

U.S. Lodging Industry Outlook Update

Background

Over the course of the past 6 weeks, economies throughout the globe have ground to a halt resulting in the U.S. hospitality industry encountering a demand shock like it has never previously experienced.

To understand the full impact of the Covid-19 pandemic and consequent impact on the U.S. hotel industry, we first must be comfortable with our economic outlook. Unfortunately, to do so, we first must have clarity to questions that are unanswerable at this time:

- When will the virus abate? And when it does abate, will it be due to social distancing and similar actions, and/or an effective treatment?
- How will the economy reopen with a bang or a trickle?
- Will prevalent antibody testing give individuals confidence in returning to normalcy?
- Will there be a second wave of the virus in the Fall?
- Will there be further economic stimulus from the government, And if so, how much?

Without resolution to questions like these, economic forecasting, along with forecasting for the hospitality industry are very much a shot in the dark.

To allow for a better understanding, below is the progression of Moody's Analytics 2020 U.S. GDP forecast:

January 10, 2020: 1.6% March 10, 2020: 1.3% March 20, 2020: -0.5% March 27, 2020: -2.3% April 10, 2020: -5.8%

Moody's Analytics revisions are not that different from other economists. In fact, the Wall Street Journal's survey of economists showed the 2020 GDP outlook moving from 1.2% on March 1, 2020 to (4.9)% on April 1, 2020. Of note, almost 10% of the economists surveyed in the April 1 survey forecast 2020 GDP to be down double digits with a low of (18.1)%.

The uncertainty driving the economy at present makes point forecasts for the broader U.S. hotel industry that much more challenging.

A Unique Lodging Downturn

It is not just the lack of clarity in the economic outlook that makes this downturn so challenging to forecast, so much as the magnitude of the decline is unique. There has never been a collapse worse than the 2008/09 global financial crisis during which time GDP declined by 2.5% in 2009, which equates to less than one-half of the decline expected in 2020. In the 2001 downturn, GDP ended the year up 1.0% and during 1991, GDP was only down 0.1%. Additionally, none of those downturns were driven by a pandemic that caused people to avoid one another. As such, we do not believe that the way the lodging industry has been impacted by past downturns or recoveries is indicative of what to expect this time around.

Economic Assumptions

We use Moody's Analytics' April 10th update as our baseline for economic assumptions. However, we also have built out hypotheses regarding a deeper downturn and a shallower one. Under the deeper downturn scenario, we assume the virus abates later in the year and the economy opens up more gradually as the population is reluctant to revert back to day to day life quickly. In the shallower decline, we assume the virus abates by May and the economy reopens aggressively with widely available antibody and Covid-19 testing. While the economic assumptions vary in the near-term, they all converge in the out-years.



Key Economic Assumptions

	Deep	Base	Shallow		
GDP					
1Q20	-8.3%	-8.3%	-8.3%		
2Q20	-89.2%	-34.3%	2.2%		
3Q20	-106.5%	15.7 %	15.7%		
4Q20	68.0%	1.1%	-35.3%		
2020	-25.6%	-5.8%	-1.2%		
2021	16.7%	2.3%	-2.4%		
3-Year CAGR	-0.7%	1.0%	1.0%		
5-Year CAGR	2.0%	2.0%	2.0%		
Business Invest	ment				
1Q20	-16.5%	-16.5%	-16.5%		
2Q20	-116.3%	-66.2%	-32.8%		
3Q20	-102.9%	20.9%	20.9%		
4Q20	59.8%	-5.9%	-41.7%		
2020	-32.4%	-14.9%	-10.9%		
2021	11.8%	-1.5%	-6.0%		
3-Year CAGR	-2.9%	-1.2%	-1.2%		
5-Year CAGR	2.1%	2.1%	2.1%		

Source: Moody's Analytics and Lodging Analytics, Research and Consulting

U.S. Hotel Industry Outlook

Based on these underlying economic assumptions (along with several others), we provide the following outlook for the hotel industry. Note that at this point, we do not assume any hotel closures, however, a change to that postulation could impact our models.

We acknowledge that the lodging industry's historical reaction to economic factors may not be the same in the short-term. However, based on over 20 years of detailed data, we would expect those relationships to revert back over the medium and long-terms. As such, while we have less conviction in our near-term outlook, creating a wide variance among our three scenarios, over the course of the next few years, they all converge to the same place by 2024, giving us greater conviction looking out a few years.

Our seasonally adjusted RevPAR model is primarily driven by the following key variables:

- Business Investment (98.8% correlation)
- Real GDP (95.2% correlation)
- RevPAR on a 1Q lead (98.6% correlation)

 Lodging Supply on a trailing four quarter average (88.4% correlation)

Based on these variables and several others, we have created a multi-variable regression forecast model that has a 98.4% R-squared, indicating an extremely high prediction confidence level within a standard error of 1.8%. The below table illustrates the current outlook across all three scenarios discussed.

U.S. Lodging Industry Forecast Scenarios

	Occupancy Change		
	Deep	Base	Shallow
2020	-43.8%	-20.6%	-17.8%
2021	53.8%	16.5%	3.8%
3-Year CAGR	-1.4%	-0.7%	-1.2%
5-Year CAGR	-0.1%	-0.2%	-0.2%
Quarter Return to Pre-Virus Levels	1Q-2023	2Q-2023	2Q-2023
	ADR Change		
	Deep	Base	Shallow
2020	-23.4%	-14.7%	-9.5%
2021	0.7%	4.7%	7.4%
3-Year CAGR	-2.9%	-0.9%	-0.4%
5-Year CAGR	2.1%	2.2%	2.2%
Quarter Return to Pre-Virus Levels	1Q-2023	4Q-2022	4Q-2022
	RevPAR Change		
	Deep	Base	Shallow
2020	-56.9%	-32.2%	-25.6%
2021	54.8%	21.9%	11.5%
3-Year CAGR	-4.3%	-1.6%	
5-Year CAGR	2.0%	2.0%	2.0%
Quarter Return to Pre-Virus Levels	1Q-2023	4Q-2022	40-2022
			+Q 2022
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	EB Deep	Base	nge Shallow
2020		Base	nge Shallow
2021	Deep -107.5% -73.2%	Base	Shallow -67.8% 117.4%
2021 3-Year CAGR	Deep -107.5%	Base -76.6%	nge Shallow -67.8% 117.4%
2021	Deep -107.5% -73.2%	Base -76.6% 87.4%	Shallow -67.8% 117.4%
2021 3-Year CAGR	Deep -107.5% -73.2% -23.7%	Base -76.6% 87.4% -12.3%	Shallow -67.8% 117.4% -4.9%
2021 3-Year CAGR 5-Year CAGR	Deep -107.5% -73.2% -23.7% 0.1% 2024	Base -76.6% 87.4% -12.3% 0.2%	Shallow -67.8% 117.4% -4.9% 0.8% 2023
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2021 3-Year CAGR 5-Year CAGR Year Return to Pre-Virus Levels	Deep -107.5% -73.2% -23.7% 0.1% 2024 V:	Base -76.6% 87.4% -12.3% 0.2% 2024 alue Chang Base -28.5% 6.8%	Shallow -67.8% 117.4% -4.9% 0.8% 2023 ge Shallow

Year Return to Pre-Virus Levels
Source: Lodging Analytics, Research and Consulting

5-Year CAGR

Below are key takeaways from our outlook:

 Our Base case 2020 RevPAR outlook calls for a 32% decline, while our range is extremely wide from a 26% drop to a 57% decrease.

-0.2%

2025

0.0%

2024

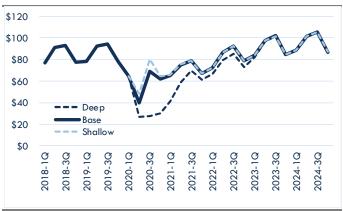
0.6%

2023



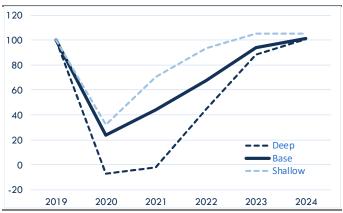
- Although we expect most of the 2020 RevPAR decline to be in the form of occupancy, ADR will be negatively impacted as well.
- Our Base case generates an almost 80% decline in Hotel EBITDA in 2020 and in our Deep downturn scenario, Hotel EBITDA turns negative across the industry.
- A strong snap back in EBITDA is forecast across all three scenarios as we expect EBITDA to recover to 2019 levels within five years.
- We estimate that in a fully transparent market where transaction volumes provided ample clarity (a situation we do not expect in 2020), hotel values would drop by nearly 30% in 2020 in our Base case and close to 50% in our Deep downturn scenario. In all scenarios, we expect values to recover to 2019 levels within about five years.

U.S. RevPAR Scenarios



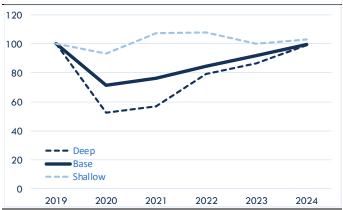
Source: STR and Lodging Analytics, Research and Consulting

U.S. Hotel EBITDA Scenarios



Source: Lodging Analytics, Research and Consulting

U.S. Hotel Value Scenarios



Source: Lodging Analytics, Research and Consulting

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