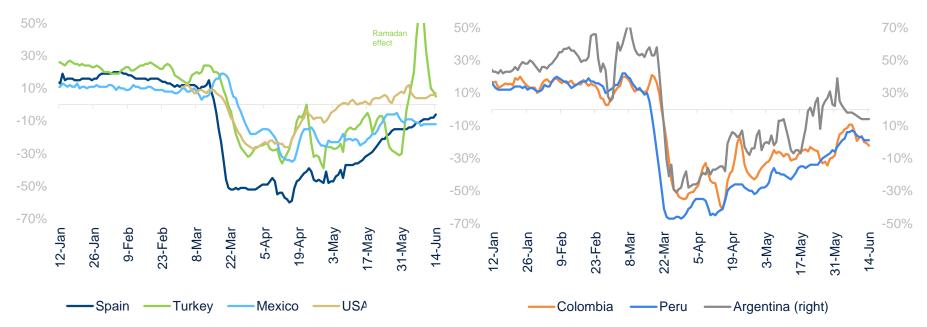
The COVID-19 impact on Consumption in Real Time and High Definition A Big Data BBVA Research Project

Positive growth rates in USA & Turkey consolidate. Spanish rapid improvement ongoing. The recovery flattens in LATAM

BBVA RESEARCH BIG DATA CONSUMPTION INDICES

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

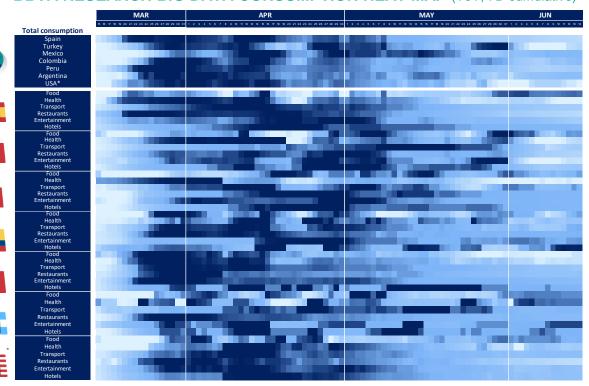


Source: BBVA Research. * Proxied by USA Sunbelt

Consumption Diffusion Heat Map: Lighter and Lighter... across countries and segments, especially in Turkey, USA and Spain

Higher Growth

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



- Light colors become broad based including the more restrained segments and countries
- Food remains positive, and the rest of the segments are catching up rapidly.
- Tourism, Entertainment & Hotels remained subdued but bottoming out

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

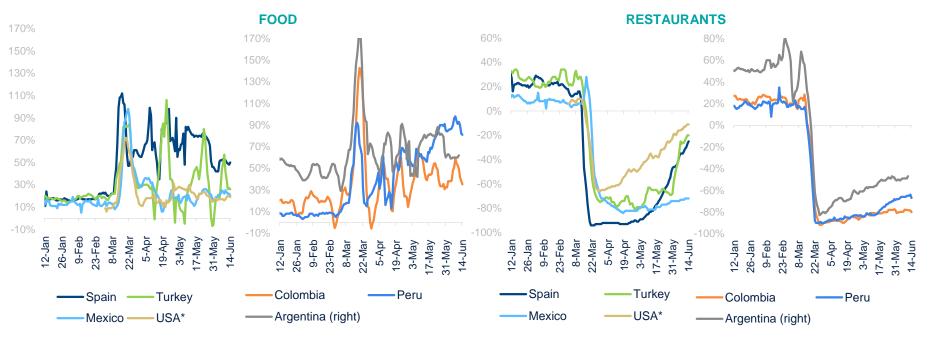
*Proxied by USA Sunbelt Source: BBVA Research.

Lower Growth

Expenditure in services like restaurants is catching up rapidly after mobility restrictions lift. Food expenditure (at home) moderates

BBVA RESEARCH BIG DATA CONSUMPTION INDICES

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

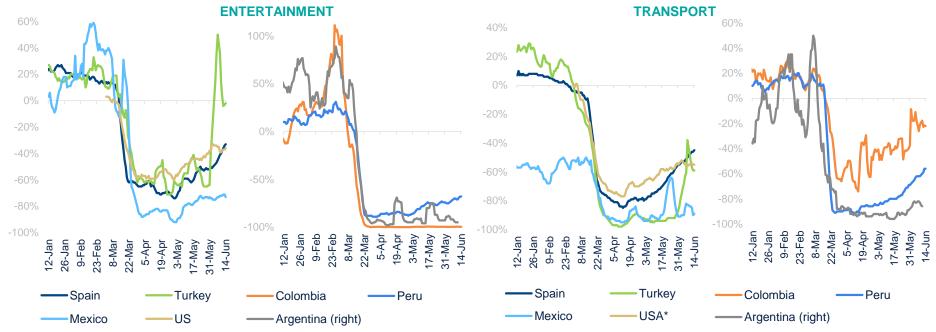


Source: BBVA Research. * USA = Proxied by USA Sunbelt

Expenditure in entertainment is recovering fast in Turkey, Spain and USA too. Transport is improving in most of the countries

BBVA RESEARCH BIG DATA CONSUMPTION INDICES

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



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

Technology matters: the gap between e-commerce growth and physical purchases remains, but it is closing in some 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)

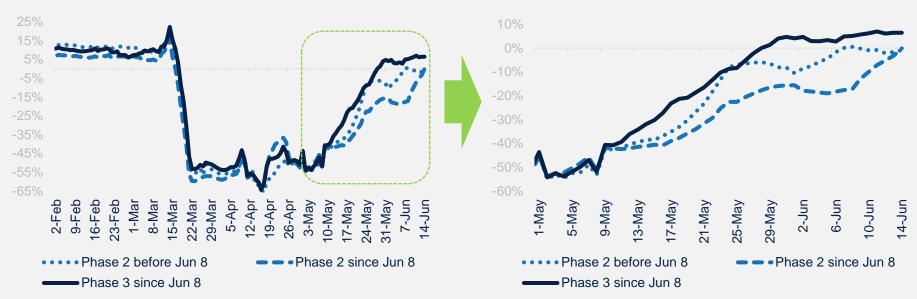


—Physical —Online

Topic of the week: rapid catching up of Phase 2 provinces, led by the sharp recovery of Madrid and Barcelona

SPANISH AVERAGE EXPENDITURE BY PROVINCE ACCORDING TO PHASES

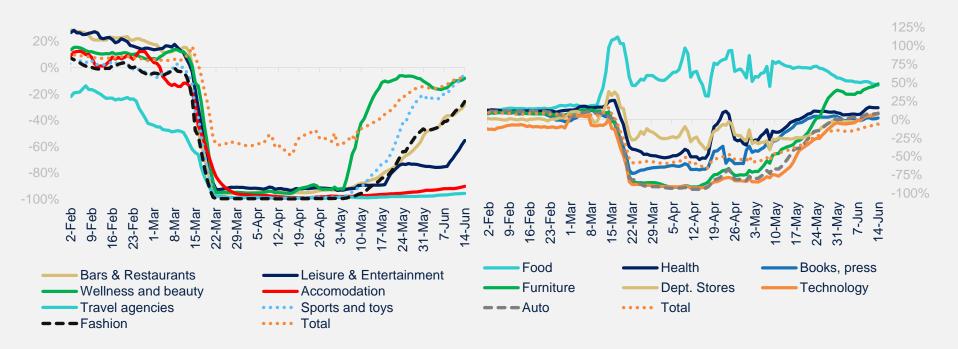
(2020 VS 2019, YoY %)



Source: BBVA Research

Topic of the week: Home expenditure continues growing. Bars & restaurants, entertainment & fashion are recovering fast

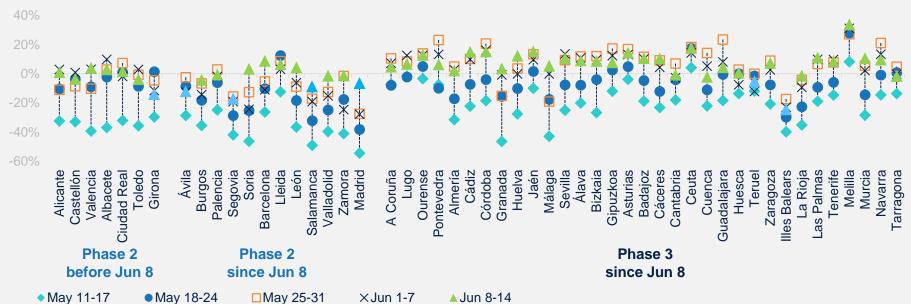
SPANISH AVERAGE EXPENDITURE BY SECTOR (2020 VS 2019, YoY %)



Topic of the week: 35 out of 52 provinces are already growing. The entrance of Madrid and Barcelona to Phase 2 triggers the recovery

YEARLY CHANGE OF SPANISH AVERAGE EXPENDITURE BY PROVINCE ACCORDING TO PHASES

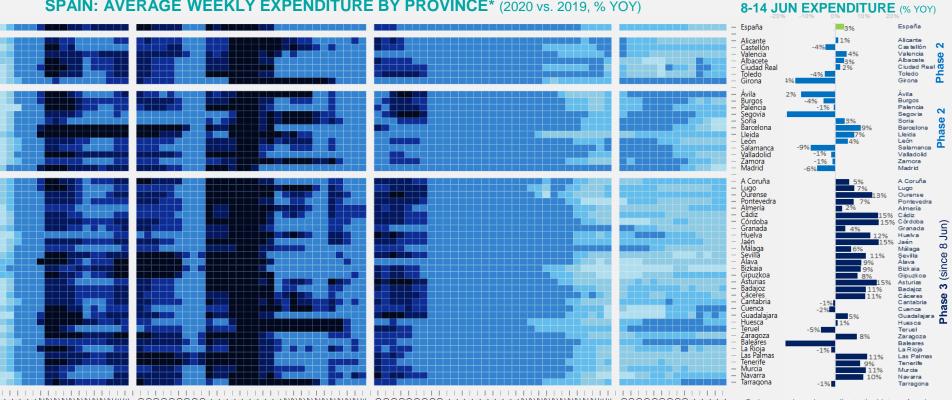
(2020 VS 2019, YoY %)



Source: BBVA Research

Topic of the week: much clear. Spanish de-escalation support the recovery

SPAIN: AVERAGE WEEKLY EXPENDITURE BY PROVINCE* (2020 vs. 2019, % YOY)



Series are coloured according to the history of each series. The darker blue represents the upper 90% percentile and the lighter one represents the lower 10% percentile. Expenditure by BBVA client and other Spanish cards registered through TPV BBVA

Higher Growth



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