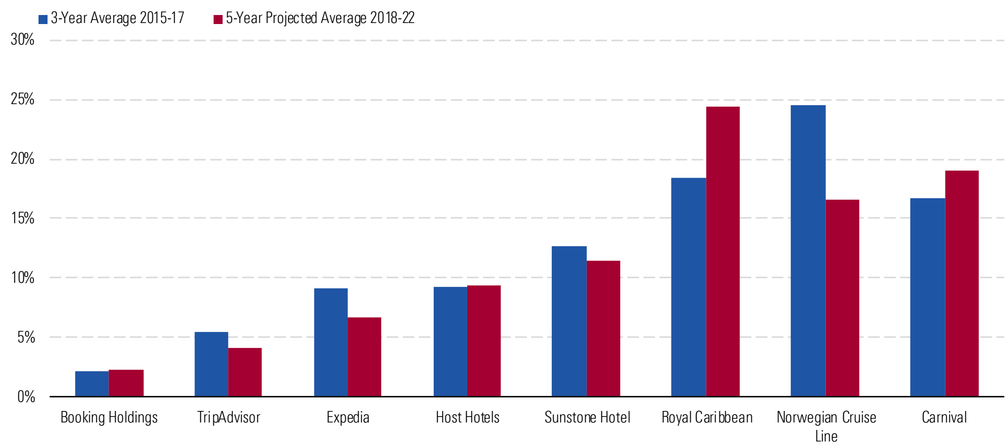
Top Performer **Bottom Performer**

Source: Morningstar Direct, Data as of Sept. 21, 2017
Note: This data is based solely on a company's current moat and moat source ratings. As these ratings have been subject to change over time, the data is not necessarily predictive.

Part of the reason ROIC is often robust is that marketplaces lack capital intensity and can be very scalable. Meanwhile, operators in industries like airlines, auto manufactures, telecommunications, hotel REITs, and cruise liners require more investment to persist. For instance, over the past three years, no-moat Host Hotels (a REIT that invests in acquiring and maintaining lodging properties) spent over 9% on capital expenditures as a percent of revenue, while Sunstone Hotels (another REIT) laid out nearly 13%

of its sales on its accommodations portfolio. Further, narrow-moat cruise companies Royal, Norwegian, and Carnival, which we believe have intangible brand and cost advantages and offer travel lodging on the sea, have combined to average capital expenditure as a percent of sales of 19.9%. This compares with just 5.5% for the three narrow-moat online travel companies Booking, Expedia, and TripAdvisor that hold network advantages in our view. The capital intensity outlook for these companies is similar, with the two hotel REITs and the three cruise liners combined expected to expend an average of 10.4% and 20% of sales on capital expenditure over the next five years, while the three online travel operators combined are expected to average only 4.3%.

Exhibit 19 Online Travel Marketplaces Are Less Capital Intensive Than Other Travel Industries



Source: Morningstar, CapIQ
*Note - Expedia's recent capex is inflated due to temporary spend on constructing a new headquarters and investing in the cloud

While financials are limited for privately held Airbnb, we do believe that its business lacks capital intensity (like Booking Holdings, Expedia, and TripAdvisor's marketplaces) and that profitability is scaling as the platform grows, similar to what occurred at Booking Holdings as its network ramped, as shown in Exhibit 20. Our Airbnb forecast is discussed in further detail in the valuation section of this report, but we see Booking Holdings as a reasonable comparable given both generate the majority of their bookings from international markets, utilizing an agency model (middlemen collecting a commission on transactions) with similar take-rates (averaging around 13%), and both are respective leaders in their accommodation markets (Airbnb in private accommodations and Booking in hotels) that continue to extend into other verticals.

Exhibit 20 We See Airbnb's Profitability Ramping Like Booking Holdings Did Historically, Due to Similar Business Exposures

Airbnb

	2016	2017	2018E	2019E	2020E	2021E	2022E
Revenue (M)	$ 1,700	$ 2,572	$ 3,819	$ 5,352	$ 6,937	$ 8,464	$ 10,152
EBITDA (M)	$156	$450	$1,069	$1,927	$2,706	$3,386	$4,061
EBITDA Margin	9.2%	17.5%	28.0%	36.0%	39.0%	40.0%	40.0%

Booking Holdings

	2008	2009	2010	2011	2012	2013	2014	2015
Revenue (M)	$ 1,885	$ 2,338	$ 3,085	$ 4,356	$ 5,261	$ 6,793	$ 8,442	$ 9,224
EBITDA (M)	$ 330	$ 510	$ 837	$ 1,453	$ 1,895	$ 2,530	$ 3,281	$ 3,531
EBITDA Margin	17.5%	21.8%	27.1%	33.4%	36.0%	37.2%	38.9%	38.3%

Source: Morningstar, Company filings

A Trip With Airbnb Offers Investors a Lasting Network Advantage

Over the next five years, we see Airbnb maintaining its network advantage, driven by both positive and negative influences. While we see Airbnb's competitive positioning being enhanced by its high awareness (strong direct bookings and mobile app usage worldwide) that can aid its horizontal expansion in its core alternative accommodation segment and vertical extension into the traditional hotel, experiences, corporate, and transportation markets, we expect competition across the travel landscape and heightened regulation in the room-sharing industry will detract from the company's network advantage.

Exhibit 21 Airbnb's Network Advantage Buoyed by Vertical Extension, Offset by Competitive and Regulatory Headwinds

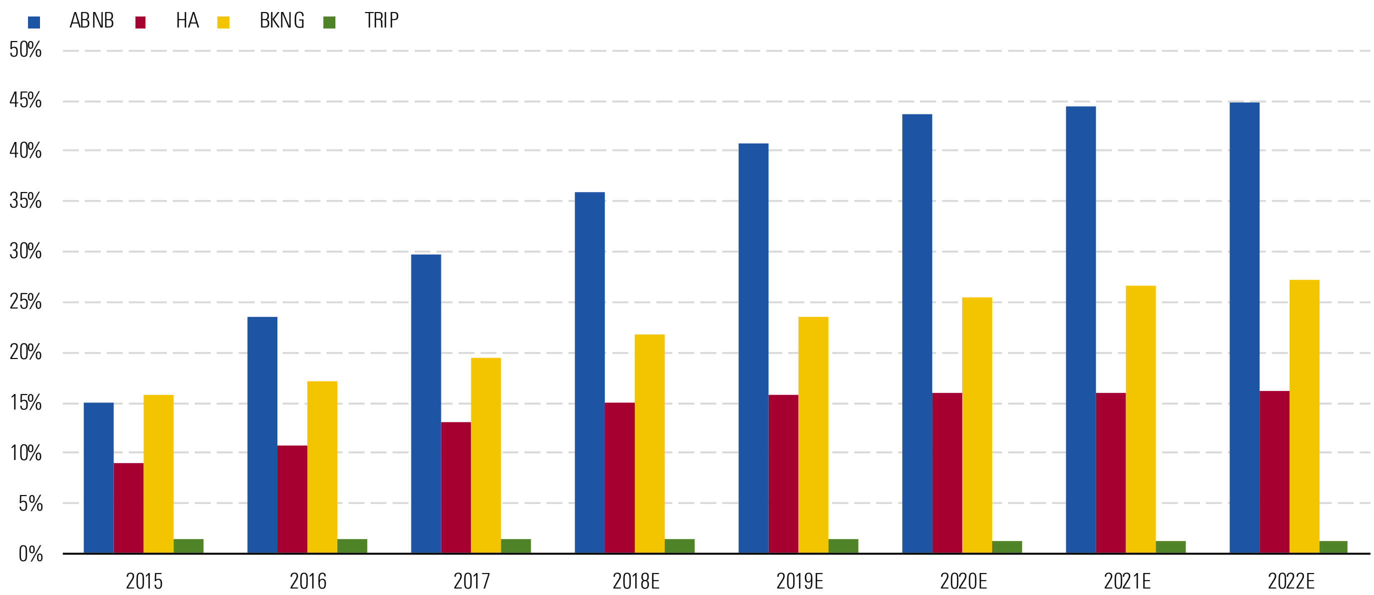
Market	2017 Global Market Size (B)	Online Vertical Growth Relative to Total Travel	Online Penetration	Take-Rate	Competition	Regulation	Airbnb Position Outlook
Alternative Accommodation	$150	Well Above Average	50%	13%	Increasing	Increasing	Healthy
Traditional Hotels	$500	Average	38%	13%	Stable	Stable	Limited
Experiences	$150	Well Above Average	18%	20%	Increasing	Stable	Average
Corporate	$1,100	Above Average	50%	13%	Increasing	Stable	Limited
Air Transportation	$600	Below Average	50%	3%	Stable	Stable	Average
Car Rental	$100	Below Average	45%	3%	Stable	Stable	Average

Source: Morningstar, Phocuswright

Alternative Accommodation Will Remain Airbnb's Primary Home

Airbnb's network edge will be supported by its first mover advantage and recent initiatives in the fast-growing $150 billion global alternative accommodations market (of which about 50% of transactions occur online), mitigated by increased regulation and competition, resulting in more gradual online booking market share gains the next few years. By 2022, we see Airbnb's booking share nearly reaching 45% from 30% and 15% in 2017 and 2015, respectively.

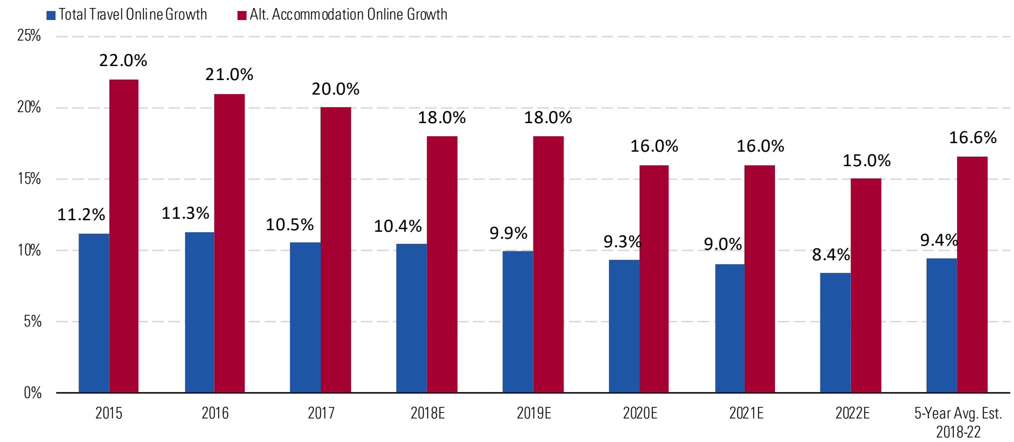
Exhibit 22 Airbnb's Alternative Accommodation Booking Share Gains Ease as Competition and Regulation Increase



Source: Morningstar, Company Filings

We haven't wavered on our long-held view that alternative accommodations will remain one of a handful of key growth drivers for the online travel industry (experiences, emerging markets, and mobile are other important markets), driven by growing online private accommodation content that is increasingly searchable. This stance is reflected in our forecast for 16.6% average annual alternative accommodation growth over the next five years, which is comfortably above the 9.4% respective lift we estimate for the global online travel bookings market.

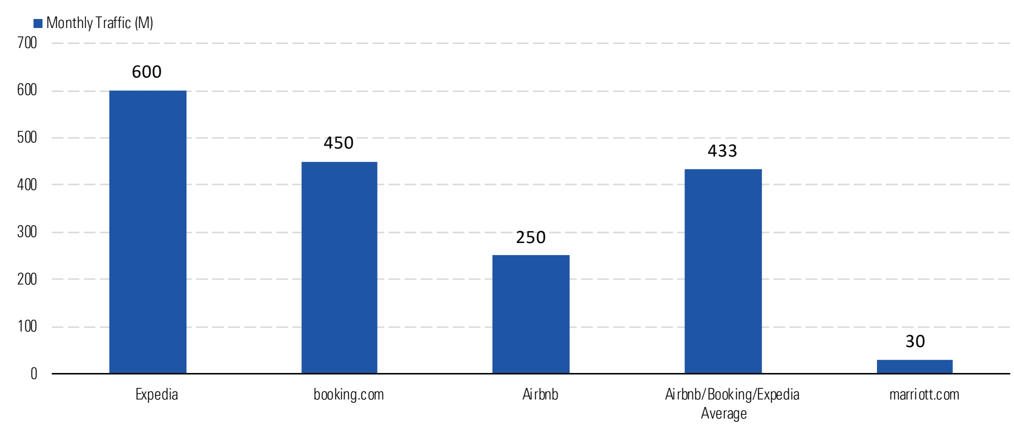
Exhibit 23 We Expect Online Alternative Accommodation Bookings Growth to Exceed That of Overall Online Travel



Source: Morningstar

The increasing supply of non-hotel online accommodations is evident in Booking Holdings having grown its alternative lodging listings (which includes homes, apartments, bed and breakfast, and other unique places) 27% year over year to 5.2 million listings in first-quarter 2018, while Airbnb's content rose to 4.5 million at the end of 2017 from just 2.3 million in May 2016. And in our view, this growing online supply is continuously more searchable, as the traffic and data scale of the Airbnb, Booking Holdings, and Expedia (the three dominate private accommodation providers that we estimate had around 60% of the market in 2017) platforms allow the companies to efficiently enhance the user experience with improved matching of the right place with the right person at the right time. The traffic scale is illustrated by the over 400 million monthly visits the Airbnb, Booking, and Expedia networks average combined, more than 14 times the Marriott.com domain (the largest hotelier in the world).

Exhibit 24 Airbnb's Critical Mass Traffic Scale Allows It to Enhance Its User Experience Relative to Marriott and Others



Source: SimilarWeb, Company Filings

Although we remain constructive on the growth potential of the alternative accommodations market, our mid-teens average annual online market lift forecast over the next five years represents a deceleration from the 20%-plus average annual lift we portend occurred the last three years, due to increased regulatory pressures, as illustrated previously in Exhibit 23.

As substantiated in the previous section, city regulation of peer-to-peer lodging has been increasing the last few years, reducing the number of Airbnb listings by limiting the number of licenses provided and removing multi-listings operated by commercial operators. Investors need to be aware that data exists pointing to a large amount of supply on Airbnb being multi-unit-listings (including renting separate rooms in the same unit) and entire home/apartments (versus private or shared), which could classify as illegal rentals in areas focused on controlling residential housing affordability by limiting or removing commercial operators on the alternative accommodation platform. To illustrate, Inside Airbnb analyzes listing data directly from Airbnb and has calculated the percent of potentially illegal homes on the room-sharing platform. As shown in Exhibit 25, on average around 60% and 40% of Airbnb listings in its top cities are classified as entire home/apartments and multi-listings, respectively, according to Inside Airbnb. This presents real risk to Airbnb's current network effect advantage, should cities continue to increasingly pass and enforce anti-room sharing laws.

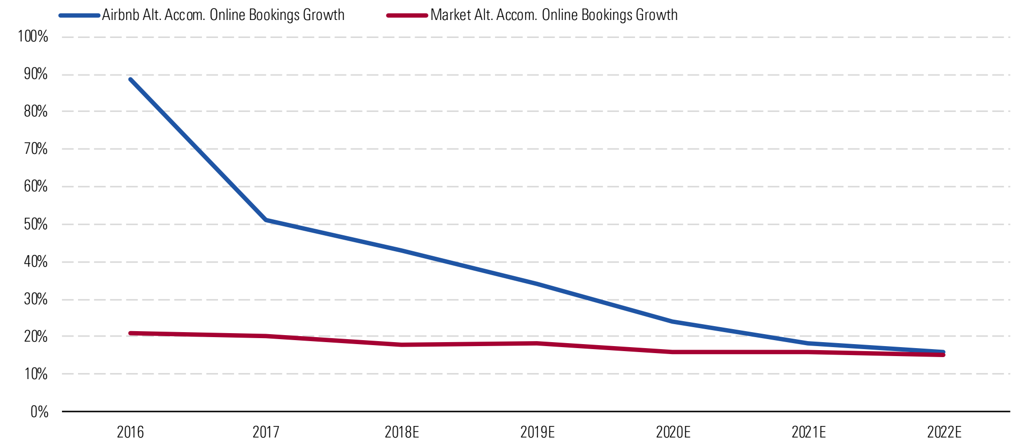
Exhibit 25 Some Data Supports a Potentially Large Amount of Airbnb Supply That Classifies as Illegal

	Estimated % of Airbnb listings	Entire Home/Apt.	Multi-Listing
Paris	1.2%	87%	20%
Sydney	0.7%	62%	33%
Rio	0.6%	70%	46%
L.A.	0.6%	58%	47%
Rome	0.5%	60%	61%
Berlin	0.5%	52%	22%
Barcelona	0.3%	40%	59%
Average	**0.6%**	**61%**	**41%**

Source: Morningstar, Inside Airbnb July 2018

We also forecast Airbnb's alternative accommodation booking growth to decelerate due to the aforementioned regulatory pressure, the law of large numbers, and competition from Booking Holdings, Expedia, and the hoteliers, although we expect recent Airbnb initiatives in this space (discussed later in this section) to support above industry growth rates.

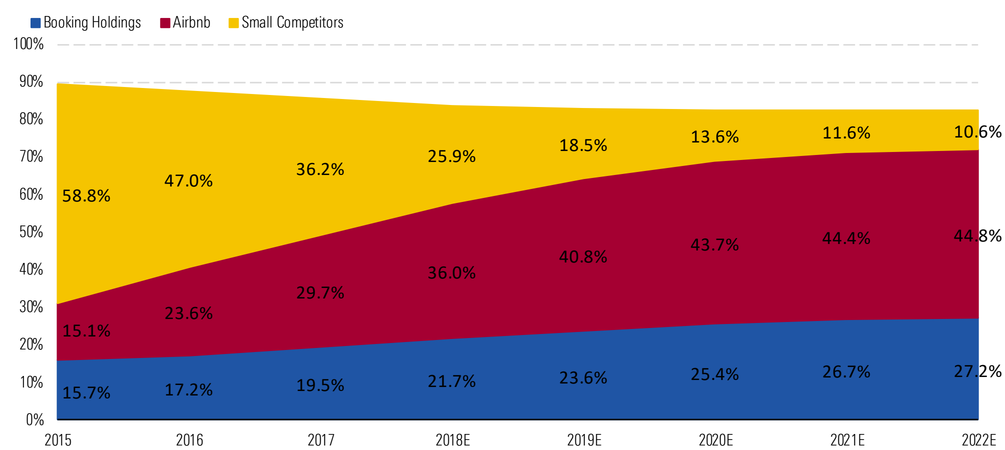
Exhibit 26 Airbnb Initiatives Drive Alternative Accommodation Booking Share Gains, Despite Regulatory and Competitive Pressures



Source: Morningstar, Company Filings

To illustrate this competition, we estimate that Booking Holdings is already second behind Airbnb in the private accommodation market, having grown its online share to roughly 20% last year from mid-teens in 2015 (as shown previously in Exhibit 22), driven by industry leading supply (over 5 million listings in alternative accommodations) and demand (around 450 million monthly visitors). And we expect Booking to continue to see share gains at the expense of smaller competitors, as the company continues to invest further into its non-hotel network with the goal to become the leader in the market.

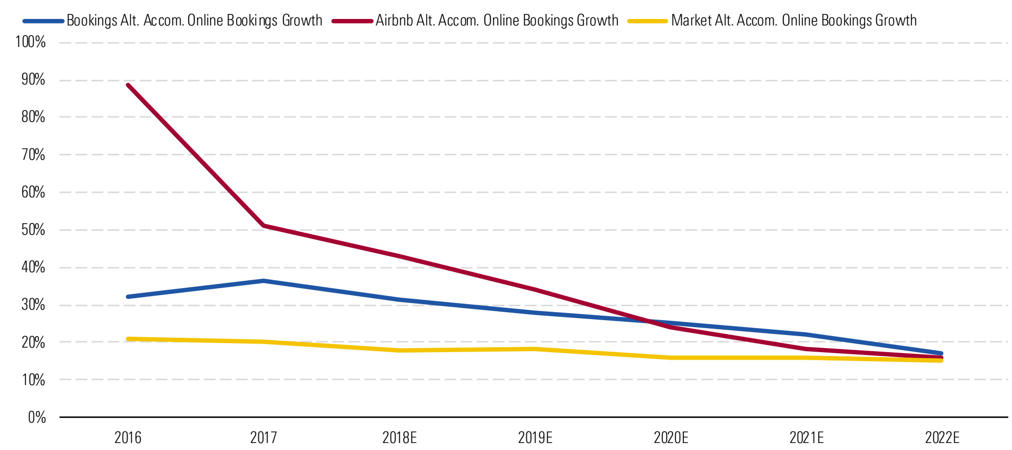
Exhibit 27 We Expect Booking Holdings to Gain Alternative Accommodation Booking Share



Source: Morningstar

This stance was supported by several comments made by Booking Holdings CEO Glen Fogel on a November 2017 conference call, during which he said that "aggressively expanding our vacation rental business is a key part of our growth strategy" and that Booking is "not the leader in this space right now…And that's why we're going to invest money because we believe that we have the technology, we believe we have the people, and we believe that we will be able to create the experience that makes people want to come to our site and be able to get the best accommodation that fits what they need." We have long held Booking Holdings management and market position in high regard, witnessed by our exemplary stewardship rating, and view that it is the best positioned travel company. And given the attractive growth opportunity, we applaud the company's decision to invest in this market and believe it will be successful in growing share within the alternative accommodation bookings industry. We estimate that Booking's alternative accommodation bookings growth rate can begin to eclipse Airbnb's in 2020, as the company's investments and powerful network advantage take hold.

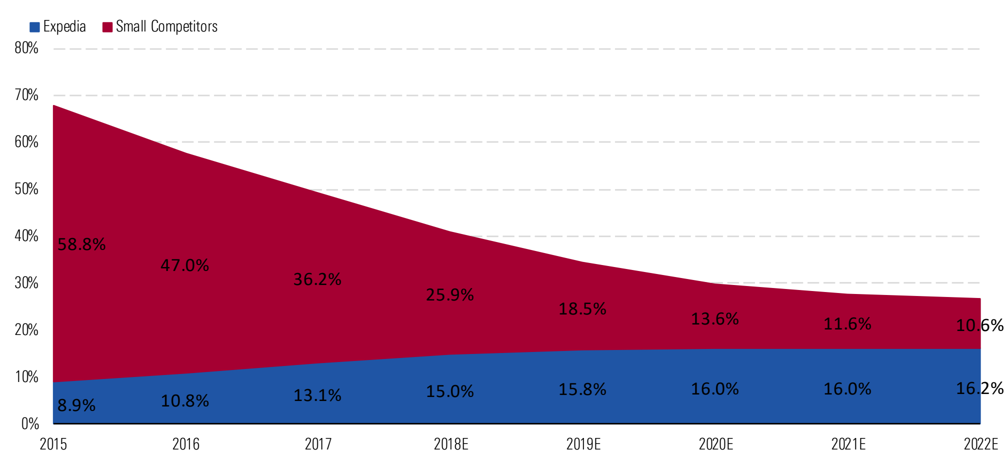
Exhibit 28 We See Booking Holdings' Alternative Accommodation Booking Growth Surpassing Airbnb's by 2020, Driven by Its Network Advantage and Investments



Source: Morningstar

Expedia also presents a formidable competitor in the alternative accommodations market after it became the number three player in the vertical with its HomeAway acquisition in late 2015. Since that merger, we believe HomeAway has also been taking share from smaller competitors, as the brand benefits from Expedia's incremental marketing and technology investments and leveraging of the network's 1.6 million alternative accommodation listings and roughly 600 million monthly visitors. We expect the HomeAway brand to boast gradual share gains in the private lodging market the next few years, benefiting from initiatives and incremental investment.

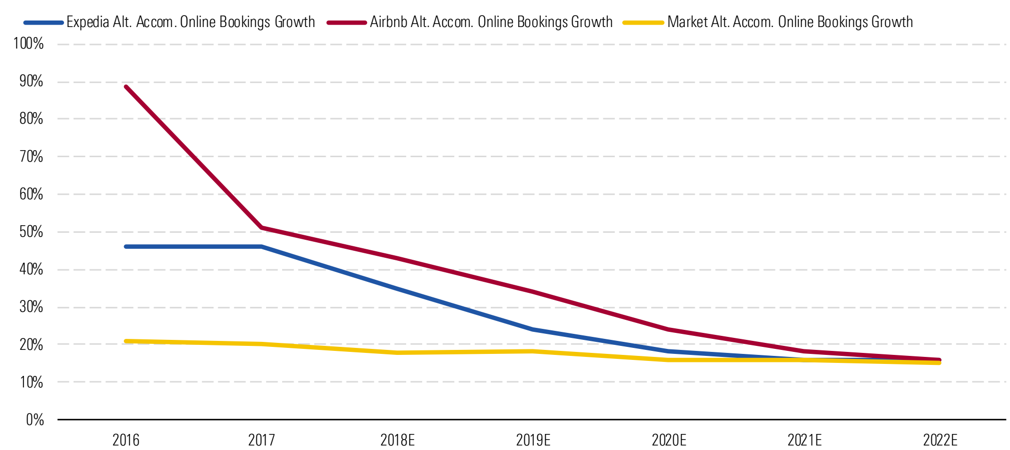
Exhibit 29 We Expect Gradual Share Gains for Expedia in the Alternative Accommodations Market, Aided by Its Network and Investments



Source: Morningstar, Company Filings

This stance is supported by HomeAway's expansion beyond the traditional full home in vacation locations and into urban content with the launch of its newCities initiative in 2015, creating more direct competition with Airbnb. Like Booking Holdings, our view of booking share gains for HomeAway is buoyed by several comments from last October by Expedia CEO Mark Okerstrom where he said that "given solid progress at HomeAway, we plan to lean even more heavily than anticipated earlier this year into paid marketing channels, a trend we expect to continue through 2018." Alan Pickerill, Expedia's CFO, also commented that the company sees "great potential at HomeAway" and with a focus on the long-term opportunity that it is "inclined to continue to invest in that business." Still, we believe that Expedia's roughly 60% of total bookings exposure to slower growing U.S. markets (versus around 25% for both Airbnb and Booking Holdings), as well as a network advantage that isn't as strong as Booking Holdings, will result in HomeAway's bookings growth in alternative accommodations that remain just below Airbnb's (as shown in Exhibit 30) versus Booking Holding's growth outpacing Airbnb's (as previously shown in Exhibit 28).

Exhibit 30 Expedia's Relatively High U.S. Exposure Keeps Its Alternative Accommodations Booking Growth Below Airbnb's, Despite Investments and a Network Advantage



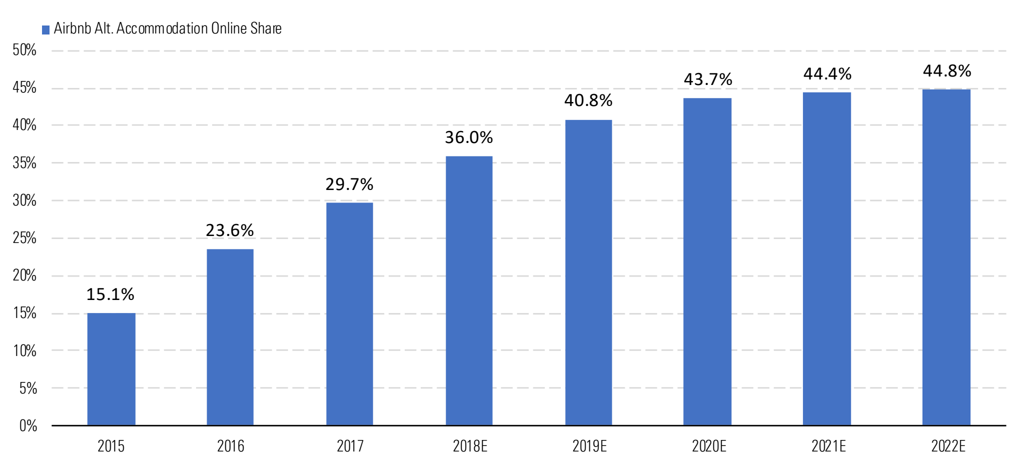
Source: Morningstar, Company Filings

Hoteliers are also increasingly investing in the alternative accommodations market, although we see this as a lower competitive threat to Airbnb than Booking Holdings or Expedia because traditional lodging operators don't have the network advantages that the large online travel agencies do. Although narrow-moat Wyndham Hotel and Resorts has integrated with timeshare and vacation rental assets for many years, narrow-moat Hyatt was among the first hoteliers to explore alternative accommodations in late 2014 with its $15 million minority investment (at a valuation of $264 million, according to Pitchbook) in luxury home rental platform onefinestay. This venture served the purpose of educating Hyatt on how guests view different guest experiences and perhaps motivated the company's decision to launch its Unbound Collection in March 2016, which offers guests unique travel experiences (like contemporary urban boutique hotels) with the loyalty benefits of the traditional hotel. This was later followed by an investment in luxury home sharing company Oasis in 2017 and partnership with the operator in 2018 that allowed Hyatt loyalty members to use points toward any of its 2,000 houses. While we strategically applaud Hyatt's ventures into alternative accommodations, we see the company disadvantaged versus the online travel agencies that have stronger networks. This is evident in hyatt.com receiving only around 7 million monthly unique visitors (demand part of the network effect) versus several hundred million for the leading online travel agencies, and by the roughly 200,000 hotel rooms flying Hyatt flags, compared with the multi-million listings found on Expedia, Airbnb, or Booking Holdings.

Although narrow-moat Accor has moved more aggressively into alternative accommodations, like Hyatt we see the company and its 650,000 hotel rooms and 13 million monthly visits as disadvantaged to the powerful networks of the leading online travel agencies. Over the past few years, Accor has acquired onefinestay and Squarebreak (a luxury home rental operator) to form its New Business division, which represented around 5% of the company's total revenue in 2017. The 6.6% and 14.5% like-for-like sales growth of Accor's New Business segment in 2017 and the first quarter of 2018, respectively, was below the roughly 20% lift we believe the alternative accommodation market grew, which in our view, points to the inherent disadvantage any hotelier faces when competing directly with leading online travel networks. Still, we agree with Accor's strategy to gain a presence in private accommodations, as having some exposure to a growing industry that can compete against a traditional hotel business is better than sitting idle.

Airbnb is also making important investments of its own into the alternative accommodations market that we believe will mitigate the increased competition from Booking Holdings and Expedia we expect over the next several years. Specifically, Airbnb has launched luxury, quality, and loyalty initiatives that support its network advantage and our view of Airbnb growing its alternative accommodations share over the next few years.

Exhibit 31 We See Airbnb Growing Its Online Alternative Accommodations Booking Share, Aided by Ongoing Initiatives



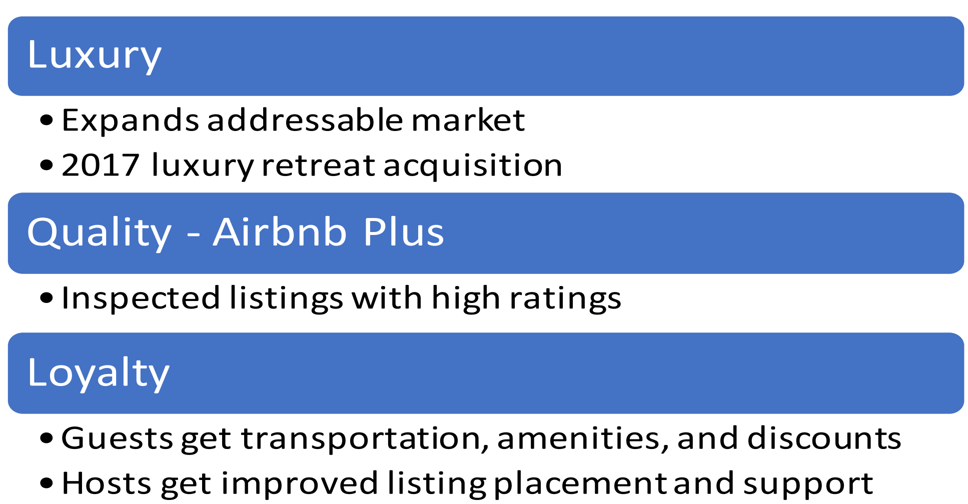
Source: Morningstar, Company Filings

Airbnb's extension into luxury properties first took hold in 2017 when the company acquired Luxury Retreats and its 2,800 unique homes that rented out for an average of $2,000 per night and offered concierge services. While we are constructive on Airbnb's expansion into higher scale units, we don't think it will prove to be a major contributor to the company's financials because scaling this segment can prove challenging given the limited amount of unique high-end homes that hosts are willing to rent.

We see Airbnb's Plus initiative (launched in February 2018), which focuses on the overall quality of listings, as a more meaningful driver to the company's network advantage and growth opportunity in alternative accommodations than its luxury initiative. The Plus initiative should lift the quality of Airbnb's network because listings need to pass a 100-point inspection, already have guest ratings of 4.8 or higher (out of 5), and receive professional photography. Further, these listings receive higher placement on Airbnb searches, which should help drive conversion and ultimately the user experience for the company.

We also think that a differentiated loyalty program (currently testing) can expand Airbnb's network advantage and support growth over the long term. Airbnb is planning to launch Superguest this summer, which could offer discounts and last-minute bookings on lodging and experiences, provide airport pick-up and lounge services, and offer benefits like access to a local gym. In our view, such services for loyalty points would differentiate Airbnb from programs offered by hoteliers and others that predominately focus on discounted lodging or free Wi-Fi, helping the company stand out in an increasingly competitive industry. Airbnb also plans to offer loyalty to its Superhosts, giving these members better placement on the website, priority support, custom URLs, early access to products, and photography, as long as the listing has at least a 4.8 rating (out of 5) with 10 or more bookings a year and zero cancellation. The Superhost program should foster quality stays for guest, thereby aiding the overall network advantage of Airbnb's platform.

Exhibit 32 Recent Airbnb Initiatives Mitigate Increased Alternative Accommodation Competition and Regulation



Source: Morningstar, Company Filings

So, despite heightened regulation and competition driving decelerating alternative lodging bookings growth for Airbnb, we still see the company's first mover advantage and initiatives allowing it to take share from smaller competitors and withstand encroachment from other online accommodation operators and hoteliers, although at a slower rate than in years past.

Airbnb's Communal Culture Limits Its Hotel Opportunity, but Still Incremental to Growth
Not only is Airbnb expanding horizontally in its core alternative accommodations market, but also vertically into segments like hotel accommodations (around a $500 billion global booking market with nearly 40% occurring online). But in our view, Airbnb's expansion into traditional lodgings will be limited given the company's mission statement and culture that centers around community and belonging. As a result, we don't believe the entire $500 billion traditional hotel booking market will be addressable to Airbnb like it is for peers Booking Holdings, Expedia, and TripAdvisor because both the company and its users seek out unique travel experiences. This frames our view that hotel bookings on Airbnb can approach 10% of the company's total by 2022, accounting for only $6.5 billion in bookings, a small figure compared with Booking Holdings that leads the industry with an estimated $110 billion of traditional lodging bookings in that year.

Exhibit 33 Airbnb's Growing Presence in Hotels Will Be Limited to Boutique Lodgings, Resulting in Low Share Relative to Leader Booking Holdings

	2018E	2019E	2020E	2021E	2022E
Airbnb Hotel Bookings (M)	$ 800	$ 2,000	$ 3,500	$ 5,000	$ 6,500
Airbnb Hotel % Total Bookings	2.7%	4.8%	6.4%	7.5%	8.2%
BKNG Hotel Bookings (M)	$ 77,784	$ 86,017	$ 94,548	$ 103,128	$ 109,554
BKNG Hotel % Total Bookings	82.0%	79.7%	77.6%	75.6%	73.7%

Source: Morningstar

Still, Airbnb can grow within this vertical by listing boutique hotels that offer differentiated stays with a connection to the culture. Defining the boutique hotel opportunity is challenging because these lodgings make up an unknown portion of the world's branded-chains and independent hotels, which each make up about half of the total market. But in a global hotel market with 16.3 million rooms (according to Wyndham Destinations), even being able to address one tenth of that over time can add incremental growth off a current Airbnb base of roughly 5 million private accommodation listings. To address this opportunity, Airbnb partnered with Siteminder in February of this year to allow any of the 28,000 hotels using that platform to list on the room-sharing network. Also, Airbnb now allows hosts to define and guests to search by a category labeled "boutique" on its platform. It appears that Airbnb has had initial success getting supply on its network with around 24,000 boutique hotels signed by the end of February, according to the company's Hotel Program Manager Cameron Houser.

Airbnb's Communal Culture Fits Well With the Tours and Attractions Market

We think the $150 billion experiences (i.e. tours and attractions) booking market is set to outpace our total online travel market growth forecast of 9.4% over the next five years (based on commentary from TripAdvisor). And we believe Airbnb's communal marketplace and company mission statement of "belonging everywhere" adheres extremely well to this market, allowing the platform to extend its network advantage, leading to the vertical representing 5% of the company's total bookings by 2022.

Exhibit 34 We Expect Airbnb Experience Bookings to Ramp Quickly, Due to the Vertical Fitting With the Company's Communal Culture

	2017E	2018E	2019E	2020E	2021E	2022E
Airbnb Experience Bookings (M)	$ 10	$ 200	$ 600	$ 1,500	$ 2,500	$ 4,000
Airbnb Experience % Total Bookings	0.1%	0.7%	1.4%	2.8%	3.8%	5.0%

Source: Morningstar, The Wall Street Journal

Although narrow-moat TripAdvisor is the clear leader in the experience market, we see plenty of room for Airbnb to compete in a fragmented landscape where online penetration was still only in the high-teens last year, well below total online travel penetration of above 40%. With the aid of its Viator acquisition in 2014, TripAdvisor has aggregated 940,000 attractions (104,000 online bookable) and millions of restaurants (45,000 online bookable)—well ahead of the next closest competitor Expedia's 25,000 things to do—resulting in an estimated $2 billion in experience bookings in 2017 for the company. Meanwhile, Airbnb launched its Trips initiative November 2016, allowing individuals to offer multi-day unique excursions, and more recently has opened up the business to shorter-term excursions that should expand the market opportunity. In February of this year, *The Wall Street Journal* reported that Airbnb experience bookings were around $10 million in 2017 and that the company said it was on track for $200 million in bookings in 2018. Achieving $200 million in bookings this year appears realistic when one considers Airbnb was annualizing 1.5 million experience transactions and growing around 10 times faster than its core accommodation business, according to comments made by CEO Brian Chesky at the Recode conference May 30, 2018. We see the economics of the experience market as attractive with 20% take-rates given the fragmented nature of the industry and nascent online penetration, which should help the segment represent around a high-single-digit percent of Airbnb's total revenue in 2022 versus the mid-single-digit percent of total bookings we estimate for the company in that year.

Airbnb's Corporate Presence Is Growing, Although Safety Concerns Presents Limitations

We think Airbnb can gain traction in the corporate booking market that we estimate is around $1.1 trillion, as the company's partnerships and initiatives reduce the back-office and safety concerns of many global firms, aiding the company's network advantage and growth opportunity.

Airbnb appears to be having some traction in the corporate market having announced several major partnerships the past few years. For instance, travel expense management operator Concur recognized Airbnb as a corporate travel provider in 2014, allowing the company’s back-office systems using the provider to accept bookings from the room-sharing platform. In the following year, Airbnb launched its Business Travel Ready initiative, offering homes that have gone through a review process of meeting standard requirements, which should reduce the safety concerns companies associate with Airbnb. Then in 2016, the large travel management companies, Amex GBT, BCD Travel, and Carlson Wagonlit partnered with Airbnb, allowing companies that use this channel to book through the alternative accommodation platform. These relationships have resulted in around 10% of all trips on Airbnb being for work in 2017, with business trips having tripled on the platform in 2016, according to the company. Further, Airbnb reported in April 2017 that employees from over 250,000 companies worldwide were using the platform. Given limited disclosures we do not provide a forecast specifically for Airbnb corporate bookings but note that business trips are reflected in our overall accommodation estimates for the company.

Transportation Is a Large Market, but Efficiencies and Commoditization Limit the Opportunity

The global air and ground transportation markets are large at around $600 billion and $100 billion, respectively, but the consolidation and efficiency of the industry offers only low-single-digit take-rates (compared with teens and 20% for lodging and experiences, respectively). Additionally, we wouldn't expect transportation attached rates on Airbnb lodging bookings to be more than a single-digit level, given the company can't offer any differentiated experience in this fairly commoditized industry. Also, travelers love to shop around for the best deal, especially in a commoditized environment like transportation. In fact, it is not unusual for a traveler to shop websites dozens or even hundreds of times before making a booking. And narrow-moat Sabre commented at its investor day this past March that the industry's shop-to-book ratio lifted 70% in 2017 and that it is likely to continue to expand in the years to come. As a result, we expect just 1%-2% of Airbnb's total revenue to come from the segment in 2022, following an anticipated launch into these markets in 2019.

Exhibit 35 The Transportation Markets Low Economics and Lack of Differentiation Limit Airbnb's Opportunity in the Vertical

	2019E	2020E	2021E	2022E
Airbnb Transportation Revenue (M)	$ 48	$ 76	$ 109	$ 149
Airbnb Transportation % Total Revenue	0.9%	1.1%	1.3%	1.5%

Source: Morningstar

Airbnb's Solid Stewardship Supports a Sustainable Network Advantage

While Airbnb's founders have excelled at design, engineering, and surrounding themselves with strong mentoring, their lack of business expertise has at times caused potentially avoidable bumps in the road. That said, we are confident that the existing team can extend the company's reach into its core alternative accommodations market and other verticals such as boutique hotels, experiences, transportation, and corporate, supporting its network advantage.

Airbnb's three founders all bring valuable skill sets that have worked well together, supported by the fact that all three remain with the company today and that it reached a $31 billion valuation based on a July 2017 funding. CEO Brian Chesky is a passionate, natural leader who has excelled at identifying key mentors who have helped guide strategy during Airbnb's extraordinary rise to one of the largest travel companies in the world. As discussed in Leigh Gallagher's book, *The Airbnb Story*, when Chesky seeks opinions, he spends most of his time researching the best person to give advice versus seeking opinions from a large amount of people. Some of the mentors he has sought out to help fortify Airbnb's culture and network expansion opportunity include wide-moat Disney CEO Bob Iger, wide-moat Salesforce CEO Mark Benioff, and former director of the CIA George Tenet. In addition to leadership skills, Chesky also has strong designer skills, having graduated from Rhode Island School of Design. This designer background proved valuable in building a quality user experience during the early years of the company.

Joe Gebbia is another of Airbnb's founders with a design background from the Rhode Island School of Design. Like Chesky, Gebbia's designer skills were key in developing the company's website during the early years. Additionally, Gebbia has strong creative ability that aids the company in building out its network in a differentiated fashion and is the reason he holds the title of chief product officer at Airbnb.

The final Airbnb founder, Nate Blecharczyk, was also vital to the company's success. While Brian Chesky and Joe Gebbia thought of the creative design, Nate Blecharczyk glued it all together and developed Airbnb's platform infrastructure. Blecharczyk was an accomplished engineer by his high school years when he made more than $1 million selling software. In addition to building Airbnb's backbone infrastructure, Blecharczyk was able to code links to Craigslist and Google AdWords that offered the founders' nascent company free or low-cost advertising at a time when funding was nonexistent. Today, Blecharczyk is the company's chief strategy officer and chairman of its China operations.

While Airbnb's founders offer strong design, solid engineering, and passionate work ethic, they have had to learn business skills along the way, leading to some reactionary versus proactive decisions that caused some unnecessary rough patches. For instance, Y Combinator business training in early 2009 helped guide the young entrepreneurs to reach out to the platform's users (arguably something they could have been doing more of initially), allowing the three founders to utilize their skill sets and build an improved user experience. Also, one could argue that the founders lacked a full understanding of the market environment, as it wasn't until an Airbnb host notified the company of New York anti-room-sharing legislation in 2010. Having an upfront understanding of affordability issues that often framed anti-room-sharing laws across cities throughout the world could have allowed the company to partner with local governments and develop legislation more favorable to the accommodations platform operator. One could also argue that Airbnb has been too reactionary when it comes to policy around safety. For example, the company did not offer guarantees and insurance around property and personal harm until a few unfortunate instances had gone viral, which is surprising given the main hurdle most investors had when Airbnb was seeking funding pertained to safety concerns. Additionally, while Airbnb does not discriminate, some people using the service do, and the company didn't frame policy around this issue until published studies of which the company was aware for years went viral. Still, we commend the vast success the founders and company have experienced, and we acknowledge that staying in front of all issues when a company ramps up to a $31 billion valuation in less than 10 years is challenging to say the least.

Finally, Airbnb is currently involved in a CFO search, after Laurence Tosi (formerly at Blackstone and Merrill Lynch) left the role this past February to work full time at his investment fund, Weston Capital Partners. During his two-and-a-half years at Airbnb, Tosi saw the company turn profitable and is noted to have run an internal hedge fund at Airbnb that was reportedly making $5 million per month and represented around 30% of its cash flow in 2017. We believe that Tosi's industry background was set to provide valuable insight into the IPO process and think it will be important for Airbnb to find a replacement with experience in the private and/or public equity markets. We will monitor the search and hiring of this important role.

Airbnb's Network Advantage and Long-Term Growth Opportunity Warrant a Premium Valuation

We currently see Airbnb's market capitalization ranging between $53 billion and $65 billion based on a DCF-derived exit multiple and peer-based approach, above the $46 billion valuation of narrow-moat Marriott (the world's largest operator of hotels with 1.27 million rooms, as of the first quarter 2018), although still below narrow-moat Booking Holdings (the largest online accommodations booking platform) $100 billion market capitalization. Our Airbnb valuation implies a 28-32 times EV/EBITDA 2019 multiple range, a premium to the roughly 18 times multiple awarded to the company's peer set that includes travel network, vacation rental, and marketplace companies. In our view, this is warranted because of the company's network advantage and expansion into industry verticals, leading to robust growth despite competitive and regulatory pressures.

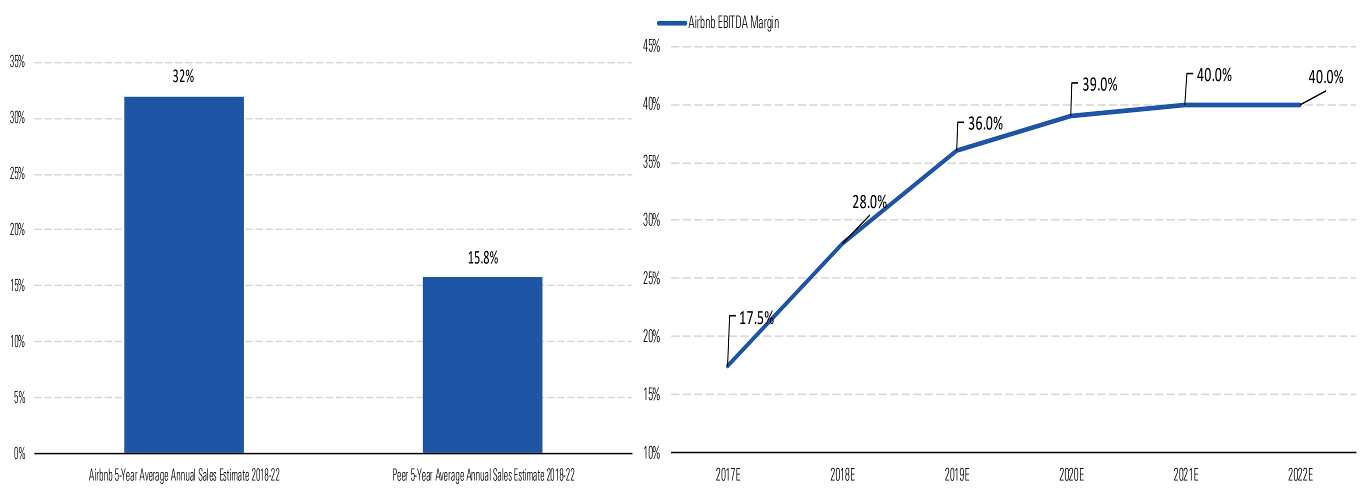
Exhibit 36 Airbnb's Superior Growth the Next Five Years Warrants a Premium Valuation to Peers

Transaction Comparable	NTM/CY19E EV/EBITDA Multiple	Five-Yr EBITDA CAGR Forecast
HomeAway (acquired by Expedia)	22.3x	28.4%
Trading Comparable		
Vacation Rental/Travel Booking		
Booking Holdings	17.1x	14.1%
Expedia	9.1x	12.0%
Tripadvisor	19.3x	17.1%
Marketplaces		
eBay	11.7x	8.7%
Etsy	19.4x	N/A
Grubhub	27.3x	26.4%
Peer Average	18.0x	17.8%
Airbnb	28-32x	60.7%

Source: Morningstar, CapIQ

Our premium Airbnb valuation assesses multiple factors, including industry forecasts, market share analysis, new product offerings that generate revenue, and EBITDA projections. Based on our travel industry forecasts for the alternative accommodations (consisting of 82% of Airbnb's projected 2022 total sales), hotel (8%), experiences (8%), and transportation (2%) verticals, and Airbnb's competitive positioning within these markets, we expect the company to grow sales 32% annually on average over the next five years. This is above the mid-teens average expected for marketplace peers, with its EBITDA margins expanding to 40% in 2022 from 17.5% in 2017, supporting the premium valuation we assess to Airbnb.

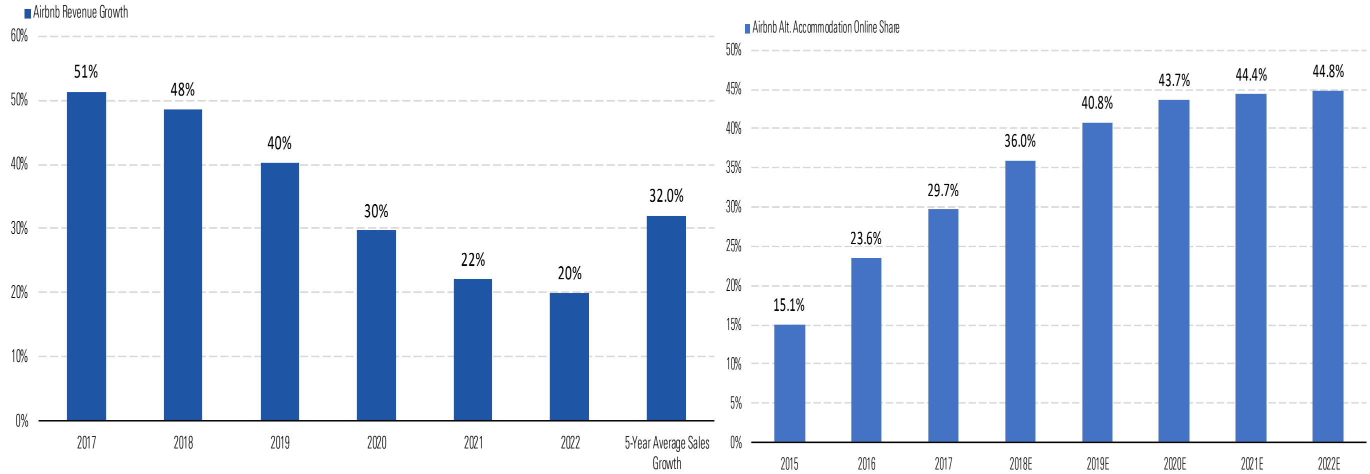
Exhibit 37 We Believe Airbnb's Sales Growth and Margin Ramp Over the Next Five Years Warrant a Premium Valuation to Peers



Source: Morningstar, CapIQ

In Airbnb's core alternative accommodation market we see the company's competitive positioning remaining healthy, although we expect increased regulatory and competitive pressures (from narrow-moat companies Booking Holdings and Expedia) to lead to a gradual sales decline (averaging 32% annually the next five years versus the 51% growth seen in 2017) with online booking share plateauing in the mid-40s in this vertical by 2020 versus the 30% witnessed in 2017.

Exhibit 38 Increased Regulatory and Competitive Pressures Present Headwinds to Airbnb's Healthy Position in Alternative Accommodations



Source: Morningstar, Company Filings

Although we expect a gradual decline in Airbnb's accommodations revenue growth, we expect strong lifts from the company's other business lines, with transportation, boutique hotels, and experiences estimated to see 58%, 75%, and 150% sales growth in 2020, respectively. This brings Airbnb's total bookings to $54.5 billion in 2020 from $19.8 billion in 2017. Given a slight decrease in average take-rate to 12.7% from 13% (due to an increasing mix in lower take-rate transportation bookings, as discussed earlier in this report), we estimate revenue of $6.9 billion in 2020. In terms of profitability, as measured by EBITDA, Airbnb has been in the black since the second half of 2016, according to various media reports that source individuals with knowledge of the company's financials. Again, we expect Airbnb to continue to increase its profit margins to 39% in 2020 from 17% in 2017, as scale and a high direct booking mix offsets investments in new verticals, heightened competition, and regulatory pressures.

Exhibit 39 We Expect Strong Sales and Profitability Growth for Airbnb the Next Few Years

(Thousands)	**2015A**	**2016A**	**2017A**	**2018E**	**2019E**	**2020E**
Gross Profit						
Total Revenue	900,000	1,700,000	2,572,000	3,819,101	5,352,493	6,937,259
%growth	113%	89%	51%	48%	40%	30%
Profitability Metrics						
EBITDA	(150,000)	100,000	450,000	1,069,348	1,926,898	2,705,531
EBITDA margin	-17%	6%	17%	28%	36%	39%

Source: Morningstar, CapIQ

Exit Multiple DCF Valuation Approach Generates a Premium Valuation for Airbnb

Our exit multiple discounted cash flow valuation method produces a $65 billion appraisal ($221 per share). Our exit multiple valuation was determined by modeling Airbnb's free cash flow to the firm and

EBITDA until growth reached a steady state, which we estimate to occur 10 years from now in 2027. In year 2027, we forecast Airbnb's free cash flow to the firm and EBITDA to reach $4.57 billion and $6.47 billion, respectively. Meanwhile, we assumed a 10% discount rate for Airbnb, above the 8.7% averaged by the three public online travel network companies (Booking Holdings, Expedia, and TripAdvisor). The higher discount rate is due to regulatory risk around the company's core alternative accommodation market (82% of 2022 total revenue) and potential challenges with extending its network into other verticals (such as hotels and corporations), given its community-based approach as discussed earlier in this report. Additionally, we assumed a 3% terminal growth rate, in line with all companies modeled under Morningstar's discounted cash flow model. This results in an EBITDA exit multiple of 10.1 times in 2027 and harmonizes with the 11.4, 10.4, and 10.2 exit multiples for Booking Holdings (the strongest network effect in our view), Expedia (the second strongest network effect in our opinion), and TripAdvisor (a network effect that is slightly stronger than Airbnb's), respectively. When Airbnb's exit multiple is applied to the company's $6.47 billion in EBITDA in that year it leads to a market capitalization of $65.3 billion with an enterprise of $62.3 billion (assuming $3 billion in net cash), equating to roughly 32 times 2019 enterprise value to EBITDA, or $221 per share.

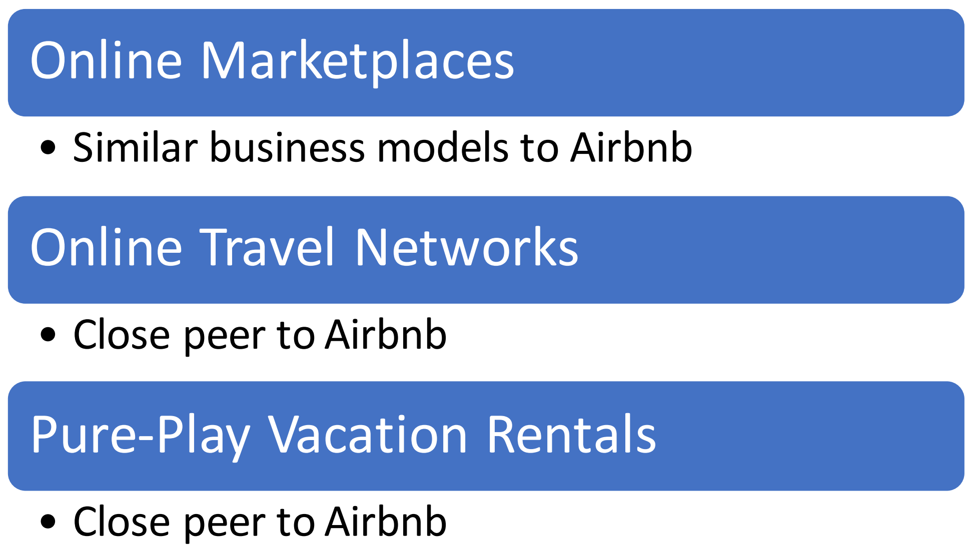
Exhibit 40 Our 10 Times Airbnb Exit Multiple Equates to a $62 Billion Enterprise Valuation

EBITDA Exit Multiple = (FCFF/EBITDA)/(r-g) 2027		
FCFF 2027 (M)		4,572
EBITDA 2027 (M)		6,470
Discount Rate		10.0%
Growth		3%
Implied EV/EBITDA Exit Multiple		10.1
Equity Valuation (M)		65,309
Current Net Cash (M)		3,000
Enterprise Valuation (M)		62,309
2019 EBITDA (M)		1,927
Implied 2019 EV/EBITDA multiple		32
Shares Outstanding (M)		295.29
Price Per Share	$	221

Source: Morningstar

Peer-Market-Multiple Valuation Approach Also Supports a Premium Valuation for Airbnb
Another valuation approach we use to determine the fair market valuation for Airbnb is the peer-market-multiples approach, which generates a 2019 EV/EBITDA multiple of around 28 times for the company, or a market capitalization of roughly $53 billion ($180 per share). We compiled both the forward-looking revenue multiples and forward-looking EBITDA multiples for Airbnb's universe of publicly traded peer companies. As seen in Exhibit 41, our peer companies were selected from three industry segments similar to Airbnb—online marketplaces (narrow-moat eBay, non-rated Etsy, and no-moat Grubhub), narrow-moat online travel networks (Booking Holdings, Expedia, and TripAdvisor), and pure-play vacation rentals (HomeAway).

Exhibit 41 We See Online Marketplaces, Travel Networks, and Vacation Rental Industries as Airbnb Peers



Source: Morningstar

We view HomeAway and the online travel platforms as the closest peer comparables to Airbnb, given the overlap in many travel verticals. We included the marketplaces segment to incorporate companies that have similar business models to Airbnb, although these companies are in different industries. Hotel operators were excluded from the universe of peers for Airbnb because the exposure of these companies is still heavily concentrated in traditional lodgings and therefore is not as directly applicable to Airbnb's growing network platform of private and hotel accommodations, experiences, and transportation. That said, we are starting to see a creeping overlap in markets and user bases that might warrant including some traditional hotel operators in Airbnb's valuation peer class in the future. Case in point: Airbnb recently launched "Airbnb Corporate & Business Travel," which directly competes for the hotel industry's bread-and-butter clientele. Similarly, hotels are starting to offer "branded experiences" to add on to hotel room bookings, which are exclusive, curated events for hotel guests—and could be analogous to Airbnb Experiences.

We derived our valuation for Airbnb under the peer multiple valuation method by using our revenue and EBITDA projections along with the consensus third-quartile—due to differentiated content, premium user experience, and competent founding team—market comparable enterprise value multiples for 2019 (note we chose 2019 as the target year for our valuation due to the potential of an IPO next year). After we arrived at our implied valuation for Airbnb, we applied a high-growth premium to account for the company's superior growth profile (we expect Airbnb's EBITDA growth to average around 60% annually the next five years versus a mid-teens lift for peers) and a formed network competitive advantage. Additionally, we also applied a discount for lack of marketability, or DLOM, to account for restrictions or absence of a market to quickly convert the held equity shares into cash of a private company. There are many factors that go into determining the DLOM for an enterprise, which include but are not limited to financial health, company history, management team, restrictions on stock transfers, or redemption policies. Many of these policies for Airbnb are unknown and are not factored into determining the DLOM. We based our DLOM for Airbnb on its historical track record, management team, unanimity DLOMs applied to comparable companies, current market environment for private company shares including recent increases in secondary transactions, and proximity to pre-IPO. Combining the after-premium and discounted implied enterprise valuations based on third-quartile EV/Revenue and EV/EBITDA multiples, we attained a blended implied enterprise value of $53.2 billion (assuming $3 billion in net cash). With 295.3 million fully diluted shares on the capitalization table, this equates to a price per share of $180. This is an increase from Airbnb’s latest fundraising round in 2017, where the post-money valuation was $31 billion with a price per share of $105.

Exhibit 42 Airbnb's Superior Growth Warrants a Premium Valuation to Peers

Transaction Comparable	Transaction Date	Transaction Value ($B)	NTM Revenue	NTM Multiple
HomeAway (acquired by Expedia)	12/15/2015	$3.9	5.70x	22.3x

Trading Comparable	Enterprise Value ($B)	CY19E Revenue	CY19E EBITDA
Vacation Rental/Travel Booking			
Booking Holdings	$108.0	6.50x	17.1x
Expedia Group	$19.0	1.50x	9.1x
Tripadvisor	$8.0	4.10x	19.3x
Marketplaces			
eBay	$48.0	4.10x	11.7x
Etsy	$3.0	4.70x	19.4x
Grubhub	$9.5	7.70x	27.3x

	Revenue	EBITDA
High	7.70x	27.30x
Mean	4.90x	18.03x
3rd Quartile	6.10x	20.85x
Low	1.50x	9.10x

Source: Morningstar, CapIQ

Exhibit 43 Our Revenue and EBITDA Multiples Approach Equates to a Blended Enterprise Value of $50 Billion and Market Capitalization of $56 Billion

(Millions)	**CY19E Revenue**		**CY19E EBITDA**
Airbnb Metric	$5,352		$1,927
Multiple	6.10x		20.85x
Implied EV	$32,650		$40,176
High-Growth Premium	45.0%		45.0%
Implied Premium EV	$47,343		$58,255
DLOM	5%		5%
Implied DLOM EV	$44,976		$55,342
		Blended Implied EV	$50,159
		Net Cash	$3,000
		Market Capitalization	$53,159
		Fully Diluted Shares	295.29
		Price/share	$180.02

Source: Morningstar, CapIQ

Airbnb's Funding Rounds Showcase a Trend of Rising Valuation

Airbnb has faced little difficulty raising private capital, and in the face of increasing skepticism of overvalued private tech companies, investors are still willing to plow capital into Airbnb despite increasing regulatory challenges and fierce competition. To date, Airbnb has raised 11 rounds of funding, including a $1 billion debt facility in June 2016 from Bank of America, Citigroup, JPMorgan, and Morgan Stanley. Not including the debt financing, Airbnb has raised a total of $3.4 billion, with the latest round—Series F—of $1 billion closed in July 2017 at a $31 billion post-money valuation. Airbnb has seen significant step-up increases in valuation since its Series B round at a $1.3 billion valuation. From there, Airbnb raised a Series C of $200 million at a $2.5 billion valuation, a Series D of $475 million at a $10 billion valuation, a Series E of $1.6 billion at a $25.5 billion valuation, and finally the Series F round mentioned above. These succeeding funding rounds with step-up valuations were matched with their price per share offerings to their investors, which increased from $2.21 per share at the Series B round to $105 per share at the Series F round (see Exhibit 44).

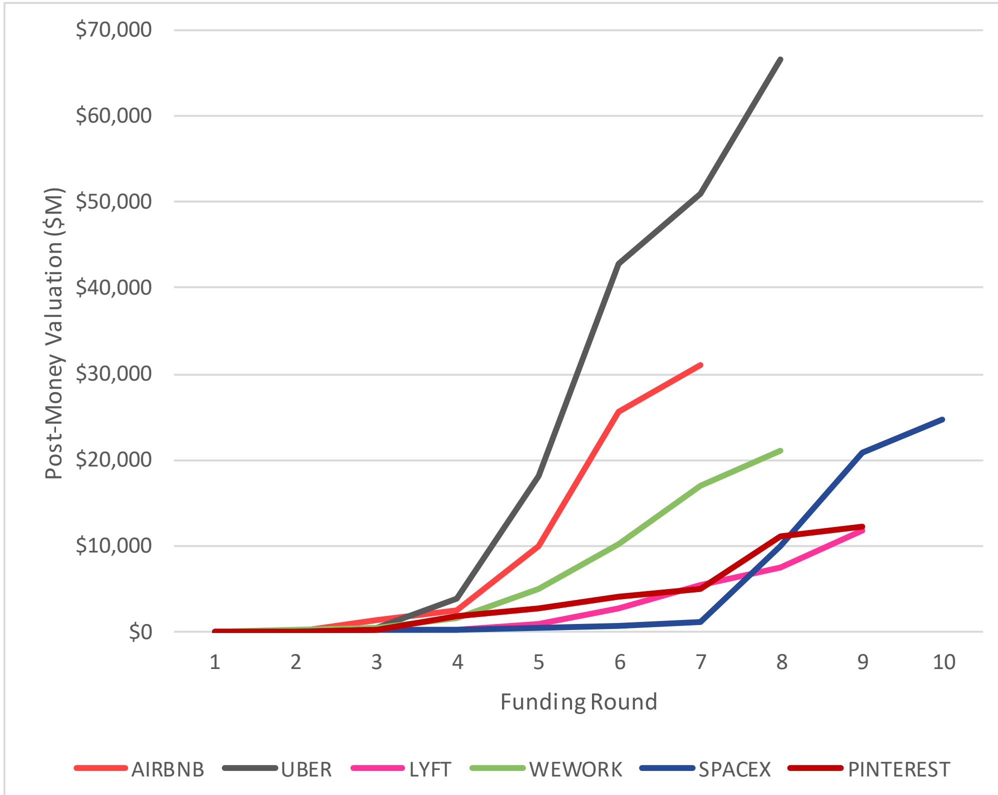
Exhibit 44 Airbnb's Capitalization Table Shows an Increasing Valuation

Stock	# of Shares Authorized	Original Issue Price	% Owned
Seed	31,827,492	$0.02	10.78%
Series A	17,197,416	$0.42	5.82%
Series B	17,351,343	$6.62	5.88%
Series B1	951,840	$2.21	0.32%
Series C	16,960,077	$11.79	5.74%
Series D	12,765,000	$40.71	4.32%
Series E	17,000,000	$93.09	5.76%
Series F	9,555,353	$105.00	3.24%
	123,608,521	INVESTOR SHARES	41.86%
	171,681,782	FOUNDER/EMPLOYEE SHARES	58.14%
	295,290,303	TOTAL SHARES	100.00%

Source: Morningstar, CapIQ

Looking at other high-growth, venture-backed companies with similar funding scale and scope (>$1 billion raised, >$10 billion post-money valuation) as Airbnb, we can see that Airbnb has had significantly higher valuation increases per subsequent rounds than the majority of the other companies, second only to Uber (Exhibit 45). We suppose that Airbnb can continue to acquire private financing at a similar clip, if necessary, unimpeded, given the ample supply of private capital currently available. In addition, secondary sales, or "secondaries," of private company shares has increasingly become commonplace among investors, founders, and employees of comparable high-growth, venture-backed companies. These secondaries provide liquidity for the shareholders without having to access the public markets. What this all means is that we would not be surprised if Airbnb chooses to continue to maintain its status as a private company and further delay an IPO.

Exhibit 45 Airbnb Has Seen Its Valuation Expand by Round of VC Relative to Most Peers



Source: PitchBook

A case can be made that Airbnb did not even need to raise as much venture capital as it already has. Of the $3.4 billion of equity financing Airbnb has raised to date, it has only realized a cash net-burn (total operating costs minus cash flow generated) of around $300 million. We think there are significant opportunities for Airbnb to deploy what appears to be a massive cash war chest and believe this expansion will be multifaceted. First, Airbnb will continue its global expansion, extending within and beyond the 65,000 cities and 191 countries in which it is currently operating. A large part of its global expansion could include working with local governments in cities in which it already maintains a platform, lobbying local officials to advocate for changes in short-term housing laws. Secondly, Airbnb will continue to extend into new product categories through vertical and horizontal expansion to diversify its user base. Its vertical expansion, as previously mentioned, includes moving up or down the travel value chain to offer new services in local experiences, transportation, or restaurant bookings. Along its horizontal expansion, Airbnb will maintain its expansion into new offerings in types of accommodations, including luxury homes and boutique hotels. Lastly, Airbnb could continue to use its stockpile of cash to continue its streak of acquisitions of competitors in the sector and technologies that would fit its platform. Airbnb has historically been acquisitive, as evidenced in its list of acquisitions for 2017, summarized in Exhibit 46. Although these Airbnb purchases are relatively small in size and lack financial details, we do see the strategic purpose behind the deals, providing confidence in the company's use of capital. For instance, Airbnb's largest acquisition, Luxury Retreats, stands to help extend its platform reach to higher priced, quality accommodations; while its Tilt purchase is expected to add expertise behind payment solutions that could improve the user experience.

Exhibit 46 We Believe Airbnb's Recent Acquisitions or Investments Make Strategic Sense

Company Name	Deal Date	Deal Type	Deal Size
Accomable	Nov-17	Acquisition	N/A
Adbasis	Nov-17	Acquisition	N/A
Trooly	Jun-17	Acquisition	$20 million
Deco IDE	May-17	Acquisition	N/A
Tilt	Feb-17	Acquisition	$60 million
Luxury Retreats	Feb-17	Acquisition	$300 million
Resy	Jan-17	Early Stage (Series A)	$15 million

Source: PitchBook

Looking at private market funding in Airbnb’s industry, there has been very little activity in terms of venture capital dollars raised. Domestically, the largest VC-backed peer in this space is Portland-based Vacasa, a rental management services provider for vacation rentals. Per PitchBook data, Vacasa has raised a total of $148 million to date at an unknown valuation. This is a relatively small sum in comparison to Airbnb’s $3.4 billion of capital raised to date. Part of the reasoning why there are few VC-backed companies in this space likely stems from the fact that many have been acquired over the past decade by larger public companies, specifically by Airbnb's peers Booking Holdings (Kayak, Opentable, Priceline), Expedia (HomeAway, Orbitz, Travelocity, Trivago), and Tripadvisor (FlipKey, Viator, Wanderfly). We see similar acquisition trends abroad as well. Internationally, there are two large VC-backed competitors to Airbnb in China—Xiaozhu, which has raised $270 million to date including a $120 million Series E round in November 2017, and Tujia, which has raised $764 million to date with a $300 million Series E round in October 2017. The post-money valuation for Xiaozhu is unknown, while the post-money valuation for Tujia is $1.5 billion. As mentioned earlier in the report, Airbnb has directed some of its focus toward the market in China, making founder Nate Blecharyzk chief strategy officer and chairman of the region in 2017. This should aid the company's competitive position in the Asian nation where we calculate it already derives around 3% of its total bookings, above the 1% of total bookings we estimate Expedia garners, but below the 10% we surmise Booking Holdings generates. Further, with significantly deeper pockets than both Xiaozhu and Tujia combined, we can foresee Airbnb acquiring either one or both of the Chinese-market participants or effectively competing with them dollar for dollar (or rather yuan for yuan).

Exhibit 47 Airbnb Income Statement Forecast

Airbnb Income Statement	**2014**	**2015**	**2016**	**2017**	**2018E**	**2019E**	**2020E**	**2021E**	**2022E**
Total Bookings	$3,846	$6,923	$13,077	$19,779	$29,270	$42,077	$54,497	$66,554	$79,753
yoy		80%	89%	51%	48%	44%	30%	22%	20%
Alt Accommodations	$3,846	$6,923	$13,077	$19,769	$28,270	$37,882	$46,973	$55,429	$64,297
yoy		80%	89%	51%	43%	34%	24%	18%	16%
Boutique Hotel					$ 800	$ 2,000	$ 3,500	$ 5,000	$ 6,500
yoy						150%	75%	43%	30%
Experiences				$ 10	$ 200	$ 600	$ 1,500	$ 2,500	$ 4,000
yoy					1900%	200%	150%	67%	60%
Transportation						$ 1,595	$ 2,524	$ 3,626	$ 4,956
yoy							58%		
Total Take-Rate	13.0%	13.0%	13.0%	13.0%	13.0%	12.7%	12.7%	12.7%	12.7%
Revenue Booking	$ 500	$ 900	$ 1,700	$ 2,572	$ 3,819	$ 5,352	$ 6,937	$ 8,464	$ 10,152
Airbnb Revenue Growth		80%	89%	51%	48%	40%	30%	22%	20%
Alt Accommodations	$ 500	$ 900	$ 1,700	$ 2,570	$ 3,675	$ 4,925	$ 6,107	$ 7,206	$ 8,359
yoy		80%	89%	51%	43%	34%	24%	18%	16%
Boutique Hotel					$ 104	$ 260	$ 455	$ 650	$ 845
yoy						150%	75%	43%	30%
Experiences				$ 2	$ 40	$ 120	$ 300	$ 500	$ 800
yoy					1900%	200%	150%	67%	60%
Transportation						$ 48	$ 76	$ 109	$ 149
yoy							58%	44%	37%
EBITDA			$156	$450	$ 1,069	$ 1,927	$ 2,706	$ 3,386	$ 4,061
Margin			9.2%	17.5%	28%	36%	39%	40%	40%

Source: Morningstar

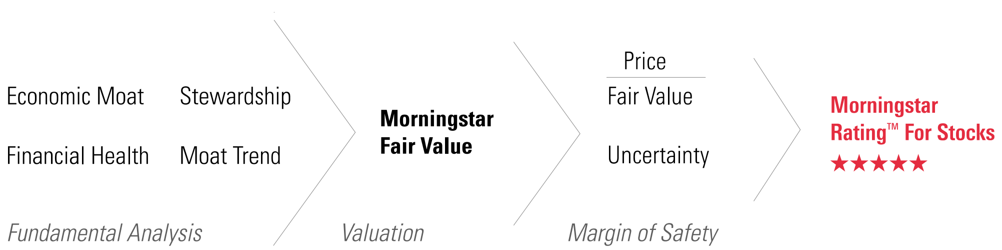
Research Methodology for Valuing Companies

Overview

At the heart of our valuation system is a detailed projection of a company's future cash flows, resulting from our analysts' research. Analysts create custom industry and company assumptions to feed income statement, balance sheet, and capital investment assumptions into our globally standardized, proprietary discounted cash flow, or DCF, modeling templates. We use scenario analysis, in-depth competitive advantage analysis, and a variety of other analytical tools to augment this process. Moreover, we think analyzing valuation through discounted cash flows presents a better lens for viewing cyclical companies, high-growth firms, businesses with finite lives (e.g., mines), or companies expected to generate negative earnings over the next few years. That said, we don't dismiss multiples altogether but rather use them as supporting cross-checks for our DCF-based fair value estimates. We also acknowledge that DCF models offer their own challenges (including a potential proliferation of estimated inputs and the possibility that the method may miss short-term market-price movements), but we believe these negatives are mitigated by deep analysis and our long-term approach.

Morningstar's equity research group ("we," "our") believes that a company's intrinsic worth results from the future cash flows it can generate. The Morningstar Rating for stocks identifies stocks trading at a discount or premium to their intrinsic worth—or fair value estimate, in Morningstar terminology. Five-star stocks sell for the biggest risk-adjusted discount to their fair values, whereas 1-star stocks trade at premiums to their intrinsic worth.

Morningstar Research Methodology



Source: Morningstar.

Four key components drive the Morningstar rating: (1) our assessment of the firm's economic moat, (2) our estimate of the stock's fair value, (3) our uncertainty around that fair value estimate and (4) the current market price. This process ultimately culminates in our single-point star rating.

Economic Moat

The concept of an economic moat plays a vital role not only in our qualitative assessment of a firm's long-term investment potential, but also in the actual calculation of our fair value estimates. An economic moat is a structural feature that allows a firm to sustain excess profits over a long period of time. We define economic profits as returns on invested capital (or ROIC) over and above our estimate of a firm's cost of capital or weighted average cost of capital (or WACC). Without a moat, profits are more susceptible to competition. We have identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

Companies with a narrow moat are those we believe are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which we have very high confidence that excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. The longer a firm generates economic profits, the higher its intrinsic value. We believe low-quality, no-moat companies will see their normalized returns gravitate toward the firm's cost of capital more quickly than companies with moats.

To assess the sustainability of excess profits, analysts perform ongoing assessments of the moat trend. A firm's moat trend is positive in cases where we think its sources of competitive advantage are growing stronger; stable where we don't anticipate changes to competitive advantages over the next several years; or negative when we see signs of deterioration.

Estimated Fair Value

Combining our analysts' financial forecasts with the firm's economic moat helps us assess how long returns on invested capital are likely to exceed the firm's cost of capital. Returns of firms with a wide economic moat rating are assumed to fade to the perpetuity period over a longer period of time than the returns of narrow-moat firms, and both will fade slower than no-moat firms, increasing our estimate of their intrinsic value.

Our model is divided into three distinct stages:

Stage I: Explicit Forecast
In this stage, which can last five to 10 years, analysts make full financial statement forecasts, including items such as revenue, profit margins, tax rates, changes in working-capital accounts, and capital spending. Based on these projections, we calculate earnings before interest, after taxes (EBI) and the net new investment (NNI) to derive our annual free cash flow forecast.

Stage II: Fade
The second stage of our model is the period it will take the company's return on new invested capital—the return on capital of the next dollar invested ("RONIC")—to decline (or rise) to its cost of capital. During the Stage II period, we use a formula to approximate cash flows in lieu of explicitly modeling the income statement, balance sheet, and cash flow statement as we do in Stage I. The length of the second stage depends on the strength of the company's economic moat. We forecast this period to last anywhere from one year (for companies with no economic moat) to 10–15 years or more (for wide-moat companies). During this period, cash flows are forecast using four assumptions: an average growth rate for EBI over the period, a normalized investment rate, average return on new invested capital (RONIC), and the number of years until perpetuity, when excess returns cease. The investment rate and return on new invested capital decline until a perpetuity value is calculated. In the case of firms that do not earn their cost of capital, we assume marginal ROICs rise to the firm's cost of capital (usually attributable to less reinvestment), and we may truncate the second stage.

Stage III: Perpetuity
Once a company's marginal ROIC hits its cost of capital, we calculate a continuing value, using a standard perpetuity formula. At perpetuity, we assume that any growth or decline or investment in the business neither creates nor destroys value and that any new investment provides a return in line with estimated WACC.

Because a dollar earned today is worth more than a dollar earned tomorrow, we discount our projections of cash flows in stages I, II, and III to arrive at a total present value of expected future cash flows. Because we are modeling free cash flow to the firm—representing cash available to provide a return to all capital providers—we discount future cash flows using the WACC, which is a weighted average of the costs of equity, debt, and preferred stock (and any other funding sources), using expected future proportionate long-term, market-value weights.

Uncertainty around that fair value estimate
Morningstar's Uncertainty Rating captures a range of likely potential intrinsic values for a company and uses it to assign the margin of safety required before investing, which in turn explicitly drives our stock star rating system. The Uncertainty Rating represents the analysts' ability to bound the estimated value of the shares in a company around the Fair Value Estimate, based on the characteristics of the business underlying the stock, including operating and financial leverage, sales sensitivity to the overall economy, product concentration, pricing power, and other company-specific factors.

Analysts consider at least two scenarios in addition to their base case: a bull case and a bear case. Assumptions are chosen such that the analyst believes there is a 25% probability that the company will perform better than the bull case, and a 25% probability that the company will perform worse than the bear case. The distance between the bull and bear cases is an important indicator of the uncertainty underlying the fair value estimate.

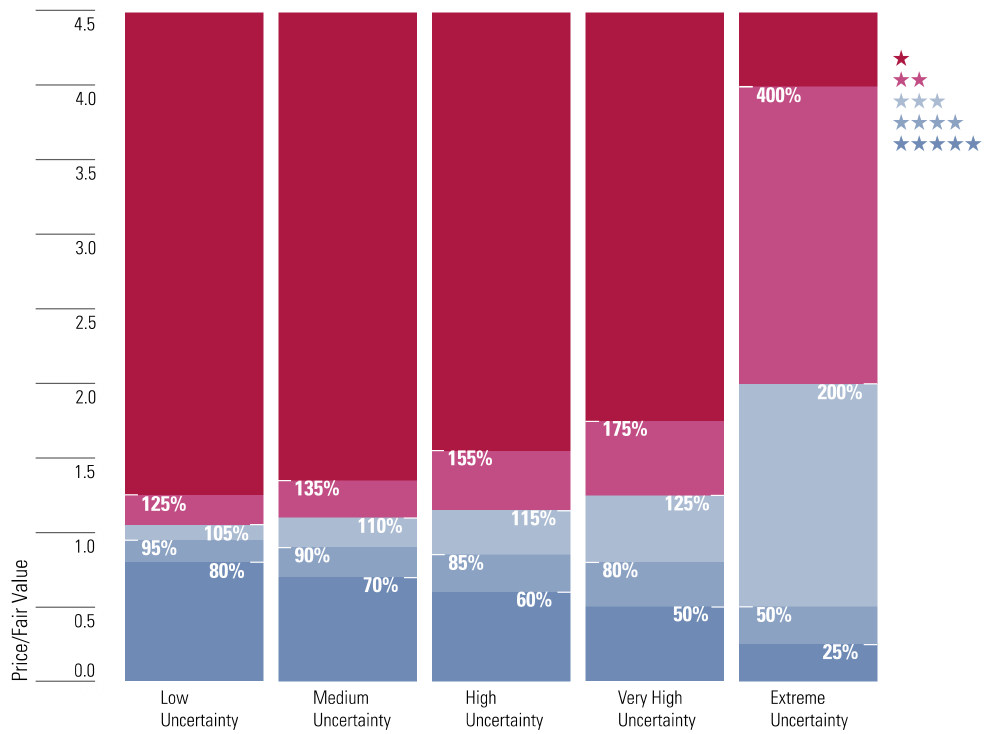
Our recommended margin of safety widens as our uncertainty of the estimated value of the equity increases. The more uncertain we are about the estimated value of the equity, the greater the discount we require relative to our estimate of the value of the firm before we would recommend the purchase of the shares. In addition, the uncertainty rating provides guidance in portfolio construction based on risk tolerance.

Our uncertainty ratings for our qualitative analysis are low, medium, high, very high, and extreme.

- Low–margin of safety for 5-star rating is a 20% discount and for 1-star rating is 25% premium.
- Medium–margin of safety for 5-star rating is a 30% discount and for 1-star rating is 35% premium.
- High–margin of safety for 5-star rating is a 40% discount and for 1-star rating is 55% premium.
- Very High–margin of safety for 5-star rating is a 50% discount and for 1-star rating is 75% premium.

- Extreme– margin of safety for 5-star rating is a 75% discount and for 1-star rating is 300% premium.

Morningstar Equity Research Star Rating Methodology



Market Price

The market prices used in this analysis and noted in the report come from exchange on which the stock is listed which we believe is a reliable source.

For more details about our methodology, please go to https://shareholders.morningstar.com.

Morningstar Star Rating for Stocks

Once we determine the fair value estimate of a stock, we compare it with the stock's current market price on a daily basis, and the star rating is automatically re-calculated at the market close on every day the market on which the stock is listed is open. Our analysts keep close tabs on the companies they follow, and, based on thorough and ongoing analysis, raise or lower their fair value estimates as warranted.

Please note, there is no predefined distribution of stars. That is, the percentage of stocks that earn 5 stars can fluctuate daily, so the star ratings, in the aggregate, can serve as a gauge of the broader market's valuation. When there are many 5-star stocks, the stock market as a whole is more undervalued, in our opinion, than when very few companies garner our highest rating.

We expect that if our base-case assumptions are true the market price will converge on our fair value estimate over time, generally within three years (although it is impossible to predict the exact time frame in which market prices may adjust).

Our star ratings are guideposts to a broad audience and individuals must consider their own specific investment goals, risk tolerance, tax situation, time horizon, income needs, and complete investment portfolio, among other factors.

The Morningstar Star Ratings for stocks are defined below:

★★★★★ We believe appreciation beyond a fair risk-adjusted return is highly likely over a multiyear time frame. Scenario analysis developed by our analysts indicates that the current market price represents an excessively pessimistic outlook, limiting downside risk and maximizing upside potential.

★★★★ We believe appreciation beyond a fair risk-adjusted return is likely.

★★★ Indicates our belief that investors are likely to receive a fair risk-adjusted return (approximately cost of equity).

★★ We believe investors are likely to receive a less than fair risk-adjusted return.

★ Indicates a high probability of undesirable risk-adjusted returns from the current market price over a multiyear time frame, based on our analysis. Scenario analysis by our analysts indicates that the market is pricing in an excessively optimistic outlook, limiting upside potential and leaving the investor exposed to Capital loss.

Risk Warning

Please note that investments in securities are subject to market and other risks and there is no assurance or guarantee that the intended investment objectives will be achieved. Past performance of a security may or may not be sustained in future and is no indication of future performance. A security investment return and an investor's principal value will fluctuate so that, when redeemed, an investor's shares may be worth more or less than their original cost. A security's current investment performance may be lower or higher than the investment performance noted within the report. Morningstar's Uncertainty Rating serves as a useful data point with respect to sensitivity analysis of the assumptions used in our determining a fair value price.

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