

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

A Big Data BBVA Research Project

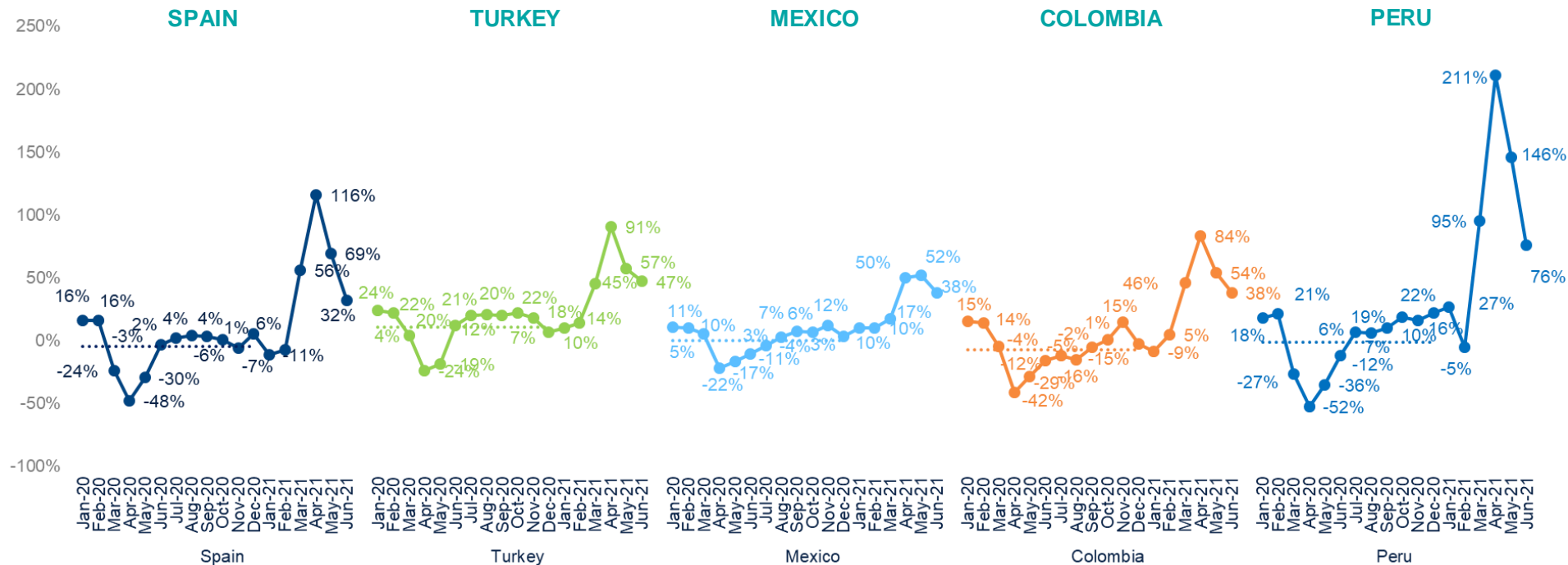
Monthly presentation

July, 2021

Consumption growth rates remained high in June despite most of the base effect on year over year terms having been corrected

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

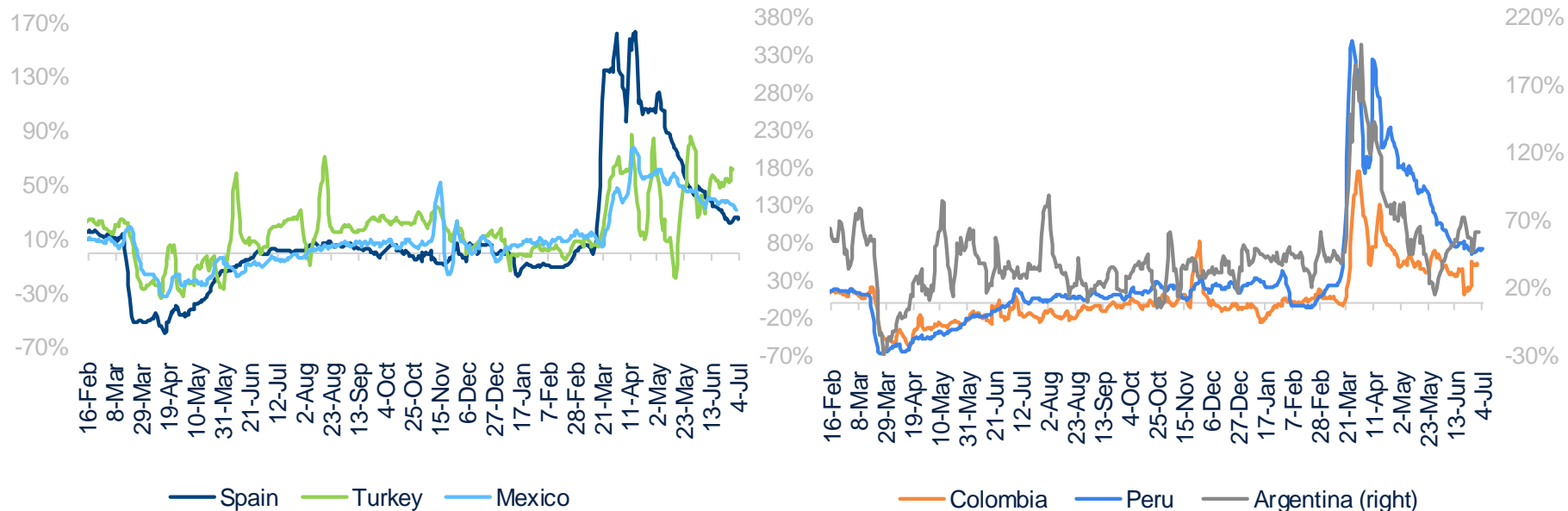
(% daily YoY average by month and year. Dashed line shows the 2020 average growth by country)



Daily growth rates show a stabilization of consumption patterns over the month

BBVA RESEARCH BIG DATA CONSUMPTION INDICES

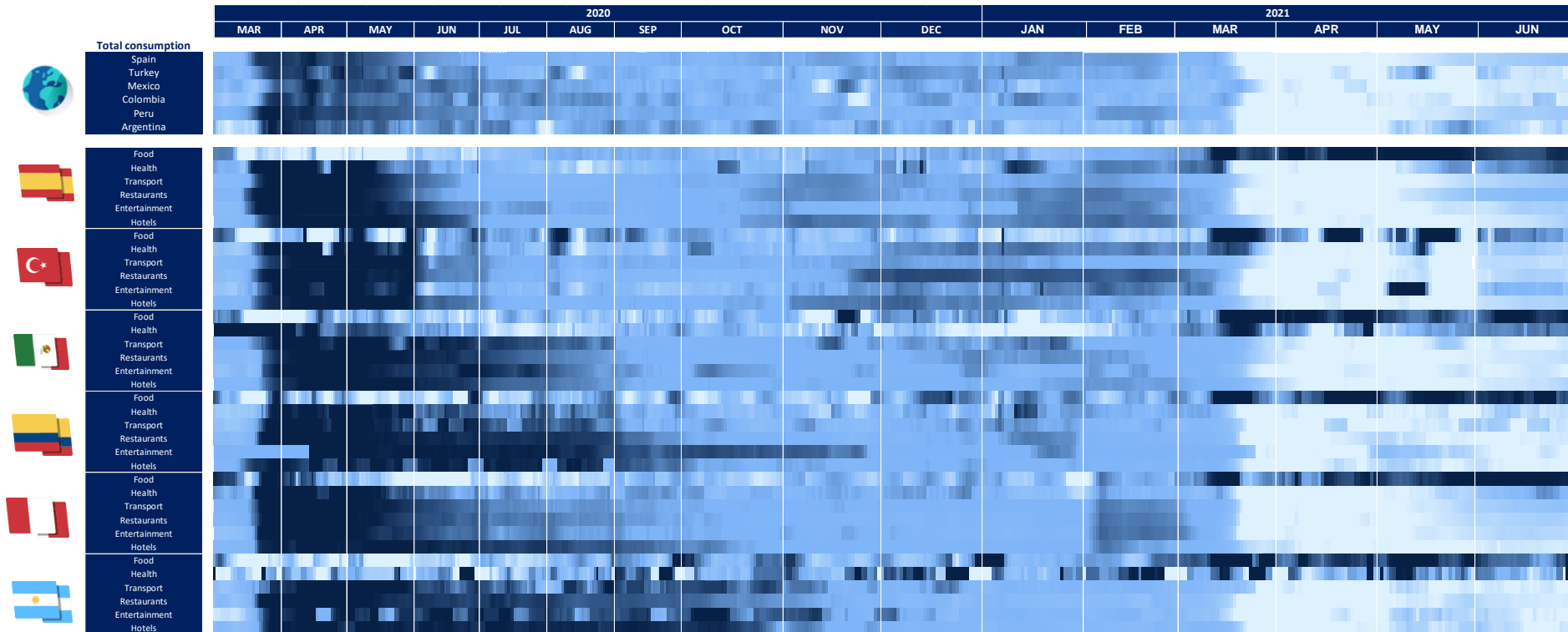
(Total consumption by card, % YoY, 7D cumulative)



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 higher in Spain, Turkey and Peru during June

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



Lower Growth Higher Growth

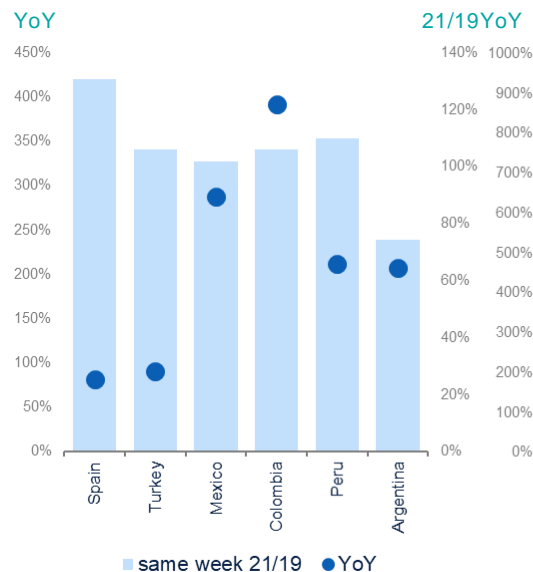
Series are coloured according to the history of each series since March 20 until the end of the series. The darker blue represents the lower 90% percentile and the lighter one represents the upper 10% percentile.

The mobility related sectors kept having a different recovery pace across sectors and countries, with the restaurants sector standing out

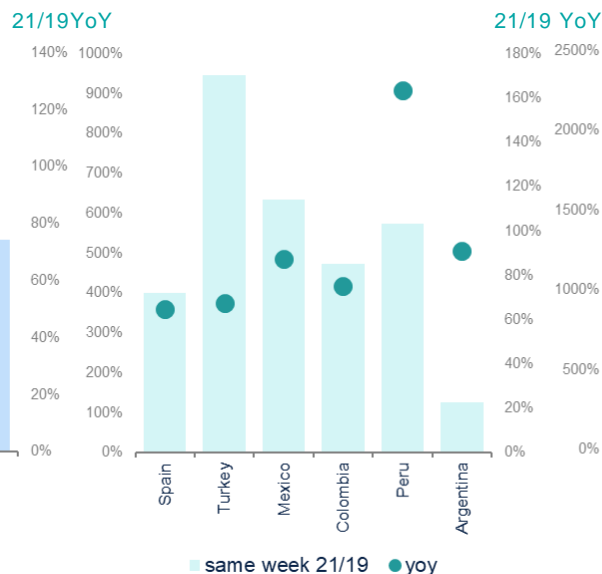
BBVA RESEARCH BIG DATA CONSUMPTION INDICES IN JUNE

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

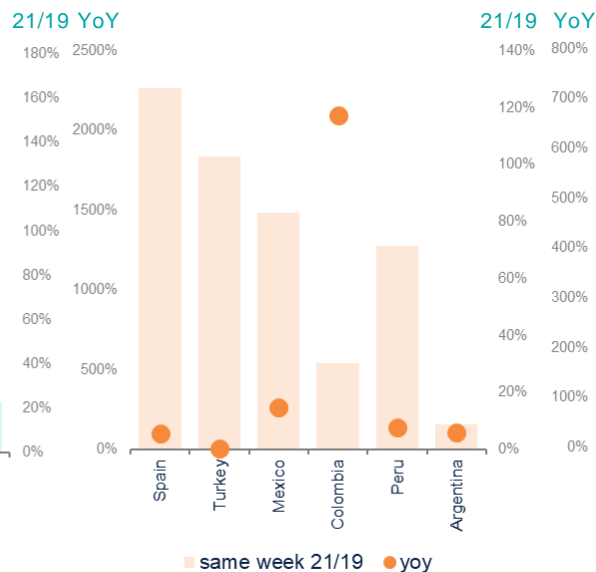
RESTAURANTS



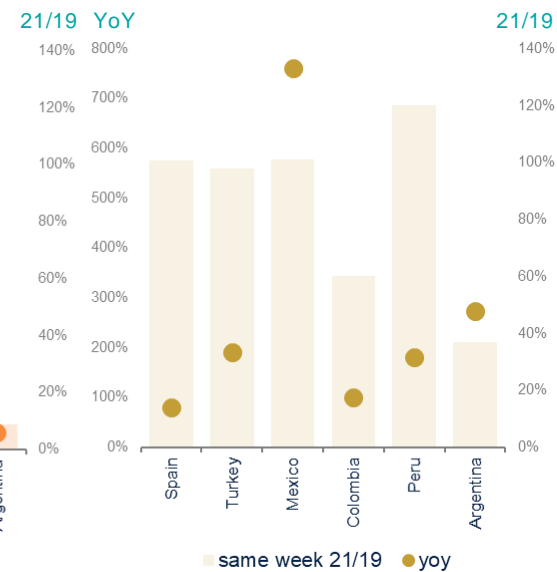
HOTELS



ENTERTAINMENT



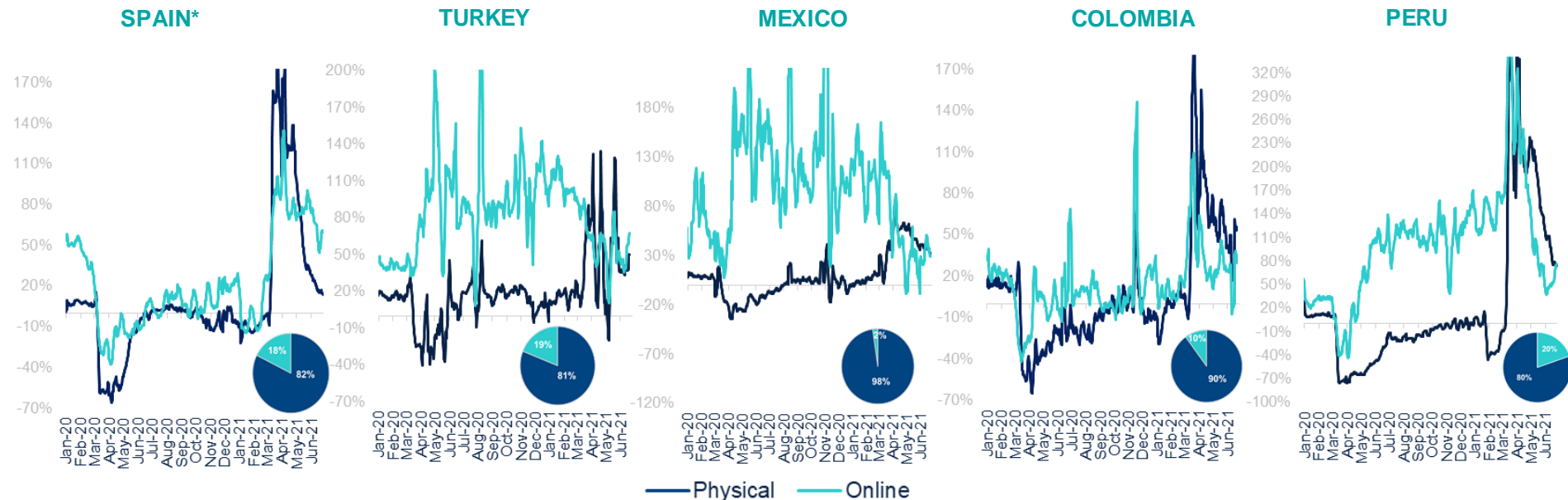
TRANSPORT



On year over year terms, the gap between e-commerce and physical purchases narrowed given last year's base effect

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)

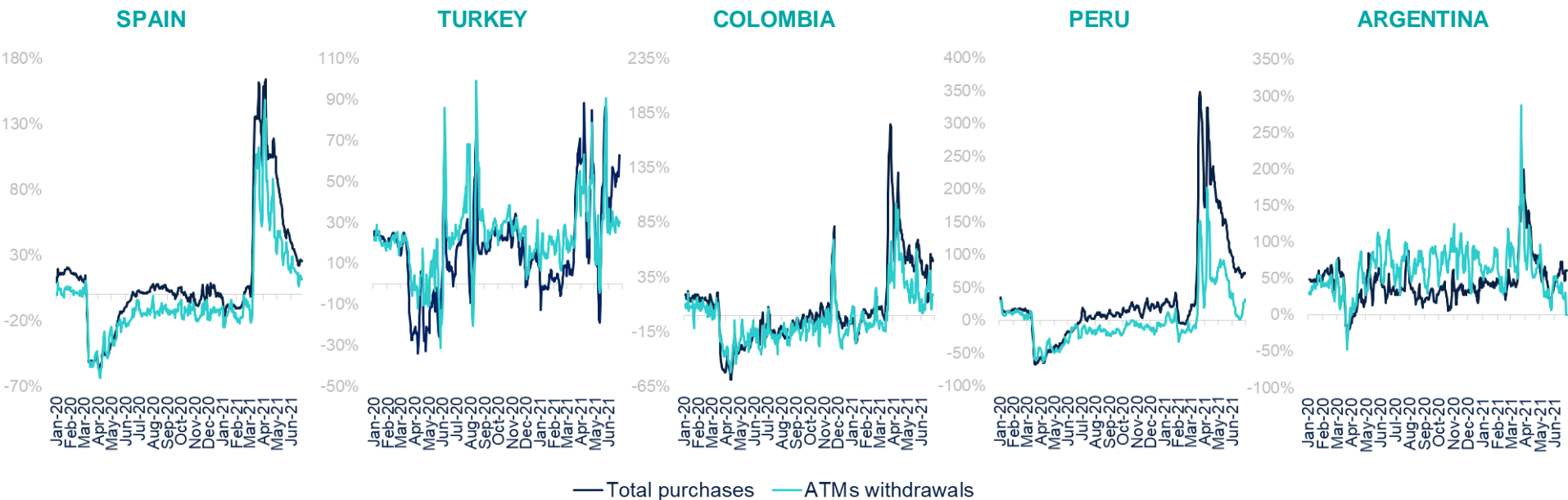


Source: BBVA Research.* In the case of Spain, the online series considers non physical data, which includes online purchases, as well as purchases done by call, mobile phone using apps, by postal code or online subscriptions.

The difference between ATM withdrawals and card spending stands out in Peru during 2021 among the rest of countries

BBVA RESEARCH BIG DATA CONSUMPTION INDICES: CARD PURCHASES VS ATM WITHDRAWALS

(Total consumption by Point of Sales. % YoY, 7D cumulative)



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