

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

A Big Data BBVA Research Project

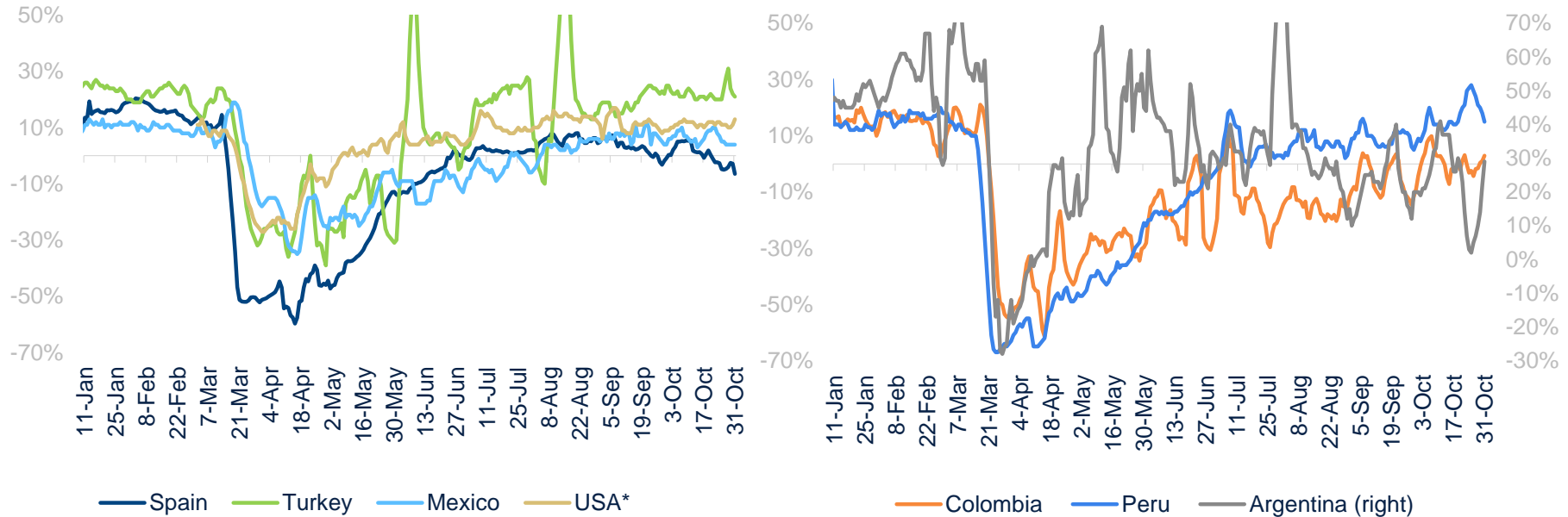
Monthly presentation

November 6th, 2020

Positive growth rates continued in Turkey, USA and Mexico during October. The positive trend intensified in Peru, while it moderated in Spain, reaching negatives values at the end of the month

BBVA RESEARCH BIG DATA CONSUMPTION INDICES

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

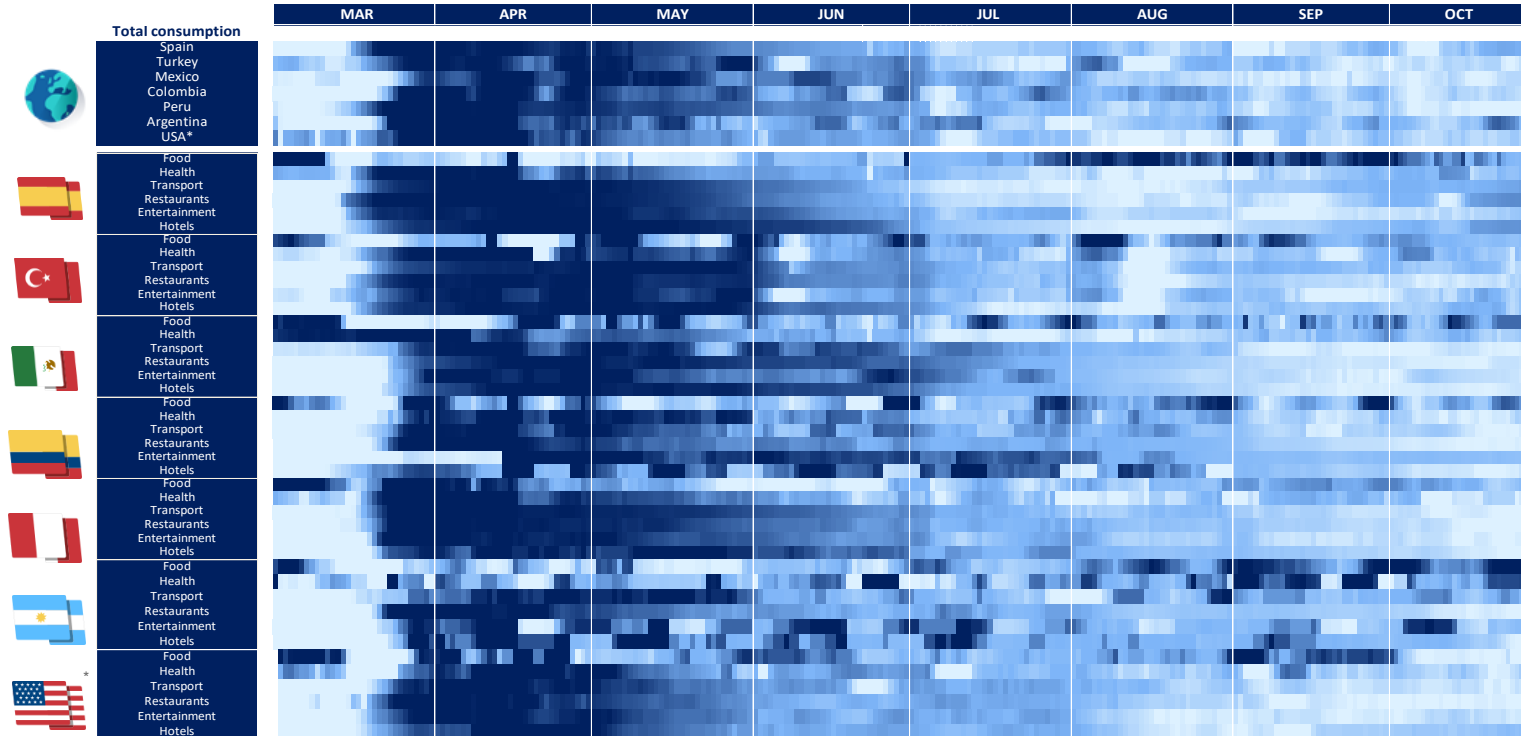


Source: BBVA Research. * Proxied by USA Sunbelt

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: consumption dynamics showed the recovery in Peru and Colombia during October

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



*Proxied by USA Sunbelt. Source: BBVA Research.

Lower Growth Higher Growth

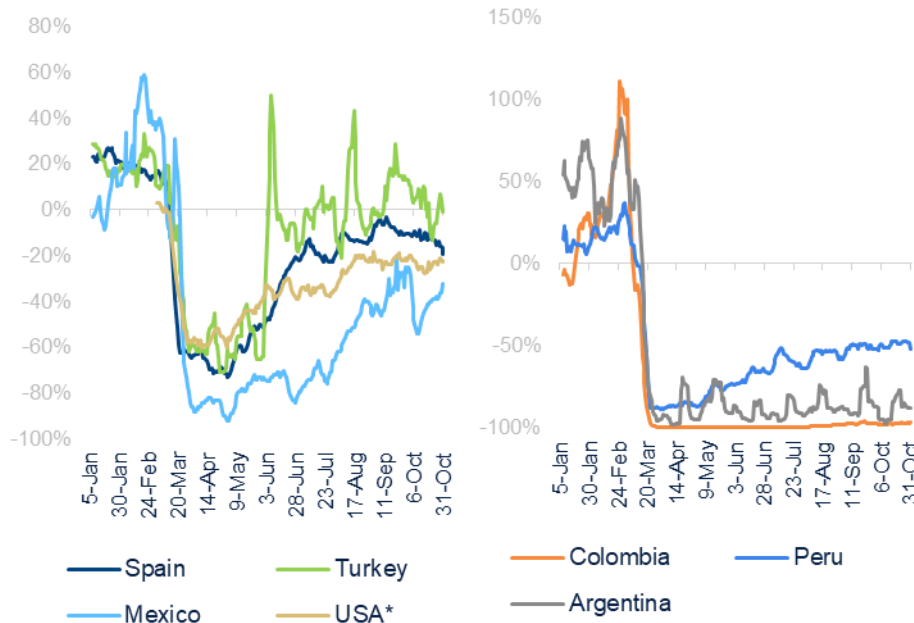
Series are coloured according to the history of each series since March 20 until the end of the series. The darker blue represents the lower 90th percentile and the lighter one represents the upper 10th percentile.

This recovery is uneven across sectors and countries. While entertainment expenditure recovered faster in developed countries and Turkey, transport spending did it in Latam countries

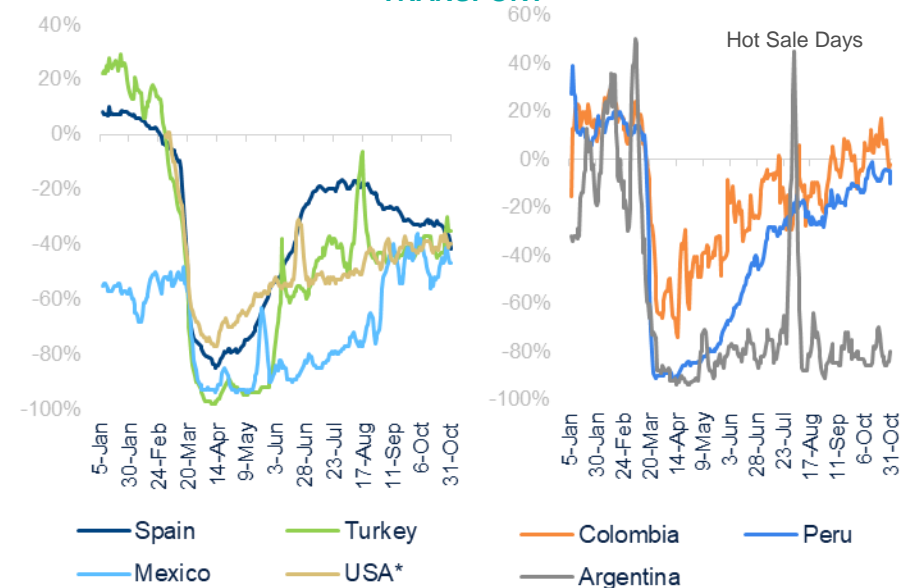
BBVA RESEARCH BIG DATA CONSUMPTION INDICES

(Consumption by card, % YoY, 7D cumulative)

ENTERTAINMENT



TRANSPORT

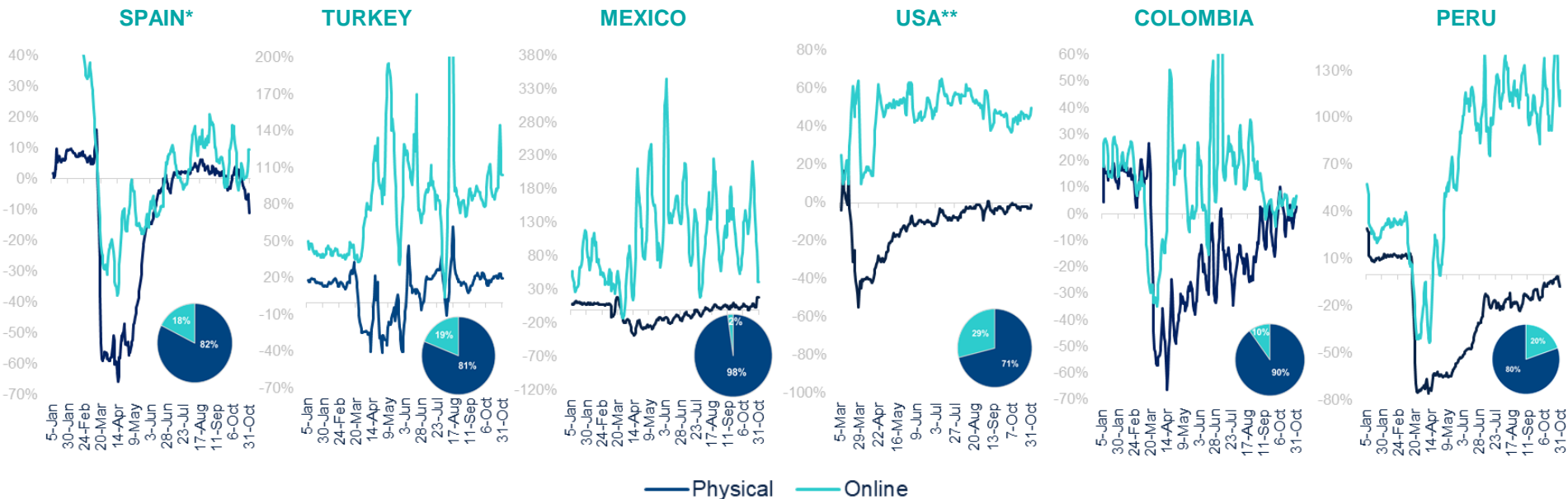


Source: BBVA Research. * USA = Proxied by USA Sunbelt

Technology matters: the gap between e-commerce and physical purchases narrowed in Colombia during the month, while it kept in the rest 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)

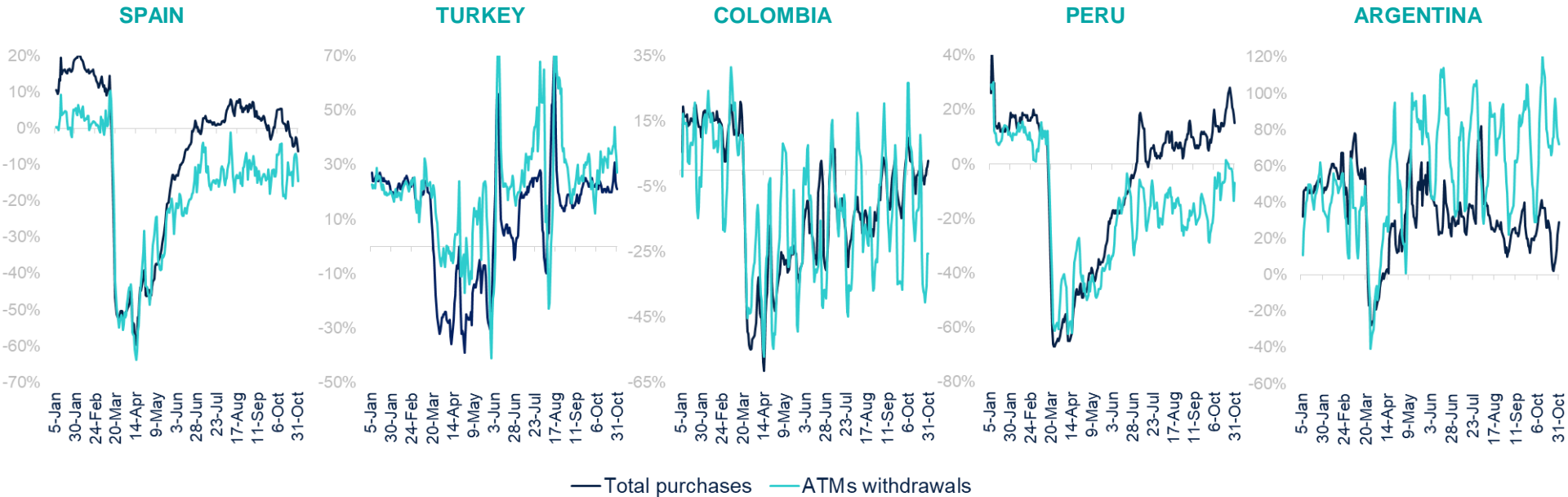


Source: BBVA Research.* In the case of Spain, the online series considers non physical data, which includes online purchases, as well as purchases done by call, mobile phone using apps, by postal code or online subscriptions. ** USA = Proxied by USA Sunbelt.

The difference between ATM withdrawals and card spending remained in Spain and Peru since June, pointing to a change in preferences of using cards instead of cash

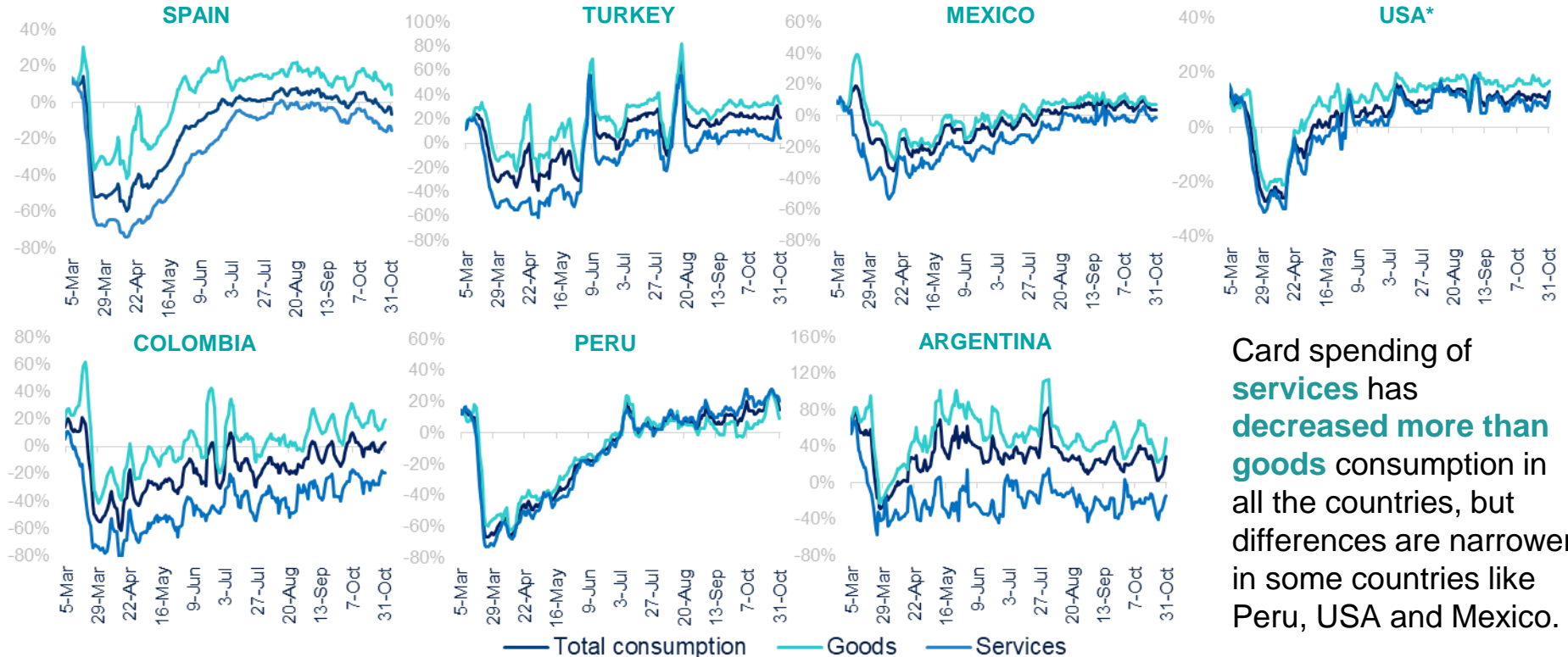
BBVA RESEARCH BIG DATA CONSUMPTION INDICES: CARD PURCHASES VS ATM WITHDRAWALS

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



Services expenditure was the most affected consumption category given the Covid-19 shock, expect in Peru

BBVA RESEARCH BIG DATA CONSUMPTION INDICES: SERVICES VS GOODS (% YoY, 7D cumulative)

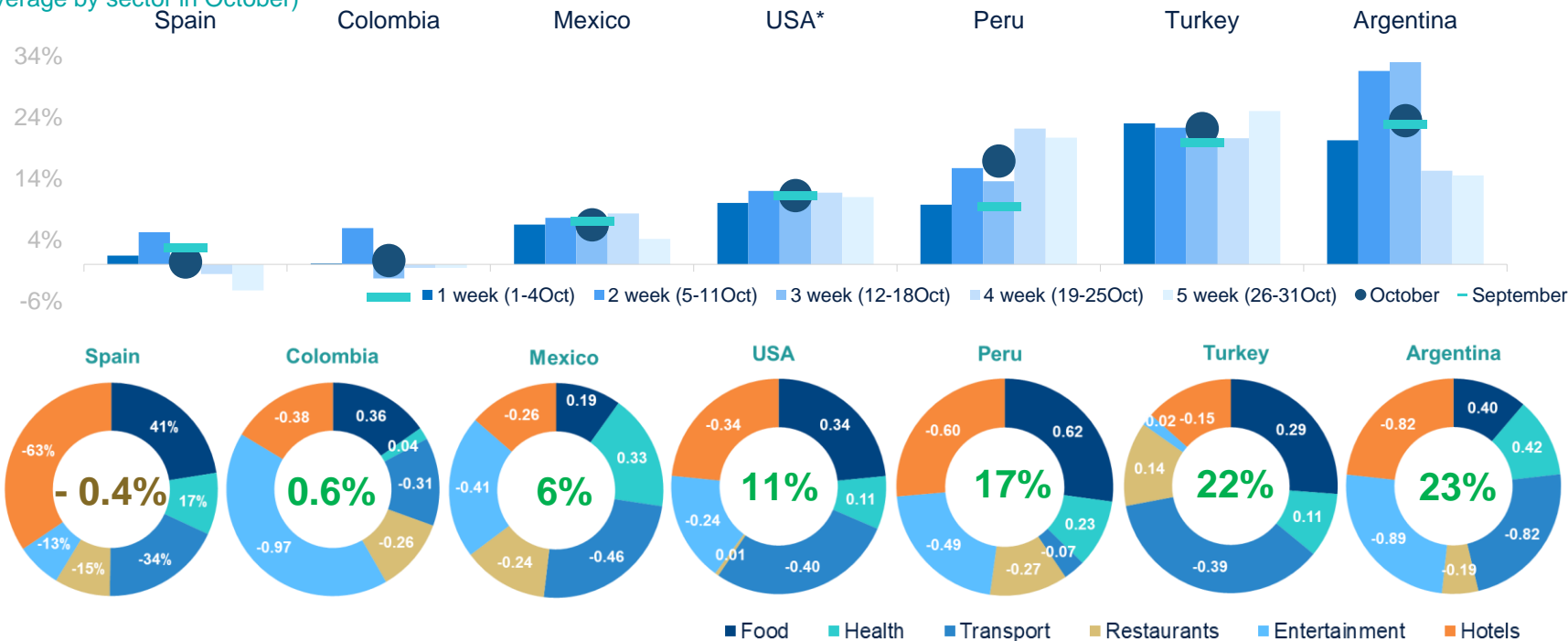


Card spending of **services** has **decreased more than goods** consumption in all the countries, but differences are narrower in some countries like Peru, USA and Mexico.

Recovering trends stood out in Peru and Colombia in October compared with the previous month. Turkey and Argentina continued outperforming

BBVA RESEARCH BIG DATA CONSUMPTION INDICES: TOTAL CONSUMPTION EVOLUTION IN SEPTEMBER AND SECTORIAL DISTRIBUTION* DURING THE MONTH

(Bar chart: % daily YoY average by week and month. Pie chart: % daily YoY average by sector in October)

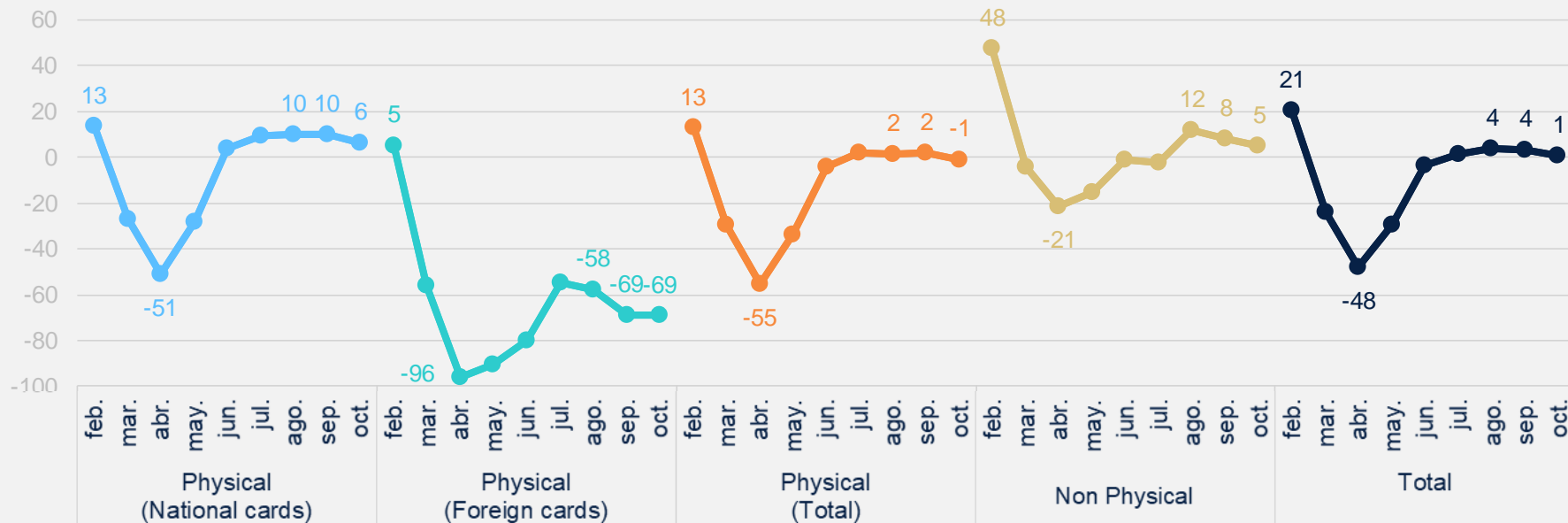


*It should be taken into account there are other categories of consumption not considered in the pie chart, so the total consumption is not equal to the average of the components of the chart

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

Spain. Total card spending increased by 0.6% yoy in October, 3 points less than in September

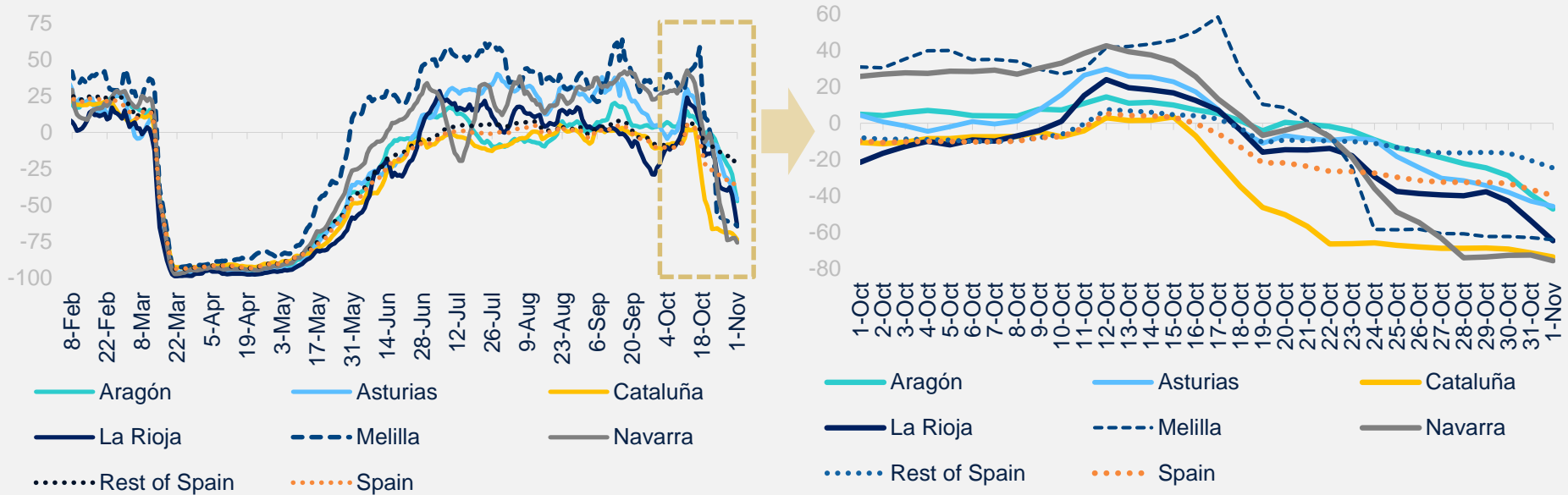
YEARLY CHANGE OF AVERAGE EXPENDITURE BY NATIONALITY AND POS TYPE (YoY %)



Non physical data includes online purchases, as well as purchases done by call, mobile phone using apps, by postal code or online suscriptions Source: BBVA Research

Spain. The impact of the restrictions on restaurants, linked to the worsening of the pandemic, has been notable, especially in the territories where the closure of restaurants was decreed such as Navarra or Catalonia

YEARLY CHANGE OF TOTAL AVERAGE EXPENDITURE IN BARS AND RESTAURANTS BY REGION (YoY %)

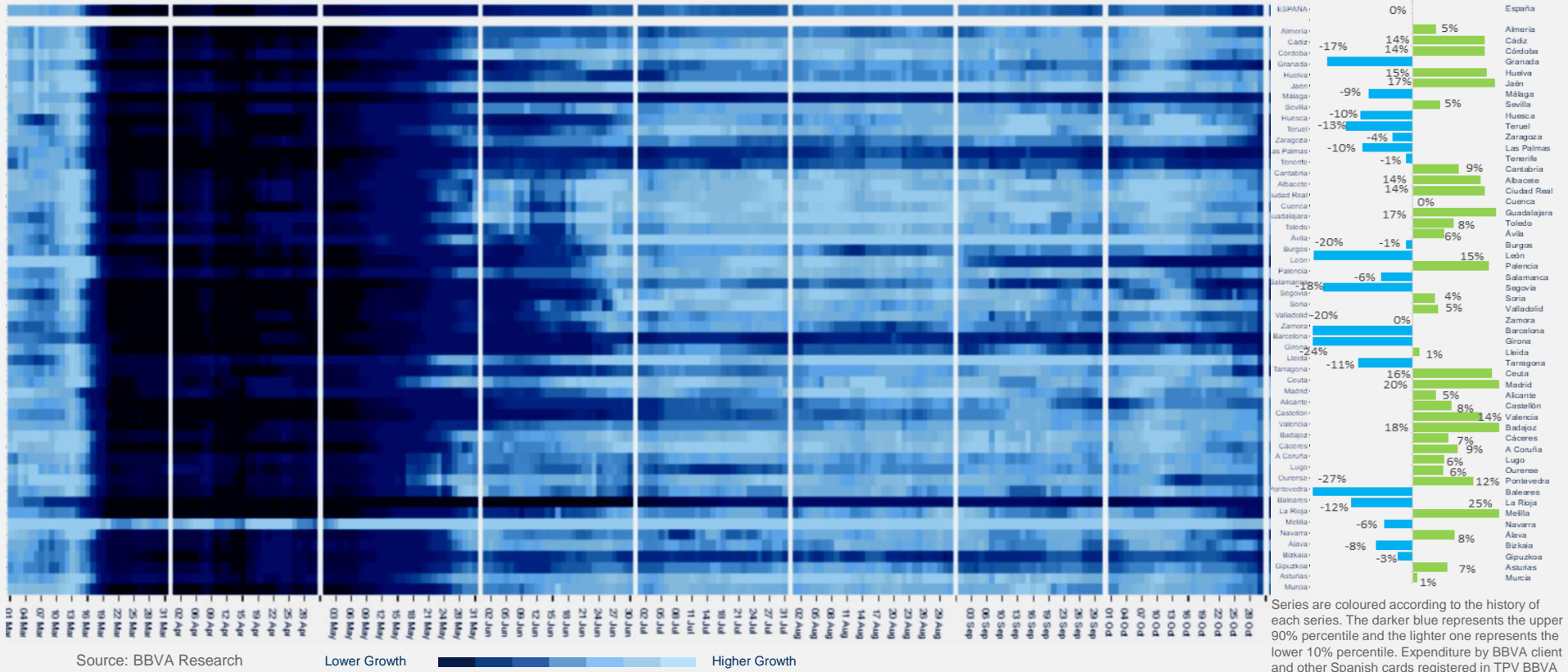


Spain. The impact of the new Covid-19 outbreak in consumption is still quite different from the one observed in March/April

SPAIN: TOTAL AVERAGE WEEKLY EXPENDITURE BY PROVINCE*

(Considering national and foreign cards and physical and online purchases . % YoY, 7D cumulative)

25 OCT – 1 NOV
EXPENDITURE (% YOY)



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