What the Evolution of Travel Means for Business

June 2021
TRAVEL & TOURISM RECOVERING AFTER DIFFICULT YEAR

Travel and tourism, including hospitality and leisure, was one of the areas most severely impacted by COVID-19, as lockdowns and travel restrictions slowed activity to a trickle or stopped it altogether. This led to a direct loss of $4.5T in global GDP, and ripple effects were felt across companies and industries as organizations struggled to find new ways to connect with their customers and employees. Now with COVID-19 vaccinations and cases controlled in some areas, short- to medium-term demand spikes are expected, accompanying the longer-term sustained changes needed to navigate the new world.

WIDE-REACHING IMPLICATIONS OF CHANGES IN TRAVEL IMPACT MANY INDUSTRIES

The changes in global travel patterns will have broader impacts throughout organizations worldwide. Leisure and business travel spending reallocated during the pandemic is starting to return. Other industries can apply learning from the travel industry, such as on navigating large demand fluctuations. Companies can also think about changes to their business travel operating model and ways to make business travel more sustainable.

Sources: WTTC, BCG analysis and case experience
# Summary

## What the Evolution of Travel Means for Business

### 1. Travel & Tourism Trends

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Travel demand is increasing, but recovery will vary by country and is tied to vaccine progress</td>
</tr>
<tr>
<td>B</td>
<td>Expect high near-term demand in leisure travel with potential structural changes in business travel</td>
</tr>
<tr>
<td>C</td>
<td>Consumers are calling for increased sustainability as travel industry responds with initiatives</td>
</tr>
</tbody>
</table>

### 2. Implications for All Companies

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Prepare for volatility from consumer spending shifts with demand sensing</td>
</tr>
<tr>
<td>B</td>
<td>Update business travel operating model to account for hybrid and remote work</td>
</tr>
<tr>
<td>C</td>
<td>Improve business travel sustainability by reducing footprint and engaging suppliers</td>
</tr>
</tbody>
</table>

### 3. Implications for Travel Companies

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Changing customer needs require continued investment in safety and hygiene protocol, demand sensing, and sustainability</td>
</tr>
<tr>
<td>B</td>
<td>Opportunities exist to establish new cost baselines and implement scenario-based agile planning to improve operations</td>
</tr>
</tbody>
</table>

Source: BCG analysis and case experience
DEVELOPMENTS IN TRAVEL AND IMPLICATIONS ACROSS SECTORS

Impact and trends in travel and tourism
Implications from travel recovery for all sectors

UPDATED ANALYSES AND IMPACT

Epidemic progression and virus monitoring
Economic and business impact
There have been major disruptions to travel and tourism

<table>
<thead>
<tr>
<th>Economic impact</th>
<th>Job loss</th>
<th>Business travel</th>
<th>Tourism</th>
<th>Airlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>-$4.5T</td>
<td>62M</td>
<td>92%</td>
<td>74%</td>
<td>26%</td>
</tr>
</tbody>
</table>

**Economic impact**

GDP loss in 2020 from COVID-19 impacts on travel and tourism

**Job loss**

Estimated jobs lost in travel and tourism sector globally

**Business travel**

Of all companies continue to suspend most or all international business travel as of May 2021

**Tourism**

Decrease in global international tourist arrivals from 2019 to 2020

**Airlines**

Of all planes owned by airlines are still in storage as of June 2021

Sources: WTTC, GBTA, UNWTO, Cirium
Travel and tourism trends | Travel demand is increasing, but recovery will vary by country and is tied to vaccine progress

Global airline capacity\(^1\) down due to lower demand

Countries that have seen better COVID-19 vaccine progress are seeing faster travel recovery

Growth in relative ticket volumes, 2021 vs 2019 over time (baselined to Jan 31, 2021 as 0%), destination data

With just 4% of Indonesians fully vaccinated and doses secured for only ~80% of the population by 2022, tourist destinations such as Bali will see a slower return of travel

1. Carrying capacity based on a measurement of ASKs or available seat kilometers for domestic and international arrivals, comparing 2019 and 2021 data

Sources: TRIP, ARC/IATA, Our World in Data
Leisure travel has near-term pent-up demand as consumers feel safe to resume travel

Some domestic markets have recovered to near 2019 levels, especially on weekends and holidays when leisure travel is prevalent.

<table>
<thead>
<tr>
<th>% of 2019 domestic airline ticketing volumes¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>US May '21</td>
</tr>
<tr>
<td>US Memorial Day Weekend '21</td>
</tr>
</tbody>
</table>

Other consumers are eager to travel soon: 56% ranked leisure travel among their top post-vaccination activities, second only to seeing family and friends.

Business travel recovery is slower with structural changes

50%+ of travel managers expect reduced travel budgets as they add greater flexibility for remote-working roles.

New reasons for travel as remote and hybrid workers gather for training and affiliation.

Most companies do not expect to return to full business travel until 2023+.

1. As of May 2021
Sources: BCG COVID-19 related measures survey of 300+ global companies, TRIP, ARC/IATA, GBTA (April 2021), BCG analysis
Travelers who are looking for more green-friendly travel brands:

Consumer preferences will have impacts on both leisure and business travel

The travel and transportation industry is responding with sustainability initiatives

Most major airlines have committed to net-zero emissions by 2050 and are exploring sustainable aviation fuels (SAFs) to comply with new regulations.

~30% of global rail track systems have been electrified, and this is expected to grow to ~40% in the next 5 years.

The cruise industry has already invested $24B in sustainable ships, with a target of 40% reduction in carbon emissions by 2030.

Sources: SCI Verker Gmbh, American Express Global Travel Trends Report (March 2021), press search, CLIA
Implications for all companies | Prepare for volatility from consumer spending shifts with demand sensing

While leisure travel decreased, other consumer areas increased during pandemic

<table>
<thead>
<tr>
<th>Larger change during COVID-19</th>
<th>Short-term spikes</th>
<th>Structural changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>COVID-safe home renovation</td>
<td>New e-commerce habits</td>
<td></td>
</tr>
<tr>
<td>Early pandemic grocery panic</td>
<td>Sustained pet care products</td>
<td></td>
</tr>
</tbody>
</table>

Spending will begin to shift back from some categories as travel resumes and public spaces open

Companies can prepare for volatility from demand fluctuations by bolstering demand-sensing capabilities

Companies must gather and analyze data from a variety of first- and third-party sources, such as epidemiological data; this information can provide indicators to support agile planning.

For example, products and investments (e.g., sales team deployments) can be adapted based on trend shifts; supply chains and operations can also be optimized to scale up and down rapidly.

Example: Car rental company implemented a real-time demand-forecasting platform\(^1\) and boosted demand-sensing accuracy by 30 pp.

---

\(^1\) Using BCG Lighthouse real-time demand-forecasting platform
Sources: BCG and Shift, How the Disruption of Air, Cruise, and Hotel Capacity Created Unique Opportunities article (April 2021); press search, BCG Lighthouse, BHI, BCG case experience

Copyright © 2021 by Boston Consulting Group. All rights reserved. BCG Executive Perspectives updated 10 June 2021 Version 2.0
Implications for all companies | Update business travel operating model to account for hybrid and remote work

Travel changes impact the future of work and how business relationships will be conducted

Business travel in the future may look different:
- Duration will shift away from short, repeated trips
- Rationale includes bringing distributed/remote teams together for rapport and training
- Companies must be more flexible and change their business travel operating model

Business travel management has shifted, and some funds reallocated may not return as travel resumes

Companies can update their business travel operating model:
- Train travel managers to manage new risks
- Reassess baseline of business travel spending
- Provide cloud-based, integrated solutions

Impact on future of work from business travel changes

Companies have opportunity to develop hybrid (onsite and remote) work model:
- Favor simplicity – focus on 2-3 most relevant models that support business objectives
- Biggest success factor is to test and learn. Pilot different models and test for 3-6 mo. to learn and refine
Implications for all companies | **Improve business travel sustainability by reducing footprint and engaging suppliers**

Climate considerations are **increasingly important**; improving business travel sustainability can be a key part of a company’s broader **sustainability plan**.

---

### 50% of organizations placed **higher priority** on travel sustainability in past 12 months

Steps for companies to optimize **travel carbon footprint**:

- Develop a realistic **net-zero pledge** or **emissions goal**
- Invest in **online tools** that measure or estimate emissions
- Decide how to reach the **reduction goal** (e.g., reduce trips, optimize meeting locations)

---

**Engaging business travel suppliers** (e.g., airlines, hotels, travel management companies) in climate efforts can make a difference

1. **Pressure from corporate customers** can be effective
2. **Emissions transparency** is difficult, but important to ask for
3. **TMCS** can help push **green initiatives** and gather **data**

---

**Sustainability efforts – examples:**

Technology company shares **sustainability initiatives** with travelers and is pushing hotels to provide better data and emissions reduction targets.

11 large corporations partnered with a global airline to accelerate solutions that **decarbonize aviation** by allowing partners to pay additional for SAF.

---

## Implications for travel companies

Take opportunity to double down on changes accelerated by COVID-19 and reset traditional approaches

<table>
<thead>
<tr>
<th>A. CUSTOMERS AND REVENUE</th>
<th>B. COST AND OPERATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Safety and hygiene</strong></td>
<td><strong>New cost standards</strong></td>
</tr>
<tr>
<td>Continue upholding COVID-19 safety standards and encourage practices such as hygiene, vaccination, etc. Adapt business offerings accordingly</td>
<td>Institutionalize lasting cost structure changes brought on by COVID-19 (e.g., organization and staffing models, capital assets) and establish new baselines</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Demand sensing</strong></th>
<th><strong>Agile planning</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue to refine operational and commercial demand-sensing platforms. Develop omnichannel capabilities that support customer loyalty</td>
<td>Invest in digital and organization capabilities that allow for quick and accurate planning for any possible scenario and scaling up or down of operations as needed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Sustainability</strong></th>
<th><strong>Safety and hygiene</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Push current status quo in sustainability and make longer-term investments that lead to step-change improvements. Explore new innovations and partnerships</td>
<td>Lodging company expanded offerings in remote locations that facilitated distancing, surpassing even 2019 sales</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>Demand sensing</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel distributors are increasingly integrating online and offline offerings (e.g., use digital to upsell)</td>
<td>Continue to refine operational and commercial demand-sensing platforms.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>Sustainability</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Airline replicates sharkskin aerodynamics in coating technology to boost fuel efficiency of cargo jets</td>
<td>Push current status quo in sustainability and make longer-term investments that lead to step-change improvements. Explore new innovations and partnerships</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>Safety and hygiene</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Many ships in cruise industry were scrapped or sold. Opportunity to buy modern ships with better unit costs</td>
<td>Lodging company expanded offerings in remote locations that facilitated distancing, surpassing even 2019 sales</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>Demand sensing</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Airline implemented tool using 1st- and 3rd-party data to estimate staff needs for up to 100 day-of scenarios</td>
<td>Continue to refine operational and commercial demand-sensing platforms.</td>
</tr>
</tbody>
</table>

Sources: BCG case experience and analysis, press search
Mixed travel recovery sentiments across the world as certain regions look to reopen while others remain controlled; various tactics explored in recovery

As of 27 May 2021

EU governments agreed to allow quarantine-free travel for vaccinated tourists from select countries

Israel welcomes first tour group since the onset of the pandemic

"Fortress Australia": Calls to open up borders are meeting resistance

Dubai targets over 5.5 million overseas tourists this year as more restrictions are eased

G20 nations representing world’s largest economies support vaccine passports

With Tokyo Olympics less than 2 months away, U.S. warns Americans not to travel to Japan as cases increase

Singapore-Hong Kong travel bubble likely delayed as COVID-19 restrictions tighten

Virtual tourism can help rebuild travel for a post-pandemic world
DEVELOPMENTS IN TRAVEL AND IMPLICATIONS ACROSS SECTORS

Impact and trends in travel and tourism

Implications from travel recovery for all sectors

UPDATED ANALYSES AND IMPACT

Epidemic progression and virus monitoring

Economic and business impact
Summary dashboard
As of 01 June 2021

Epidemic Progression
Global epidemic snapshot

<table>
<thead>
<tr>
<th>172M</th>
<th>13.6M</th>
<th>3.7M</th>
<th>2B</th>
</tr>
</thead>
<tbody>
<tr>
<td># of cases</td>
<td># of active cases</td>
<td># of fatalities</td>
<td>Vaccine doses administered</td>
</tr>
</tbody>
</table>

- **Month-on-month growth of new cases**
  - Americas
  - Americas (Feb): 0.6x, Mar: 1.0x, Apr: 1.2x, May: 0.8x
  - Americas (Mar): 0.7x, Apr: 0.9x, May: 0.6x
  - Americas (Apr): 0.9x, May: 1.7x
  - Americas (May): 1.0x, June: 0.8x

Consumer Activity

**Mobility**

- **(month vs. Jan '20)**
  - US: Feb -26%, Mar -18%, Apr -15%
  - Europe: Feb -30%, Mar -25%, Apr -24%
  - Japan: Feb -17%, Mar -12%, Apr -12%

- **Domestic air travel tickets booking**
  - US: Feb -37%, Mar 18%, Apr 189%
  - UK: Feb -78%, Mar -47%, Apr 181%
  - China: Feb 15%, Mar 138%, Apr 157%

**Sales**

- **Retail goods sales**
  - US: Feb 6%, Mar 19%, Apr 9%
  - Europe: Feb 0%, Mar 12%, Apr 21%
  - China: Feb 34%, Mar 34%, Apr 18%

- **Passenger vehicle sales**
  - US: Feb -13%, Mar 61%, Apr 113%
  - Germany: Feb -19%, Mar 36%, Apr 90%
  - China: Feb 397%, Mar 75%, Apr 9%

Business Impact

**Stock market performance**

- **Month end vs. 02 Jan '20**
  - S&P500: Feb 17%, Mar 22%, Apr 28%
  - FTSE100: Feb -15%, Mar 12%, Apr -8%
  - CHN SSE: Feb 14%, Mar 12%, Apr 12%

**Volatility Index (S&P500)**

- Feb: 2.2x, Mar: 1.6x, Apr: 1.5x

**International trade**

- **Trade value**
  - US: Feb 2%, Mar 3%, Apr 18%
  - France: Feb 0%, Mar 0%, Apr 29%
  - China: Feb 56%, Mar 26%, Apr 34%

**Industrial production**

- **Purchasing manager’s index**
  - US: Feb 59, Mar 59, Apr 61
  - Germany: Feb 61, Mar 67, Apr 66
  - China: Feb 51, Mar 52, Apr 51

**Steel production**

- US: Feb 5%, Mar 16%, Apr 24%

**To be updated in forthcoming editions**

---

1. Calculated as 7-day rolling average
2. Calculated as monthly average of daily cases vs. previous month
3. Includes Middle East and Oceania
4. IMF April 2021 forecast
5. IMF: Calculated as monthly average of daily cases vs. previous month
6. Mobility is calculated as the average of in-person mobility indicators in workplace, public transit, retail & recreation, and grocery & pharmacy, and compared to a baseline from 03 Jan – 06 Feb 2020. Europe mobility values are calculated as the average of Germany, France, UK, Spain, and Italy
7. Calculated as change in last 30 days rolling average value as compared to same period last year. As of 01 June 2021, Retail goods sales include online & offline sales and comprise food & beverages, apparel, cosmetics & personal care, home appliances, general merchandise, and durable goods. Europe and US exclude freight. US retail goods sales also include food service.
8. Calculated as change in last 30 days rolling average value as compared to same period last year. 9. Calculated as change in last 30 days rolling average value as compared to same period last year. Suppliers: JHU CSSE, Our World in Data, WHO, WorldBank, IMF, Bloomberg, Google Mobility, US Department of Commerce, US Census Bureau, US National Bureau of Statistics, HCA, Nielsen, StatCounter, Google Analytics, STR, Statista, G20, OECD, BEA, IIDEA, BCG, China, BAK, BIS, ING Group, HSBC, Credit Suisse, Morgan Stanley, Fitch Solutions, Danske Bank, Bank of America, Reuters, and BCG. 10. Europe includes 27 countries currently in the EU as of 01 June 2021. 11. For China, Jan & Feb are reported together due to data availability. 12. Passenger vehicle sales include sales of sedans, compact, SUV, MPV, van and pickup; sales data for Jan same month in previous year. 13. Calculated as cumulative sales in February as a percentage of February sales in January. 14. Calculated as cumulative sales in February as a percentage of cumulative sales in January. 15. Includes 27 European Union countries and Russia. 16. Steel production refers to crude steel production in China. 17. Volatility Index (S&P500) is a measure of market risk and investors’ sentiments. 18. Calculated as mean monthly mobilities in workplace, public transit, retail & recreation, and grocery & pharmacy and compared to a baseline from 03 Jan – 06 Feb 2020. - 2. Calculated as monthly average of daily cases vs. previous month. - 3. Includes Middle East and Oceania - 4. IMF April 2021 forecast - 5. For India, forecast is for financial year, for others, it is for calendar year. - IMF: Forecasts range from forecasts (where available) of World Bank, International Monetary Fund, JPMorgan Chase, Morgan Stanley, Bank of America Merrill Lynch, Credit Suisse, Citigroup, UBS, BofA Securities,德银，德意志银行，花旗集团，美银美林，高盛，瑞银，瑞信，摩根士丹利，巴克莱，摩根大通，巴克莱，MDM, MUFG, Morgan Stanley, HSBC, Credit Suisse, Danske Bank, ING Group, HSBC, BCG. - 6. Retrieved on 08 June 2020 from the JHU CSSE website. - 7. As of reports dated 08 June 2020. - 8. During the outbreak, the number of cases was calculated as the average of in-person mobility indicators in workplace, public transit, retail & recreation, and grocery & pharmacy, and compared to a baseline from 03 Jan – 06 Feb 2020. - 9. Europe mobility values are calculated as the average of Germany, France, UK, Spain, and Italy. - 10. Calculated as change in last 30 days rolling average value as compared to same period last year. As of 01 June 2021, Retail goods sales include online & offline sales and comprise food & beverages, apparel, cosmetics & personal care, home appliances, general merchandise, and durable goods. Europe and US exclude freight. US retail goods sales also include food service. - 11. Calculated as change in last 30 days rolling average value as compared to same period last year. Supplies include food service. - 12. Calculated as change in last 30 days rolling average value as compared to same period last year. 13. Underlying data is from Chicago Board Options Exchange Volatility Index (VIX). - 14. Calculated as sum of imports and exports, measured in USD and compared to previous year period. - 15. Purchasing manager’s index (PMI) is a diffusion index that summarizes whether market conditions, as perceived by purchasing managers, are improving or deteriorating. - 16. China steel production is calculated as the sum of crude steel production in China. 17. Calculated as cumulative sales in February as a percentage of cumulative sales in January.
Case counts reduced as vaccine rollout continues, especially in North America and Europe

As of 01 June 2021

Daily new cases (7-day rolling average)

Month-on-month growth of new cases\(^2\):

- North America: 215% 15% 50% 10% 10% 40% 45% 10% 0% (40%) 20% 60% (15%)% 10%
- South America: 10%
- Africa: 60%
- Asia: 10%

1. Includes Oceania (Australia, New Zealand, Papua New Guinea and surrounding island nations of the Pacific ocean); 2. Calculated monthly as average of daily cases compared to previous month daily cases and rounded to nearest 5%. Sources: Johns Hopkins CSSE; Our World in Data; Worldometer; press search; BCG

Key observations

172M
# of confirmed cases

13.6M
# of active cases

3.7M
# of fatalities

India drove massive surge in new cases and recent decline in Asia
Despite progress on vaccination across the world, caution required as concerning variants spread among immune-naïve population

As of 23 May 2021

Time series view of variant frequency

4 variants of concern are ~80% of sequenced samples

Variants of concern compared with wild type

Relative antibody resistance

- B.1.351 – 6% (South Africa)
- B.1.1.7 – 48% (UK)
- P.1/P.2 – 7% (Brazil)
- B.1.617 – 17% (India)

Relative transmissibility

- 1.0x Wild type
- 1.5x
- 2.0x

Note: Several of the concerning variants (e.g., those first identified in the UK and South Africa) share mutations (e.g., N501Y) while also having distinct mutations (some more than others)

Sources: JAMA, Nextstrain, Financial Times, Virological; Centers for Disease Control and Prevention; cov-lineages.org, Lancet Infectious Diseases, press search; Axios variant tracker; Nature
COVID-19 has broad geographic reach today with countries at different stages in their fight

As of 01 June 2021

**Epidemic Progression**

**Continuation**
Curve was never quite flattened; ongoing battle
Daily new confirmed cases per million

**Resurgence**
Curve was flattened but saw one or more resurgences
Daily new confirmed cases per million

**Crush and contain**
Curve was flattened and case counts continue to remain low
Daily new confirmed cases per million

**Vaccinated**
Curve reduced through vaccination progress
Daily new confirmed cases per million

---

1. Data shown as 7 day rolling average of daily new cases per million

Sources: Our World in Data; BCG
Many large economies expected to continue recovery and reach 2019 GDP levels between 2021 and 2022

As of 01 Jun 2021

GDP forecast levels indexed to 2019 value (Base: 100)

**US**
- 2019: 99.8
- 2020: 97.5
- 2021 forecast: 110.1
- 2022 forecast: 114.6

**Europe**
- 2019: 110.1
- 2020: 99.7
- 2021 forecast: 109.9
- 2022 forecast: 112.6

**China**
- 2019: 100
- 2020: 97.1
- 2021 forecast: 104
- 2022 forecast: 107.4

**Japan**
- 2019: 122.6
- 2020: 117.1
- 2021 forecast: 117.1
- 2022 forecast: 115.8

**India**
- 2019: 137.7
- 2020: 110.8
- 2021 forecast: 110.9
- 2022 forecast: 115.8

2021 forecast vs. 2019

- **US**: 99-104%
- **Europe**: 96-98%
- **China**: 107-115%
- **Japan**: 97-99%
- **India**: 99-108%

Note: As of reports dated 08 June 2020 to 01 Mar 2021, YoY forecast 2020 values are estimated actual GDP; 1. For India, forecast is for financial year; for other countries, the forecast is for calendar year; 2. Range from forecasts (where available) of JPMorgan Chase; Morgan Stanley; Bank of America; Fitch Solutions; Credit Suisse; Danske Bank; ING Group; HSBC; Sources: Bloomberg; World Bank; IMF; BCG
Retail and recreation mobility recovered fastest; public transit mobility remains lower in most countries

As of 31 May 2021

Workplace¹, public transit², and retail and recreation³ mobility compared with baseline of January 2020 to February 2020

1. Tracked as changes in visits to workplaces; 2. Tracked as changes in visits to public transport hubs, such as underground, bus and train stations; 3. Tracked as changes for restaurants, cafés, shopping centers, theme parks, museums, libraries and cinemas; 4. Refers to average lockdown start and easing dates for larger lockdowns; Note: Data taken as weekly average compared with baseline (average of all daily values of respective weeks during Feb 15 2020–Feb 28 2021); Sources: Google LLC "Google COVID-19 Community Mobility Reports". https://www.google.com/covid19/mobility/ Accessed: 01 Mar 2020; Press search; BCG

Economic Impact

Retail and recreation mobility recovered fastest; public transit mobility remains lower in most countries

As of 31 May 2021

Workplace¹, public transit², and retail and recreation³ mobility compared with baseline of January 2020 to February 2020

1. Tracked as changes in visits to workplaces; 2. Tracked as changes in visits to public transport hubs, such as underground, bus and train stations; 3. Tracked as changes for restaurants, cafés, shopping centers, theme parks, museums, libraries and cinemas; 4. Refers to average lockdown start and easing dates for larger lockdowns; Note: Data taken as weekly average compared with baseline (average of all daily values of respective weeks during Feb 15 2020–Feb 28 2021); Sources: Google LLC "Google COVID-19 Community Mobility Reports". https://www.google.com/covid19/mobility/ Accessed: 01 Mar 2020; Press search; BCG

19
Manufacturing PMI recovery globally indicates continued positive momentum

*As of 01 June 2021*

### Manufacturing PMI before, during, and after the crisis

<table>
<thead>
<tr>
<th>Country</th>
<th>Neutral level = 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td></td>
</tr>
<tr>
<td>South Korea</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
</tr>
</tbody>
</table>

#### Economic Impact

<table>
<thead>
<tr>
<th>Date</th>
<th>Economic Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>As of 01 June 2021</td>
<td></td>
</tr>
</tbody>
</table>

1. Lockdown dates are only pertaining to Hubei province; Note: PMI (Purchasing Manager’s Index) is a diffusion index that summarizes whether market conditions, as viewed by purchasing managers, are expanding, staying the same, or contracting. 50 is neutral, >50 is considered to be positive sentiment and <50 is considered to be negative sentiment; Sources: Markit South Korea Manufacturing PMI SA; Jibun Bank Japan Manufacturing PMI SA; China Manufacturing PMI SA; Swedbank Sweden PMI SA; Markit/BME Germany Manufacturing PMI SA; Markit Italy Manufacturing PMI SA; Markit US Manufacturing PMI SA; EIKON

Copyright © 2021 by Boston Consulting Group. All rights reserved. BCG Executive Perspectives updated 10 June 2021 Version 2.0
Monthly passenger vehicle sales show promising upward trends

As of 01 June 2021

Monthly passenger vehicle\(^1\) sales, YOY % change vs. past year

**US**

<table>
<thead>
<tr>
<th>Month</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>-47%</td>
<td>-30%</td>
<td>-12%</td>
<td>-20%</td>
<td>-14%</td>
<td>-3%</td>
<td>-13%</td>
<td>6%</td>
<td>1%</td>
<td>6%</td>
<td>6%</td>
<td>61%</td>
<td>113%</td>
</tr>
</tbody>
</table>

**Germany**

<table>
<thead>
<tr>
<th>Month</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>-61%</td>
<td>-49%</td>
<td>-32%</td>
<td>-20%</td>
<td>-4%</td>
<td>-3%</td>
<td>-31%</td>
<td>-19%</td>
<td>36%</td>
<td>90%</td>
<td>36%</td>
<td>4%</td>
<td>6%</td>
</tr>
</tbody>
</table>

**China\(^2\)**

<table>
<thead>
<tr>
<th>Month</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>1%</td>
<td>11%</td>
<td>9%</td>
<td>14%</td>
<td>9%</td>
<td>10%</td>
<td>11%</td>
<td>12%</td>
<td>6%</td>
<td>28%</td>
<td>75%</td>
<td>9%</td>
<td>6%</td>
</tr>
</tbody>
</table>

**Italy**

<table>
<thead>
<tr>
<th>Month</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>-97%</td>
<td>-48%</td>
<td>-23%</td>
<td>-8%</td>
<td>2%</td>
<td>9%</td>
<td>1%</td>
<td>461</td>
<td>2,646%</td>
<td>14%</td>
<td>47%</td>
<td>9%</td>
<td>6%</td>
</tr>
</tbody>
</table>

**South Korea\(^3\)**

<table>
<thead>
<tr>
<th>Month</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>13%</td>
<td>14%</td>
<td>9%</td>
<td>17%</td>
<td>0%</td>
<td>7%</td>
<td>21%</td>
<td>29%</td>
<td>6%</td>
<td>13%</td>
<td>14%</td>
<td>9%</td>
<td>6%</td>
</tr>
</tbody>
</table>

**Sweden**

<table>
<thead>
<tr>
<th>Month</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>-38%</td>
<td>-50%</td>
<td>-26%</td>
<td>-7%</td>
<td>-20%</td>
<td>-14%</td>
<td>-35%</td>
<td>26%</td>
<td>9%</td>
<td>11%</td>
<td>86%</td>
<td>6%</td>
<td>6%</td>
</tr>
</tbody>
</table>

**Japan**

<table>
<thead>
<tr>
<th>Month</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>-29%</td>
<td>-45%</td>
<td>-23%</td>
<td>-15%</td>
<td>-13%</td>
<td>-15%</td>
<td>29%</td>
<td>7%</td>
<td>10%</td>
<td>7%</td>
<td>1%</td>
<td>6%</td>
<td>31%</td>
</tr>
</tbody>
</table>

---

1. Passenger vehicle sales includes data on, where available, hatchback, MPV, pickup, sedan, SUV, mini trucks, light trucks, and vans; 2. Stimulus policies: Launched subsidies for car purchases in 10 cities, lessened purchase restriction in high tier cities and extended NEV subsidies; 3. South Korea’s growth in auto sales from Mar through June 2020 is supported by recent tax cuts for individual consumption goods (e.g., cars), several carmakers (e.g. Audi, VW) launching new models and the increased appreciation by the Koreans of cars as a safe mode of transport and as a travel alternative for camping during COVID-19, supported by recently passed legislation to allow a variety of different cars to be modified into ‘camping cars’

Sources: Marklines; BCG
Retail goods sales (excluding auto and fuel) have grown compared with pre-COVID-19 levels in most countries

As of 01 Jun 2021

Growth of retail goods sales (excluding auto and fuel)\(^1\), YOY % change vs. same month past year

Retail goods sales include online and offline sales and comprise food and beverages, apparel, cosmetics and personal care, home appliances, general merchandise, building material; do not include auto, fuel, and food services

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>1%</td>
<td>-15%</td>
<td>-4%</td>
<td>3%</td>
<td>4%</td>
<td>5%</td>
<td>7%</td>
<td>6%</td>
<td>5%</td>
<td>2%</td>
<td>10%</td>
<td>6%</td>
<td>19%</td>
<td>-</td>
</tr>
<tr>
<td>UK(^2)</td>
<td>-5%</td>
<td>-18%</td>
<td>-9%</td>
<td>1%</td>
<td>3%</td>
<td>5%</td>
<td>6%</td>
<td>8%</td>
<td>5%</td>
<td>6%</td>
<td>-4%</td>
<td>-2%</td>
<td>8%</td>
<td>38%</td>
</tr>
<tr>
<td>Spain</td>
<td>-13%</td>
<td>-29%</td>
<td>-18%</td>
<td>-5%</td>
<td>-3%</td>
<td>-3%</td>
<td>-3%</td>
<td>-2%</td>
<td>-5%</td>
<td>-1%</td>
<td>-9%</td>
<td>-6%</td>
<td>13%</td>
<td>38%</td>
</tr>
<tr>
<td>Sweden</td>
<td>2%</td>
<td>-3%</td>
<td>2%</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
<td>3%</td>
<td>5%</td>
<td>0%</td>
<td>2%</td>
<td>3%</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Belgium</td>
<td>-1%</td>
<td>-8%</td>
<td>5%</td>
<td>7%</td>
<td>1%</td>
<td>14%</td>
<td>5%</td>
<td>8%</td>
<td>-3%</td>
<td>5%</td>
<td>6%</td>
<td>10%</td>
<td>13%</td>
<td>18%</td>
</tr>
<tr>
<td>China(^3)</td>
<td>-12%</td>
<td>-6%</td>
<td>-1%</td>
<td>2%</td>
<td>-2%</td>
<td>-1%</td>
<td>2%</td>
<td>1%</td>
<td>4%</td>
<td>4%</td>
<td>34%</td>
<td>34%</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>1%</td>
<td>-6%</td>
<td>-2%</td>
<td>9%</td>
<td>7%</td>
<td>7%</td>
<td>1%</td>
<td>12%</td>
<td>8%</td>
<td>6%</td>
<td>3%</td>
<td>5%</td>
<td>4%</td>
<td>9%</td>
</tr>
</tbody>
</table>

1. Retail goods sales categorization may be different across countries; seasonally adjusted values taken; country-specific categorization
2. UK figures includes total retail sales excluding automotive fuels sourced from Office for National Statistics United Kingdom as data is no longer reported in Eurostat after Brexit. For China, Jan & Feb 2021 are reported together due to national holidays

Sources: US Census Bureau; PRC National Bureau of Statistics; Eurostat; Office for National Statistics United Kingdom; Ministry of Economy Japan

Retail goods sales have **rebounded** with YoY growth seen in most countries

US has seen **consistent retail sales growth** since mid 2020

China has seen **very strong retail growth** in 2021 compared YoY with early months of 2020, when it had strict lockdowns

Some European countries have seen retail sales dips coinciding with increased cases and lockdowns
Retail store sales in China have rebounded across categories; apparel sales continue to be impacted in other countries

As of 01 Jun 2021

Retail store sales breakdown by category, YoY % change vs. same month in past year

<table>
<thead>
<tr>
<th>Category</th>
<th>June '21</th>
<th>July '21</th>
<th>Aug '21</th>
<th>Sep '21</th>
<th>Oct '21</th>
<th>Nov '21</th>
<th>Dec '21</th>
<th>Jan '22</th>
<th>Feb '22</th>
<th>Mar '22</th>
<th>Apr '22</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>US</strong></td>
<td>-24%</td>
<td>-23%</td>
<td>-20%</td>
<td>-9%</td>
<td>-11%</td>
<td>-16%</td>
<td>-16%</td>
<td>-7%</td>
<td>-11%</td>
<td>115%</td>
<td>-</td>
</tr>
<tr>
<td><strong>UK</strong></td>
<td>-35%</td>
<td>-24%</td>
<td>-16%</td>
<td>-14%</td>
<td>-13%</td>
<td>-32%</td>
<td>-15%</td>
<td>-47%</td>
<td>-53%</td>
<td>-11%</td>
<td>207%</td>
</tr>
<tr>
<td><strong>Spain</strong></td>
<td>-29%</td>
<td>-24%</td>
<td>-24%</td>
<td>-23%</td>
<td>-23%</td>
<td>-34%</td>
<td>-22%</td>
<td>-36%</td>
<td>-35%</td>
<td>111%</td>
<td>667%</td>
</tr>
<tr>
<td><strong>Sweden</strong></td>
<td>-22%</td>
<td>-22%</td>
<td>-18%</td>
<td>-14%</td>
<td>-14%</td>
<td>-25%</td>
<td>-30%</td>
<td>-26%</td>
<td>-20%</td>
<td>21%</td>
<td>17%</td>
</tr>
<tr>
<td><strong>Belgium</strong></td>
<td>-11%</td>
<td>-25%</td>
<td>-16%</td>
<td>-7%</td>
<td>-8%</td>
<td>-48%</td>
<td>-4%</td>
<td>-6%</td>
<td>-5%</td>
<td>57%</td>
<td>91%</td>
</tr>
<tr>
<td><strong>China¹</strong></td>
<td>0%</td>
<td>-3%</td>
<td>2%</td>
<td>6%</td>
<td>10%</td>
<td>5%</td>
<td>4%</td>
<td>48%</td>
<td>69%</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td><strong>Japan</strong></td>
<td>-6%</td>
<td>-39%</td>
<td>-18%</td>
<td>-24%</td>
<td>-4%</td>
<td>-8%</td>
<td>-5%</td>
<td>-18%</td>
<td>-17%</td>
<td>13%</td>
<td>64%</td>
</tr>
</tbody>
</table>

1. For China, Jan & Feb 2021 are reported together due to National Holidays. Food & beverages category only includes food & grains; 2. UK data set switched over from Eurostat to Office for National Statistics following Brexit. 3. Includes clothing accessories, shoes, etc.; 4. Includes audio video & home appliances stores; Note: For US, share in retail store sales in Q4 2019: F&B ~25%, personal care & cosmetics ~12%, apparel ~6%, home appliances ~3%, general merchandising ~25% and building material & gardening equipment ~13%. Sector classification & mix may be different across countries; Sources: US Census Bureau; PRC National Bureau of Statistics; Eurostat; Office for National Statistics United Kingdom, Ministry of Economy Japan

China’s sales in all categories have seen strong rebounds in 2021 (except food & beverage, which maintains a similar growth rate to that in 2020)

Retail store sales recovery driven by F&B across all countries

Apparel category saw the largest decline; continued fluctuations and beginning recovery across countries

Home appliances sales have had mixed development across countries
Stock markets continue to have an optimistic outlook: 19 out of 24 sectors currently above pre-crisis TSR levels

As of 01 Jun 2021

<table>
<thead>
<tr>
<th>Sector</th>
<th>21 Feb 2020–20 Mar 2020</th>
<th>21 Feb 2020–31 May 2021</th>
<th>Companies with default probability &gt;15%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semiconductors</td>
<td>-30%</td>
<td>57%</td>
<td>0%</td>
</tr>
<tr>
<td>Materials</td>
<td>-32%</td>
<td>39%</td>
<td>0%</td>
</tr>
<tr>
<td>Durable Goods</td>
<td>-39%</td>
<td>36%</td>
<td>0%</td>
</tr>
<tr>
<td>Tech Hardware</td>
<td>-26%</td>
<td>32%</td>
<td>0%</td>
</tr>
<tr>
<td>Retailing</td>
<td>-40%</td>
<td>31%</td>
<td>0%</td>
</tr>
<tr>
<td>Media</td>
<td>-36%</td>
<td>31%</td>
<td>0%</td>
</tr>
<tr>
<td>Capital Goods</td>
<td>-35%</td>
<td>26%</td>
<td>2%</td>
</tr>
<tr>
<td>Auto</td>
<td>-41%</td>
<td>25%</td>
<td>0%</td>
</tr>
<tr>
<td>Financials</td>
<td>-35%</td>
<td>22%</td>
<td>0%</td>
</tr>
<tr>
<td>Software</td>
<td>-30%</td>
<td>15%</td>
<td>0%</td>
</tr>
<tr>
<td>Health Equipment</td>
<td>-31%</td>
<td>15%</td>
<td>0%</td>
</tr>
<tr>
<td>Prof. Services</td>
<td>-30%</td>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td>Hospitality</td>
<td>-44%</td>
<td>9%</td>
<td>0%</td>
</tr>
<tr>
<td>Insurance</td>
<td>-39%</td>
<td>8%</td>
<td>0%</td>
</tr>
<tr>
<td>Food/Staples Retail</td>
<td>-10%</td>
<td>8%</td>
<td>0%</td>
</tr>
<tr>
<td>Household Products</td>
<td>-16%</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>Banks</td>
<td>-39%</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>Pharma</td>
<td>-20%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Food &amp; Beverage</td>
<td>-23%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Telecom</td>
<td>-17%</td>
<td>-3%</td>
<td>0%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>-39%</td>
<td>-4%</td>
<td>0%</td>
</tr>
<tr>
<td>Energy</td>
<td>-52%</td>
<td>-5%</td>
<td>0%</td>
</tr>
<tr>
<td>Utilities</td>
<td>-30%</td>
<td>-7%</td>
<td>0%</td>
</tr>
<tr>
<td>Transport</td>
<td>-34%</td>
<td>-14%</td>
<td>24%</td>
</tr>
</tbody>
</table>

1. Performance is tracked for two periods, first from 21 February 2020 (before international acceleration of outbreak) to 20 March 2020 (trough of the market) and from 21 February 2020 through 31 May 2021; 2. Implied by 5-year credit default swap based on median; Note: Based on top S&P Global 1200 companies; sectors are based on GICS definitions; Sources: S&P Capital IQ; BCG ValueScience Center; BCG
Additional perspectives on travel and tourism

The Science Behind Why People Have Missed Traveling

With Business Travel Up in the Air, What’s Next for Airlines?

How the Disruption of Air, Cruise, and Hotel Capacity Created Unique Opportunities

Travel Distributors Must Deliver a Seamless Customer Experience

Breaking Ground on a New Era in Lodging

BCG Travel Recovery Insights Portal

How Travel Companies Can Emerge Stronger from COVID-19

Why Airlines’ Network Planning Must Be Bionic

Bionic Revenue Management in Travel and Tourism
The services and materials provided by Boston Consulting Group (BCG) are subject to BCG’s Standard Terms (a copy of which is available upon request) or such other agreement as may have been previously executed by BCG. BCG does not provide legal, accounting, or tax advice. The Client is responsible for obtaining independent advice concerning these matters. This advice may affect the guidance given by BCG. Further, BCG has made no undertaking to update these materials after the date hereof, notwithstanding that such information may become outdated or inaccurate.

The materials contained in this presentation are designed for the sole use by the board of directors or senior management of the Client and solely for the limited purposes described in the presentation. The materials shall not be copied or given to any person or entity other than the Client (“Third Party”) without the prior written consent of BCG. These materials serve only as the focus for discussion; they are incomplete without the accompanying oral commentary and may not be relied on as a stand-alone document. Further, Third Parties may not, and it is unreasonable for any Third Party to, rely on these materials for any purpose whatsoever. To the fullest extent permitted by law (and except to the extent otherwise agreed in a signed writing by BCG), BCG shall have no liability whatsoever to any Third Party, and any Third Party hereby waives any rights and claims it may have at any time against BCG with regard to the services, this presentation, or other materials, including the accuracy or completeness thereof. Receipt and review of this document shall be deemed agreement with and consideration for the foregoing.

BCG does not provide fairness opinions or valuations of market transactions, and these materials should not be relied on or construed as such. Further, the financial evaluations, projected market and financial information, and conclusions contained in these materials are based upon standard valuation methodologies, are not definitive forecasts, and are not guaranteed by BCG. BCG has used public and/or confidential data and assumptions provided to BCG by the Client. BCG has not independently verified the data and assumptions used in these analyses. Changes in the underlying data or operating assumptions will clearly impact the analyses and conclusions.

The situation surrounding COVID-19 is dynamic and rapidly evolving, on a daily basis. Although we have taken great care prior to producing this presentation, it represents BCG’s view at a particular point in time. This presentation is not intended to: (i) constitute medical or safety advice, nor be a substitute for the same; nor (ii) be seen as a formal endorsement or recommendation of a particular response. As such you are advised to make your own assessment as to the appropriate course of action to take, using this presentation as guidance. Please carefully consider local laws and guidance in your area, particularly the most recent advice issued by your local (and national) health authorities, before making any decision.