# **Skift Recovery Index**

## Methodology

Updated: June 9, 2020

### Introducing the Skift Recovery Index

The Skift Recovery Index is a real-time measure of where the travel industry at large — and the core verticals within it — stands in recovering from the COVID-19 pandemic. It provides the travel industry with a powerful tool for strategic planning, of utmost importance in this uncertain business climate.

Included in the index are:

- Weekly top-level global and country travel recovery indices
- Weekly country-level recovery index for: hotel, short-term rental, air travel, car travel
- Weekly country-level recovery index split by source and destination performance
- Monthly global and country-level macroeconomic recovery index, built upon unemployment, industrial production, retail sales, and stock market returns indicators.
- A mix of leading and trailing indicators. Leading indicators include actual occupancy, revenue per available room (RevPAR), seat capacity, and load factors. Trailing indicators include travel searches and reservations/bookings, cancellations, etc.

### Country Coverage

The Index focuses on the travel performance in 15 of the largest tourism economies, combined accounting for 51% of inbound tourism receipts, 61% of outbound tourism expenditure, and 66% of global 2019 GDP.

- Australia
- Brazil
- Canada
- China
- France
- Germany
- India
- Italy

- Mexico
- Singapore
- Spain
- Thailand
- U.S.
- United Arab Emirates
- United Kingdom

The selection of these countries is a combination of including the largest economies, and most important tourist destinations and origin markets. The selection purposely includes a number of net exporters of tourism (more inbound tourism than outbound tourism), and net importers of tourism, to track how this impacts recovery.

### The Skift Recovery Index Score

#### Skift Recovery Index (SRI) Score Calculation

The Index is designed to provide an easy overview of the health of the travel industry. To do this, current 2020 performance of each indicator is compared to the same time last year.

E.g. Performance in week 10 of 2020 (w/c March 1, 2020) is compared to week 10 of 2019 (w/c March 3, 2019)

The Skift Recovery Index provides a score relative to a baseline reading of 100 for the same week in 2019. The index provides data back to week 1 of 2020 for all countries, and will run for an as of yet undetermined time.

Comparing the current performance with 2019 figures, which was a strong year for travel in most countries and verticals, allows for easy interpretation as different verticals and countries are starting to recover at different rates. Possible future downturns can also be identified.

Seasonality provides major fluctuations in the travel industry, and impacts countries differently, and by comparing the current situation with the previous year, the index compensates for any seasonal fluctuations.

#### **Retrospective Data Changes**

To make the index near real-time, we have opted for weekly updates of the index scores. Most of our data partners are able to provide us with weekly data. There are a few indicators, however, for which we rely on monthly data, including government data for our macroeconomic indicators, hotel RevPAR from STR, and flight load factors from IATA.

As this information is often available with a time lag, Skift Research uses the most recent month's data to make an estimate for the current month and all weeks in the month use the same estimate and receive the same weighting score. We update this retrospectively when full-month data becomes available, which might result in revisions to our index scores.

### Index Design

The index currently tracks over 25 indicators per country to assess the health of the travel industry in each country. We will update this methodology article to reflect additions as we continue to add more indicators and break out more verticals in the future. These indicators are aggregated into performance metrics. The metrics themselves are split and bucketed in multiple ways, the top level of which is a split between origin and destination indicators.

### Metric and Indicator Weighting

Each 2019/20 growth rate is indexed, where the 2019 volume or value is based at 100. This means that if 2020 performance was exactly on par with 2019, the index score will be 100. Any growth compared to 2019 means an index over 100, any contraction means a score lower than 100.

Each metric indicator is weighted to provide a final index score. Weighting is based on Skift Research estimates of the relative importance of different travel verticals, as well as the strength and reliability of indicators to provide conclusive insight into recovery. E.g. search data provides an interesting indication of travel sentiment, but actual transactional data like hotel RevPAR is seen as more important as an indicator of recovery on the ground.

Any given metric can be measured across multiple indicators, the most granular level of data we have (e.g. hotel room sales and hotel room nights are distinct indicators, but each roll up to the same metric that measures the pace of lodging bookings). This diversifies each metric by data provider and data collection methodology. Typically, all indicators within a given metric are equally weighted.

As not all indicators are available for each country, weightings differ slightly per country, but below is a table with ideal weightings by category and metrics if all indicators are available.

Category	Vertical	Metric
Origin Performance - <b>30%</b>	Macroeconomics - <b>30%</b>	Labor Market - <b>25%</b>
		Business Conditions - <b>25%</b>
		Consumer Conditions - <b>25%</b>
		Financial Conditions - <b>25%</b>

Traveler Activity - <b>70%</b>	Flight Performance - Origin - <b>50%</b>
	Lodging Performance - Origin - <b>50%</b>

Category	Vertical	Metric
Destination Performance - 70%	Lodging - <b>60%</b>	Lodging Bookings - <b>50%</b>
		Lodging KPIs - <b>50%</b>
	Flight - <b>30%</b>	Flight Sentiment - <b>15%</b>
		Flight Bookings - <b>30%</b>
		Flight KPIs - <b>55%</b>
	Drive - <b>10%</b>	Drive Performance - <b>100%</b>

#### Origin Performance

The origin performance bucket tracks the performance of each country as a source market, considering economic performance and traveler sentiment and activity amongst country residents.

This section is split into macroeconomic indicators and traveler activity indicators.

#### Macroeconomic indicators

This subsection provides an insight in the economic health of each country. As these indicators tend to be tracked on a monthly basis, monthly data is converted into weekly index scores by Skift Research. Due to a lag in reporting, Skift Research estimates the latest month data for these indicators, and retrospectively changes the index scores once official sources become available

Metric	Indicator	Source
Labor Market	Unemployment	Skift Research from Capital IQ, govt data
Business Conditions	Industrial production or Purchasing Managers Index	Skift Research from Capital IQ, govt data
Consumer Conditions	Retail sales or Consumer sentiment	Skift Research from Capital IQ, govt data
Financial Conditions	Stock market returns	Skift Research from Capital IQ, govt data

#### Traveler activity indicators

This section investigates whether travelers from each country are searching for, and booking travel, either for domestic or international travel.

Metric	Indicator	Source
Flight Sentiment and Performance - Origin	Flight searches by origin	Sojern
	Web traffic flight by origin	Criteo
	Flight sales by origin	Criteo
Lodging Sentiment and Performance - Origin	Hotel searches by origin	Sojern
	Web traffic lodging by origin	SimilarWeb
	Hotel room nights booked by origin	Hotelbeds
	Hotel room sales by origin	Hotelbeds

#### **Destination Performance**

This bucket tracks each country as a destination market, taking stock of searches and bookings made with the country as a destination, as well as the 'on-the-ground' performance through key performance indicators.

We are splitting the destination performance by travel vertical, into lodging (hotels and short-term rentals), flight, and drive (private and rental car), to better cater to users working in these specific verticals.

#### Lodging indicators

Metric	Indicator	Source
Lodging Sentiment and Bookings	Hotel searches by destination	Sojern
	Hotel bookings by destination	SiteMinder
	Hotel bookings by destination	Shiji
	Hotel bookings by destination	RateGain
	Hotel room nights booked by destination	Shiji
	Hotel room nights booked by destination	Hotelbeds
	Hotel room sales by destination	Hotelbeds
	Vacation rental bookings by destination	Transparent

	Hotel cancellations by destination	Rategain
	Hotel RevPAR by destination	Skift Research from STR
	Vacation rental occupancy rates by destination	Transparent

#### **Flight indicators**

Metric	Indicator	Source
Flight Sentiment and Bookings	Flight searches by destination	Sojern
	Flight bookings by destination	Criteo
Flight KPIs	Airlift capacity	OAG
	International load factor	Skift Research from IATA
	Domestic load factor	Skift Research from IATA

#### **Drive indicators**

Metric	Indicator	Source
Drive Performance	Web traffic car rental	Criteo
	Car rental sales	Criteo
	Car journey volume	Arrivalist

### Indicator Definitions

Following is a list of all indicators and their definitions.

#### Macroeconomic indicators

*Unemployment:* How many citizens of a given country are searching for a job but are unable to find work, expressed as a percentage of the total labor force.

*Industrial production*: A chained index measure of economic output produced by the industrial (e.g. manufacturing) sector of the economy. Though industrial businesses are not representative of every business, they are highly sensitive to changes in the economic environment and consumer demand. As such industrial

production is often used as a near-real time proxy for state of business and economic conditions.

*Purchasing Managers Index:* A monthly survey of private sector companies that asks operational and supply chain staff (the titular purchasing managers) for their opinion on the current performance of their businesses and their outlook for the future. Reported as a diffusion index of 0-100 where 50+ indicates business expansion.

*Retail sales*: Aggregate consumer spending on retail purchases, expressed as a percent change relative to the prior year.

Consumer sentiment: A chained index based on household surveys that measures how consumers are feeling about the current and future state of the economy and their personal finances.

*Stock market returns*: The change in each respective country's benchmark stock index, expressed as a percent change over the last year.

#### Traveler activity indicators

*Hotel searches*: Volume of hotel searches in week *n*, compared to the same week in 2019, by residents from each country.

*Flight searches*: Volume of flight searches in week *n*, compared to the same week in 2019, with each country as the place of departure.

*Web traffic*: Number of unique visitors to top travel domains (websites) in each country in week *n*, compared to the same week in 2019.

Hotel room nights booked/room sales: Volume/value of total number of room nights sold to residents of each country in week *n*, compared to the same week in 2019, for hotels in each country.

*Flight sales*: Value of flight bookings in week *n*, compared to the same week in 2019, with each country as place of departure.

#### Lodging indicators

*Hotel searches*: Volume of hotel searches in week *n*, compared to the same week in 2019, for hotels in each country.

*Hotel bookings*: Volume of bookings/reservations made in week *n*, compared to the same week in 2019, for hotels in each country. Data is not corrected for cancellations or no-shows.

Hotel room nights booked/room sales: Volume/value of total number of room nights sold in week *n*, compared to the same week in 2019, for hotels in each country. Data is not corrected for cancellations or no-shows.

*Vacation rental bookings*: Volume of bookings/reservations made in week *n*, compared to the same week in 2019, for short-term rentals in each country.

*Hotel RevPAR*: Realized Revenue per Available Room (RevPAR) for open hotels in each country, compared to the same week in 2019. This is based on STR data accessed through hotelnewsnow.com, with additional Skift Research estimates.

*Hotel cancellations*: Volume of cancellations in week *n*, compared to the same week in 2019, for hotels in each country. This is an inverse indicator, with higher cancellations providing a lower index score.

*Vacation rental occupancy*: Realized occupancy for open short-term rentals in each country during week *n*, compared to the same week in 2019.

#### Flight indicators

*Flight searches*: Volume of flight searches in week *n*, compared to the same week in 2019, with each country as the destination.

*Flight bookings*: Value of flight bookings in week *n*, compared to the same week in 2019, with each country as the destination.

*Airlift capacity*: Number of scheduled seats for routes to and from each country in week *n*, compared to the same week in 2019.

*International/domestic load factor*: Measures the percentage of available seating capacity that is filled with passengers in week *n*, compared to the same week in 2019.

#### **Drive indicators**

*Web traffic car rental*: Unique visitor volumes on car rental websites in each country in week *n*, compared to the same week in 2019.

*Car rental sales*: Value of car rental bookings with car rental companies in each country in week *n*, compared to the same week in 2019.

*Car journeys*: Volume of trips taken over 50 miles by car in week *n*, compared to the same week in 2019.

### Data Partners

Skift Research collaborates with a number of data partners to provide weekly updated data, without which the Index would not be able to exist.

Below is a brief explanation of the partners we work with, the data they share, and their methodology.

#### Arrivalist

<u>Arrivalist</u> is a leading location intelligence platform in the travel industry. The company uses mobile location datasets to provide actionable insights on consumer behavior, competitive share, media effectiveness, and market trends. Over 200 travel marketers use these insights to inform media strategy, operations, and destination development.

The company has been <u>tracking driving behavior</u> of U.S. residents, which we have included in the Index. Arrivalist data is based on the average trips in each week compared to the average trips between July 1, 2019 and December 28, 2019.

#### Criteo

<u>Criteo</u> is a global technology company powering the world's marketers with trusted and impactful advertising. Criteo supports a number of suppliers, online travel agencies and meta sites with over 600 travel accounts globally. The foundation of Criteo's travel offering lies in its ability to understand a user's path-to-booking journey, tying awareness & intent-driven marketing to performance-driven strategies built to drive leads and bookings further down the funnel.

Criteo provides indexed data from various OTA, airline, and car rental partners to give an insight into airline and car rental web traffic and sales. Flight bookings by destination is indexed to the average of the final six weeks of 2019, rather than a simple week-to-week comparison.

#### Hotelbeds

<u>Hotelbeds</u> provides over 180,000 hotels across the globe with access to high-value, complementary distribution channels that do not compete with the hotelier's direct distribution strategy. It offers a network of over 60,000 hard-to-access b2b travel buyers such as tour operators, retail travel agents, airline websites, and loyalty partners. The company is predominantly focused on the leisure travel market.

Hotelbeds provides data on hotel room nights and hotel room sales, from an origin and destination point of view.

#### OAG

<u>OAG</u> is a leading global travel data provider which has been powering the growth and innovation of the air travel ecosystem since 1929. The company collects data about every journey, every booking, every take-off and landing, departure and delay, totalling over 110,000 flights, 100,000 schedule changes daily and over 4 million flight status updates. OAG provides further information and webinars about the impact of COVID-19 on the airline industry <u>here</u>.

OAG provides flight capacity data for the Skift Recovery Index. Flight capacity data is the number of scheduled seats as supplied by the world's global airlines and distributed by OAG on their behalf to all the major distribution channels and analytics sources on both a daily and weekly basis.

#### RateGain

<u>RateGain</u> is a leading provider of SaaS products, which help travel and hospitality companies with cognitive revenue management, smart e-distribution, and brand engagement. RateGain supports over 250,000 hotel properties globally by providing 240 billion rate and availability updates, and powering over 30 million bookings. RateGain's clients include the largest OTAs, airlines, hotel chains, tour operators, wholesalers, car rental companies, cruise lines, and travel management companies. RateGain has produced a number of whitepapers about the impact of COVID-19 on the hotel, airline, and car rental sectors, which can be found <u>here</u>.

RateGain provides hotel bookings and cancellation data for the Skift Recovery Index.

#### Shiji Group

Shiji Group provides software solutions and services for the hospitality, food service, retail and entertainment industries, ranging from hotel management solutions, to food and beverage and retail systems, payment gateways, data management, online distribution and more. Founded in 1998 as a network solutions provider for hotels, Shiji Group today serves over 74,000 hotels, 200,000 restaurants and 600,000 retail outlets across the world. The company provides regular updates on the recovery of the Chinese hotel market <u>here</u>.

Shiji Group provides China hotel bookings and room night data for the Skift Recovery Index.

#### SimilarWeb

<u>SimilarWeb</u> is the most trusted platform for measuring online behavior. Millions of people rely on SimilarWeb insights daily as the ground truth for their knowledge of the digital world. SimilarWeb's digital data is gathered from multiple sources, including first-party direct measurement, public data sources, anonymous behavioral data, and external partners. More details on their methodology can be found <u>here</u>.

SimilarWeb provides unique visitor data to the top 10 travel websites per country for the Skift Recovery Index. This data is collected by taking weekly unique visitors, which takes the sum of individual devices visiting the analyzed domains, within each specific country. SimilarWeb tracks data by week from Tuesday to Monday.

#### Siteminder

<u>SiteMinder</u> is the global hotel industry's leading guest acquisition platform, ranked among technology pioneers for its smart and simple solutions that put hotels everywhere their guests are, at every stage of their journey. SiteMinder works with over 35,000 hotels, across 160 countries, to generate in excess of 100 million reservations worth over US\$35 billion in revenue for hotels each year.

SiteMinder provides hotel booking data for the Skift Recovery Index, pulled from its World Hotel Index. The <u>SiteMinder World Hotel Index</u> is updated daily and compares year-over-year 2020 daily booking volumes as a percentage of 2019 bookings. To ensure a like-for-like comparison, the data relates only to active hotel users of SiteMinder's platform during the full 365-day period.

#### Sojern

<u>Sojern</u> provides digital marketing solutions for the travel industry. Powered by artificial intelligence and built on more than a decade spent analyzing traveler intent data, Sojern activates multi-channel branding and performance marketing solutions to drive direct demand for more than 10,000 hotels, attractions, tourism boards and travel marketers. Sojern provides further COVID related insights on its <u>blog</u>.

Sojern contributes flight and hotel search data for the Skift Recovery Index. The company collects and analyzes travel data, including flight and hotel booking data, from thousands of partners all around the world. This gives Sojern an unprecedented view of travel demand and is the basis of the Sojern insights presented in the Index.

#### Transparent

<u>Transparent</u> provides business intelligence serving the vacation rental industry. Through a combination of proprietary and public data aggregation and data science, Transparent develops insights into market conditions such as supply growth, demand patterns, rate changes, and property manager activities. Transparent has a <u>COVID-19 impact tracker</u> with further insights about the current impact on the vacation rental sector. Transparent contributes occupancy and bookings data for the Skift Recovery Index. The company draws on data from the 34 million vacation rental listings they track worldwide, in every geography.