The COVID-19 impact on Consumption in Real Time and High Definition
A Big Data BBVA Research Project

Monthly presentation
June, 2021
The outstanding consumption growth rates in May were lower given that the Covid-19 impact in May 2020 started to correct.
Consumption daily rates kept adjusting in most of the countries until the end of the month, but all of them continued to be positive.

Source: BBVA Research. Spending at BBVA POS by BBVA and non-BBVA customers plus spending by BBVA customers at non-BBVA POS. This data considers final expenditures, so not intermediate consumption is included. Therefore, the correspondence with national accounts household consumption is not fully equivalent. More detail about the data could be found in the following [link].
Consumption Diffusion Heat Map: the growth rates corrections were different across all countries and sectors.

BBVA RESEARCH BIG DATA CONSUMPTION HEAT MAP (YoY, 7D cumulative)

<table>
<thead>
<tr>
<th>Total consumption</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>2020</td>
<td>2021</td>
</tr>
<tr>
<td>Turkey</td>
<td>2020</td>
<td>2021</td>
</tr>
<tr>
<td>Mexico</td>
<td>2020</td>
<td>2021</td>
</tr>
<tr>
<td>Colombia</td>
<td>2020</td>
<td>2021</td>
</tr>
<tr>
<td>Peru</td>
<td>2020</td>
<td>2021</td>
</tr>
<tr>
<td>Argentina</td>
<td>2020</td>
<td>2021</td>
</tr>
<tr>
<td>Food</td>
<td>2020</td>
<td>2021</td>
</tr>
<tr>
<td>Health</td>
<td>2020</td>
<td>2021</td>
</tr>
<tr>
<td>Transport</td>
<td>2020</td>
<td>2021</td>
</tr>
<tr>
<td>Restaurants</td>
<td>2020</td>
<td>2021</td>
</tr>
<tr>
<td>Entertainment</td>
<td>2020</td>
<td>2021</td>
</tr>
<tr>
<td>Hotels</td>
<td>2020</td>
<td>2021</td>
</tr>
</tbody>
</table>

Series are coloured according to the history of each series since March 20 until the end of the series. The darker blue represents the lower 90% percentile and the lighter one represents the upper 10% percentile.
The mobility related sectors are on the road to recovery across sectors and countries, but a different pace.

BBVA RESEARCH BIG DATA CONSUMPTION INDICES IN MAY
(Consumption by card, % YoY and ratio 2021/2019 comparing the same week, 7D cumulative)

RESTAURANTS
- Spain: 140%
- Turkey: 140%
- Mexico: 140%
- Colombia: 300%
- Peru: 140%
- Argentina: 300%

HOTELS
- Spain: 140%
- Turkey: 140%
- Mexico: 140%
- Colombia: 300%
- Peru: 140%
- Argentina: 300%

ENTERTAINMENT
- Spain: 140%
- Turkey: 140%
- Mexico: 140%
- Colombia: 300%
- Peru: 140%
- Argentina: 300%

TRANSPORT
- Spain: 140%
- Turkey: 140%
- Mexico: 140%
- Colombia: 300%
- Peru: 140%
- Argentina: 300%

Source: BBVA Research.
Technology matters: the gap between e-commerce and physical purchases narrowed during May

BBVA RESEARCH BIG DATA CONSUMPTION INDICES: PHYSICAL VS ONLINE
(Total consumption by Point of Sales. % YoY, 7D cumulative. Pie chart reflects the proportion of online and physical purchases in 2019)

Source: BBVA Research,* In the case of Spain, the online series considers non physical data, which includes online purchases, as well as purchases done by call, mobile phone using apps, by postal code or online suscriptions. ** USA = Proxyed by USA Sunbelt.
The COVID-19 impact on Consumption in Real Time and High Definition
A Big Data BBVA Research Project

Monthly presentation
June, 2021