

The COVID-19 impact on Consumption in Real Time and High Definition

A Big Data BBVA Research Project

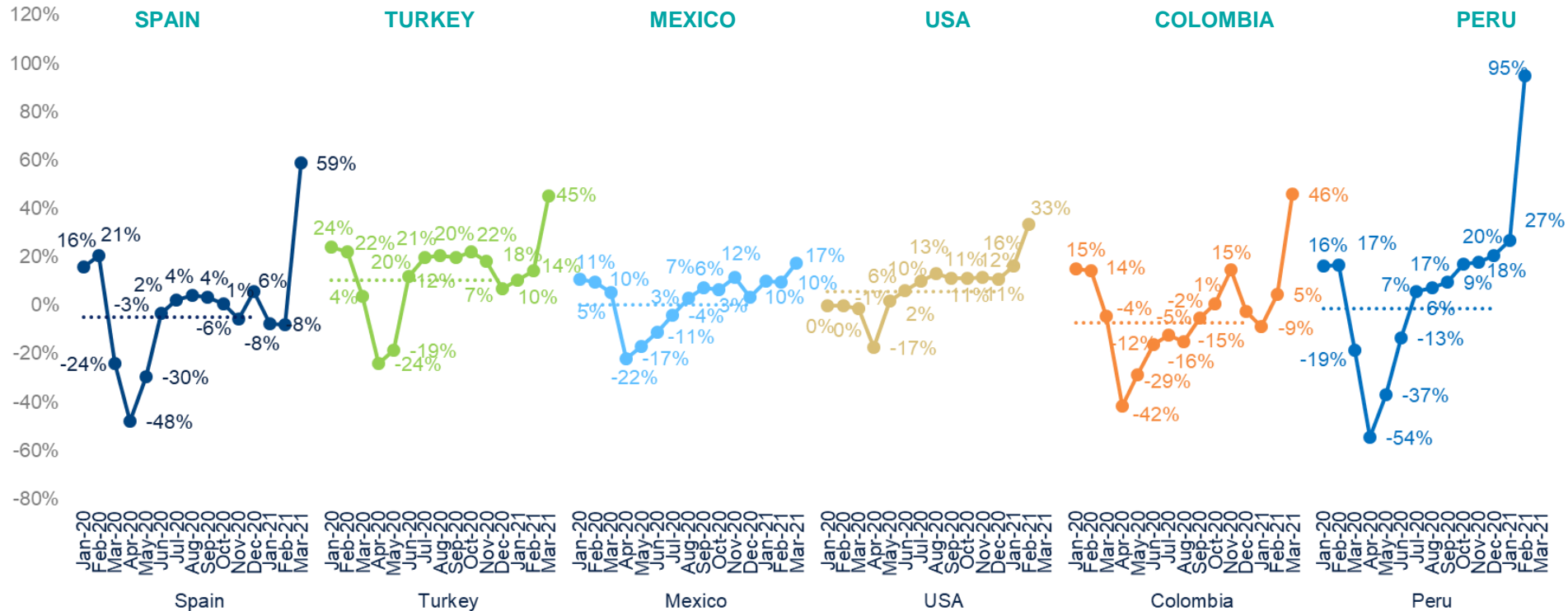
Monthly presentation

April, 2021

Consumption growth sharply accelerated during March compared with last year lockdowns

BBVA RESEARCH BIG DATA CONSUMPTION INDICES: TOTAL CONSUMPTION EVOLUTION IN 2020 AND 2021

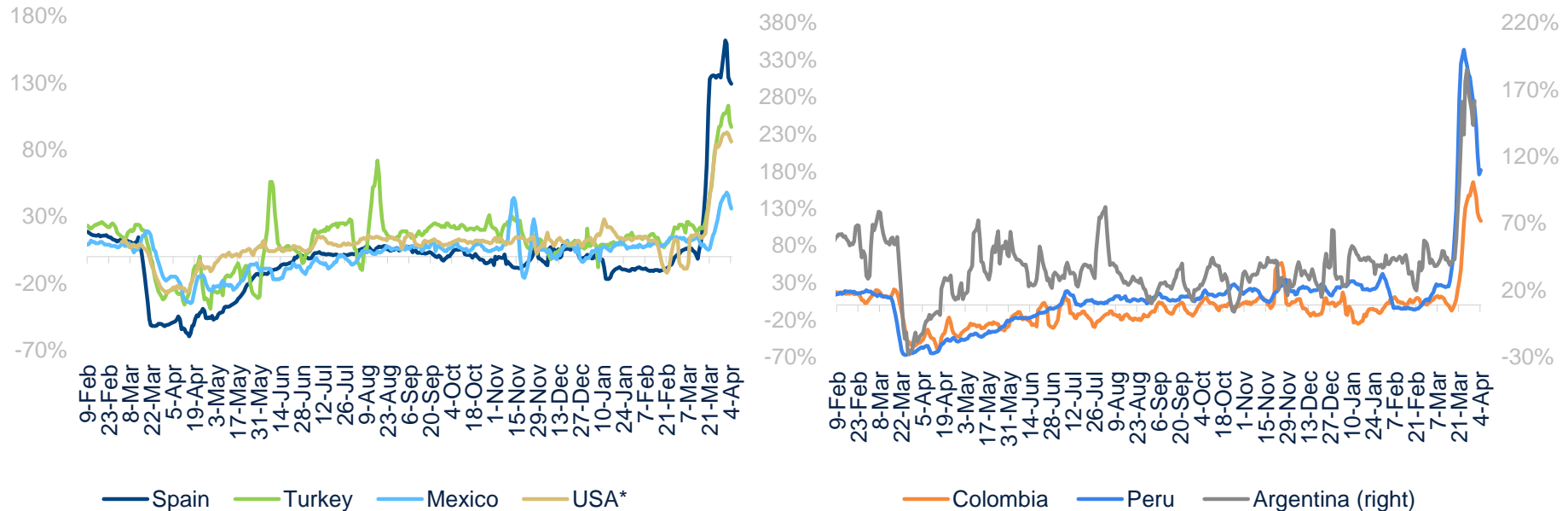
(% daily YoY average by month and year. Dashed line shows the 2020 average growth by country)



The acceleration of consumption was specially high during the second half of March and particularly in Spain and Peru

BBVA RESEARCH BIG DATA CONSUMPTION INDICES

(Total consumption by card, % YoY, 7D cumulative)

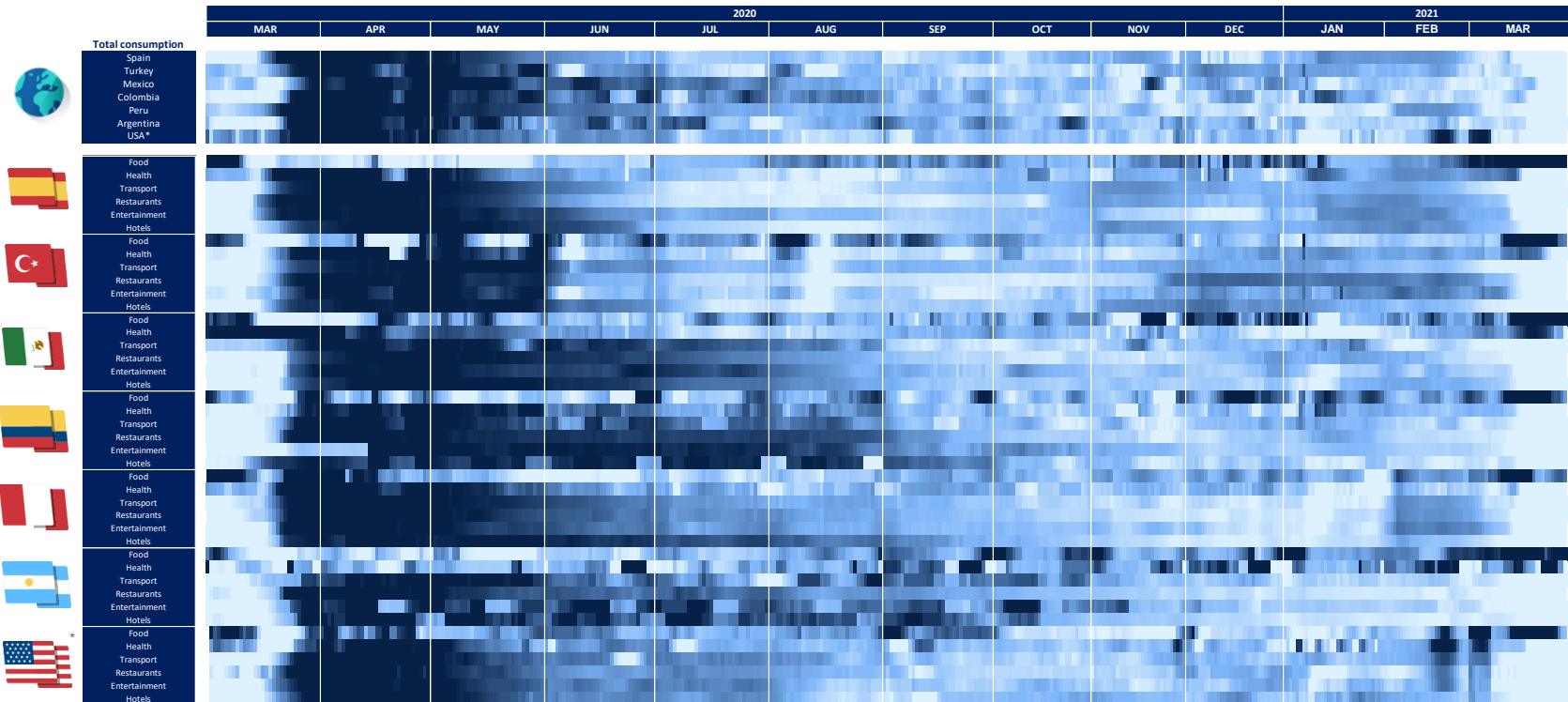


Source: BBVA Research. * Proxied by USA Sunbelt

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: this increasing growth rates are observed across all countries and sectors

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



*Proxied by USA Sunbelt. Source: BBVA Research.

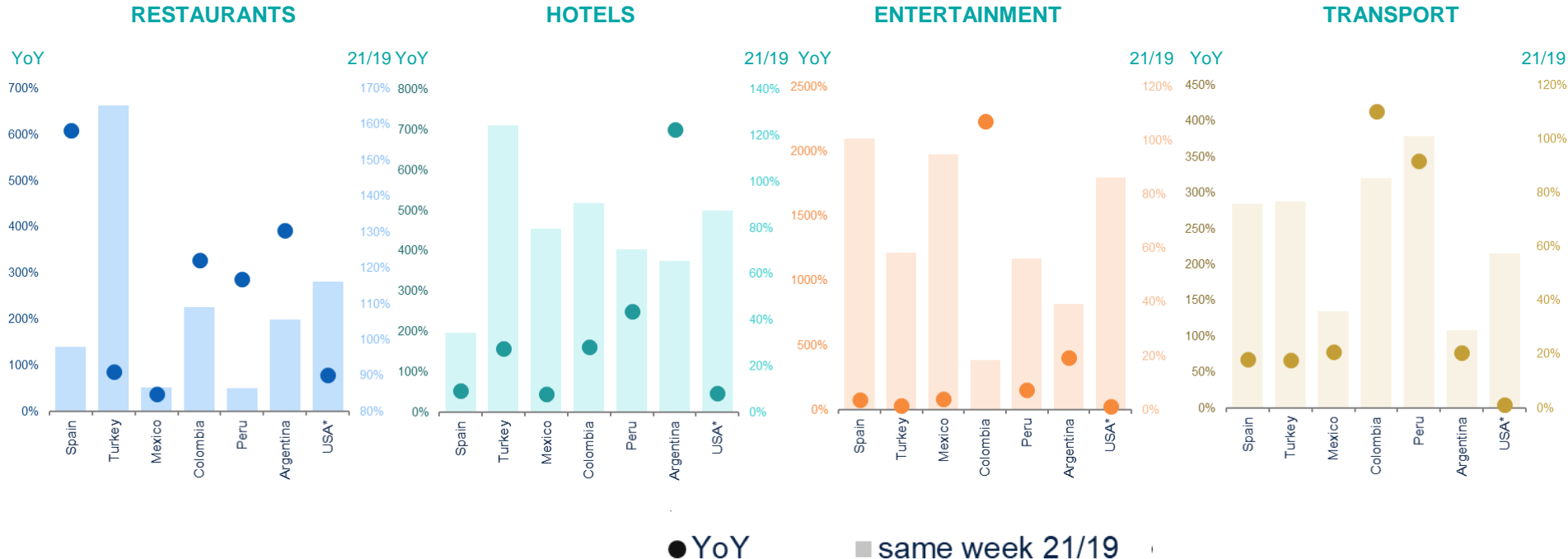
Lower Growth Higher Growth

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 recovery is uneven across sectors and countries. Sharp increases in yoy terms, even with the comparison with the pre covid-19 period

BBVA RESEARCH BIG DATA CONSUMPTION INDICES

(Consumption by card, % YoY and ratio 2021/2019 comparing the same week, 7D cumulative)

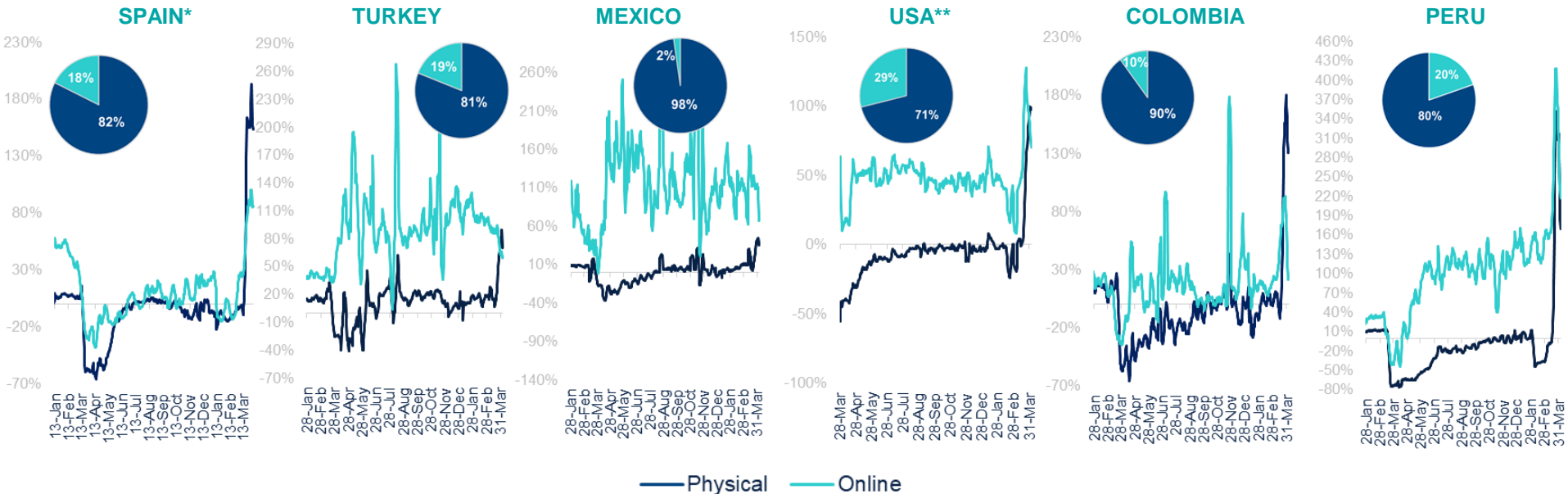


Source: BBVA Research. * USA = Proxied by USA Sunbelt

Technology matters: the gap between e-commerce and physical purchases keeps in most of countries

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 subscriptions. ** USA = Proxied by USA Sunbelt.

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