

August 21, 2020 01:15 AM GMT

Global Economics | Global

Global High Frequency Activity Tracker (#20)

Key Observations:

- Despite still high levels of new cases and the emergence of new clusters of infections, we have not seen renewed aggressive lockdowns, and policy makers are targeting these new clusters with very localised and limited measures. This is also reflected in the economic data continuing to show improvement, a clear evidence to us that the virus / economy equation is changing as we highlighted previously.
- In the US, we have been highlighting for the last two weeks and watching the data for signs of moderation given that the additional fiscal package has been delayed. However, most of the indicators that we are tracking, particularly those related to consumer spending are still posting moderately higher averages month to date in August vs their July averages. There could be a temporary blip in the next 2-3 weeks but with our US public policy analyst Michael Zetas still expecting the passage of an additional \$1.5-2trillion package, household spending recovery will remain on track.
- In EA, a number of activity indicators are getting closer to pre Covid-19 levels, and this improvement have also not been interrupted by the imposition of localised measures. In the UK, the bounce back in economic activity continues with restaurant activity improving, and businesses which are temporarily closed are just 4% now compared with 24% in early April.
- In China, we are seeing more signs of improvement in its services sector, which is supporting the overall recovery. Air travel, hotel occupancy took another leg up from July onwards and hotel occupancy is already above and air travel is now even closer to their respective pre Covid-19 levels. Box offices too have staged an impressive recovery post reopening. Meanwhile, steel and cement demand had improved but could be potentially impacted again as various provinces have lifted their flood control response levels this week.
- In EMs ex China, more indicators are turning positive on a YoY basis. India and Brazil are continuing to see improvement and in Russia, SME activity moved above Feb-20 levels and consumer spending is now growing on a YoY basis.

alphawise α

MORGAN STANLEY & CO. LLC

Derrick Y Kam

ECONOMIST

Derrick.Kam@morganstanley.com

+1 212 761-9260

Chetan Ahya

CHIEF ECONOMIST AND GLOBAL HEAD OF ECONOMICS

Chetan.Ahya@morganstanley.com

+1 212 761-6730

MORGAN STANLEY & CO. INTERNATIONAL PLC

Nora Wassermann

ECONOMIST

Nora.Wassermann@morganstanley.com

+41 44 588-1050

MORGAN STANLEY & CO. LLC

Julian M Richers

ECONOMIST

Julian.Richers@morganstanley.com

+1 212 761-2305

Frank Zhao

ECONOMIST

Frank.Zhao@morganstanley.com

+1 212 761-1909

High Frequency Data Coverage by Economy:

United States

Euro Area

United Kingdom

Japan

China

India

Brazil

Recent Global Macro Research

Global Macro Briefing: A Stronger Case for the Return of Inflation

Global Economics: Policy Action Tracker – Watching the next steps in US fiscal and monetary policy

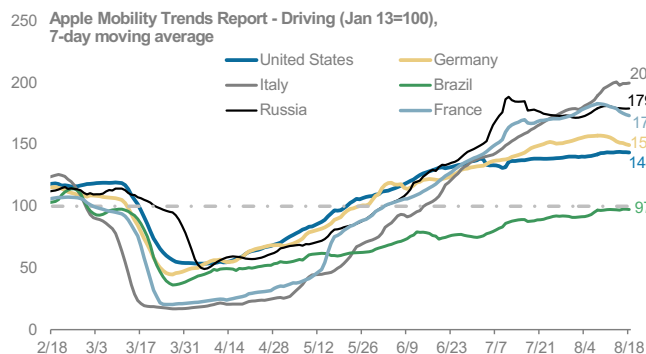
Global Macro Briefing: US vs. European Labor Markets: Is There Really a Big Divergence?

European Data Tracker: Covid-19: Data Tracker

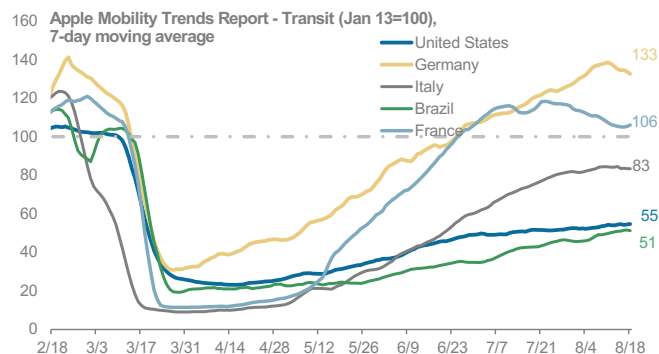
China Economics: Trade, Train, TSF: On The Right Track

For important disclosures, refer to the Disclosure Section, located at the end of this report.

Global – Key Charts for the Week

Exhibit 1: Driving mobility is moderating in France and Germany


Source: Apple, Morgan Stanley Research; Note that May 11 and May 12 data are not reported thus not included in the 7-day moving average.

Exhibit 2: Transit mobility ticked up slightly in France


Source: Apple, Morgan Stanley Research; Note that May 11 and May 12 data are not reported thus not included in the 7-day moving average.

Exhibit 3: Mobility in driving...

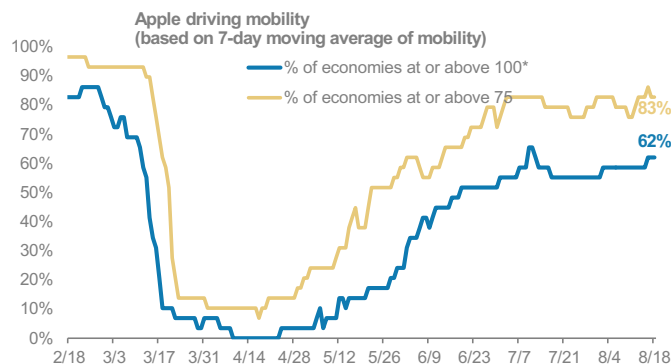
Apple Driving Mobility WoW Trend (Jan 13, 2020 = 100, 7-day avg)					
	8/18	8/11	8/4	8/18 vs 8/11	8/18 vs 8/4
Italy	200	197	181	+3	+18
Russia	179	181	173	-2	+6
France	173	182	179	-8	-6
Spain	167	171	163	-4	+4
Germany	150	156	156	-7	-7
Japan	147	148	121	-1	+26
United States	144	144	140	+0	+3
United Kingdom	126	130	127	-3	+0
Mexico	100	98	97	+2	+3
Brazil	97	97	92	+0	+6
Republic of Korea	84	75	82	+10	+3
India	78	74	68	+4	+9

Source: Apple, Morgan Stanley Research; Note: Table is ranked by current level of mobility index.

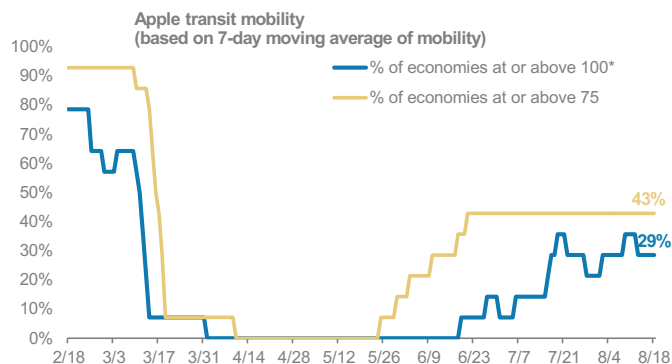
Exhibit 4: ... and transit has moderated this week

Apple Transit Mobility WoW Trend (Jan 13, 2020 = 100, 7-day avg)					
	8/18	8/11	8/4	8/18 vs 8/11	8/18 vs 8/4
Japan	137	139	120	-1	+18
Germany	133	139	132	-6	+0
France	106	107	112	-1	-6
Italy	83	84	82	-1	+1
Spain	75	79	82	-4	-7
United Kingdom	71	71	67	+0	+4
Singapore	63	66	65	-3	-2
United States	55	54	52	+0	+3
Brazil	51	50	46	+1	+5
Mexico	51	49	49	+2	+2

Source: Apple, Morgan Stanley Research; Note: Table is ranked by current level of mobility index.

Exhibit 5: Driving mobility in 62% of the economies we track is at or above 100


Source: Apple, Morgan Stanley Research; *Jan 13, 2020 = 100, and the percentage is calculated based on 29 economies in our coverage.

Exhibit 6: Transit mobility in 29% of the economies in our coverage is at or above 100


Source: Apple, Morgan Stanley Research; *Jan 13, 2020 = 100, and the percentage is calculated based on 14 economies in our coverage.

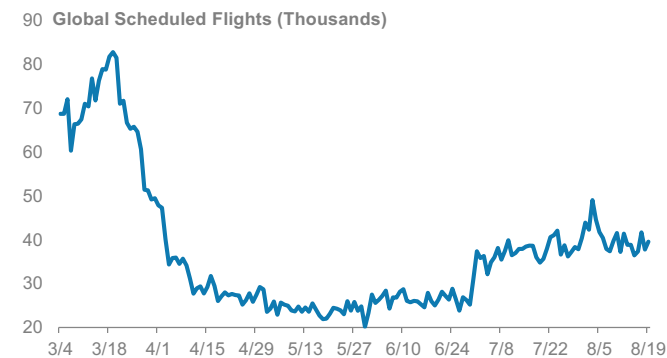
Exhibit 7: Global scheduled flights range-bound

Exhibit 8: Scheduled flights in China softened this week

Exhibit 9: US high frequency indicators up moderately in August MTD as compared to July

US Major High Frequency Indicators	March 4-Wk Avg	April 4-Wk Avg	Week 1	Week 2	May Week 3	Week 4	Week 5	May 5-Wk Avg	June				June 4-Wk Avg	July				July 4-Wk Avg	August			August 3-Wk Avg
Apple Driving Mobility WoW Trend (Jan 13, 2020 = 100, 7-day avg)	87	59	75	84	97	106	110	94	117	127	131	136	127	133.1	136.6	138.5	138.9	137	139.8	143.0	143.8	142
Small Business Credit Card Sales (Relative to 1st Week of March)	-12%	-43%	-13%	-3%	0%	5%	-1%	-2%	21%	20%	18%	21%	20%	20.4%	21.8%	25.0%	25.0%	23%	26.5%	24.6%	26.9%	26%
US Auto Weekly Sales (actual vs. pre-COVID-19 forecast)	-28%	-47%	-30%	-23%	-24%	-24%	-14%	-23%	-10%	-4%	-5%	-4%	-6%	-3.0%	-3.0%	-8.0%	-7.0%	-5%	-8.0%	-3.0%	-3.0%	-5%
Hotel Occupancy Rate	42%	23%	29%	30%	32%	35%	37%	33%	39%	42%	44%	46%	43%	45.6%	45.9%	47.5%	48.1%	47%	48.9%	49.9%	47.0%	49%
Truck Loading MDI Index (%ΔY)	52%	-46%	-36%	-18%	4%	15%	18%	-4%	-6%	18%	45%	48%	26%	88.5%	75.9%	120.7%	124.3%	102%	104.2%	130.5%	125.8%	120%
Retail Gas Demand (%ΔY)	-6%	-44%	-32%	-20%	-27%	-23%	-20%	-24%	-19%	-21%	-9%	-10%	-15%	-10.4%	-6.3%	-10.9%	-8.4%	-9%	-10.4%	-11.0%	-10.1%	-10%
Airport Security Checkpoint Traveler Volume (Relative to 1st Week of March)	61%	6%	6%	8%	10%	13%	14%	10%	17%	22%	25%	28%	23%	30.6%	34.2%	32.9%	32.7%	33%	33.6%	34.4%	35.2%	34%
Restaurant Seated Diners (%ΔY)	-56%	-100%	-100%	-98%	-95%	-90%	-84%	-93%	-79%	-71%	-60%	-62%	-68%	-61.7%	-62.3%	-62.0%	-61.2%	-62%	-58.2%	-56.2%	-53.6%	-56%

Source: Apple, Cardflight, J.D. Power, STR, Truckstop, EIA, Bloomberg, Haver Analytics, Morgan Stanley Research; Note: The table above is color-coded to display lower values for each indicator in lighter green while higher values in darker green. Truck loadings was up strongly in early March due to stocking up for the lockdown as well as an easy base for comparison against a freight recession last year. *The strong growth in July was due to a low base last year.

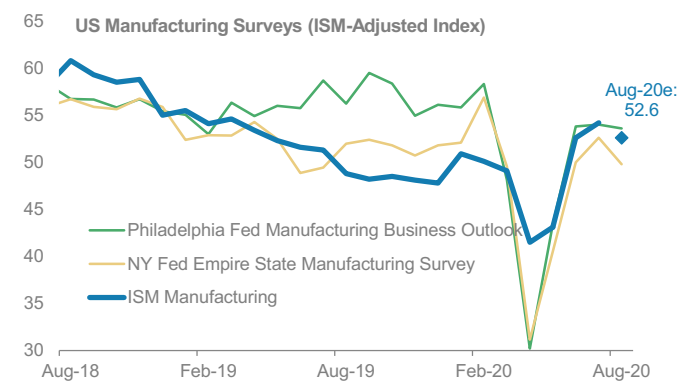
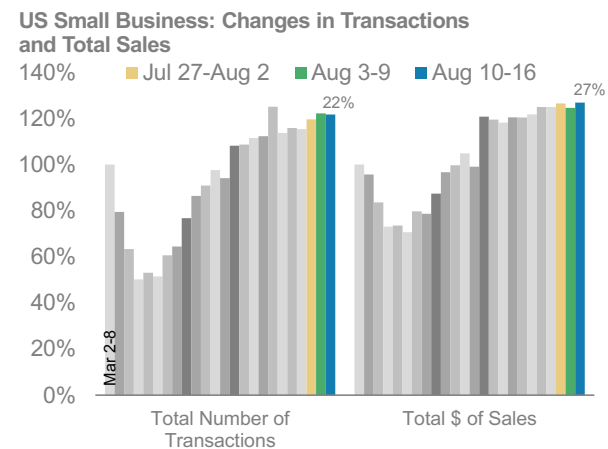
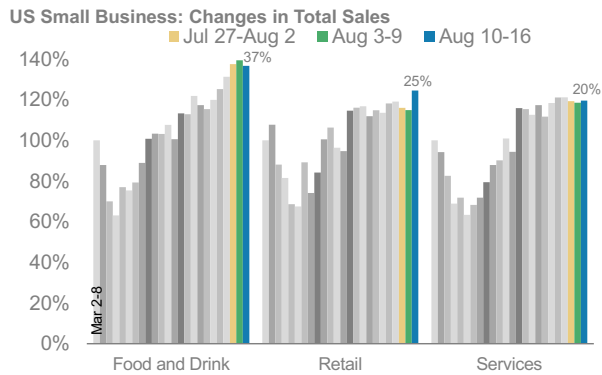
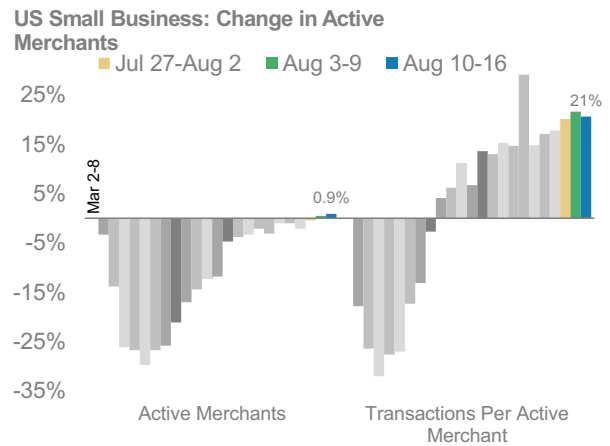
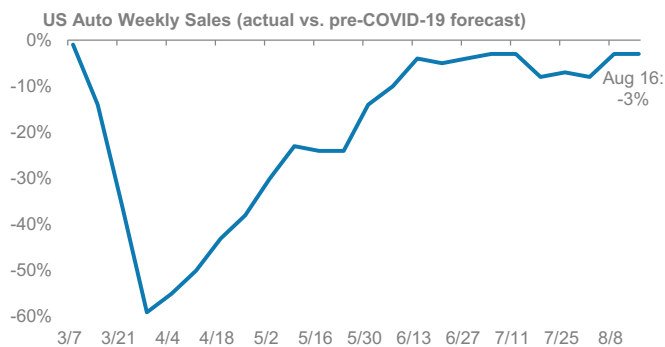
Exhibit 10: US: NY and Philly Fed manufacturing surveys point to a downtick in August ISM manufacturing

Exhibit 11: US CardFlight small business sales – Total sales improved last week ...


Exhibit 12: ... mainly driven by improvement in retail sector


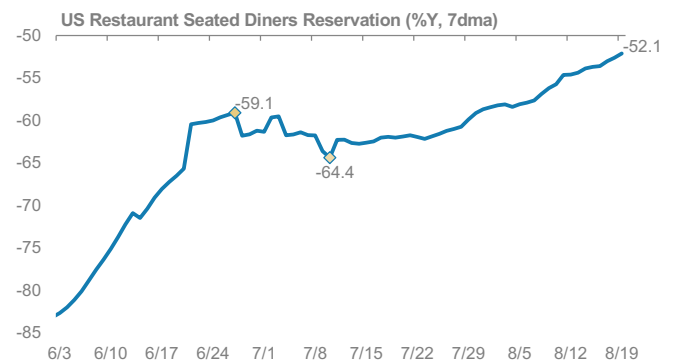
Source: CardFlight, Morgan Stanley Research

Exhibit 13: The number of active merchants continues to rise


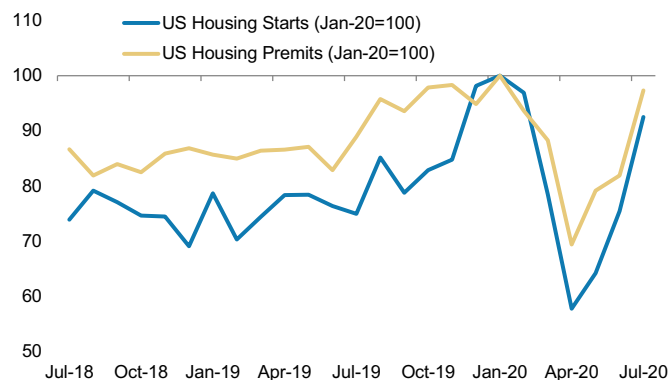
Source: CardFlight, Morgan Stanley Research

Exhibit 14: US auto sales moved up to 3% below pre-COVID-19 forecast


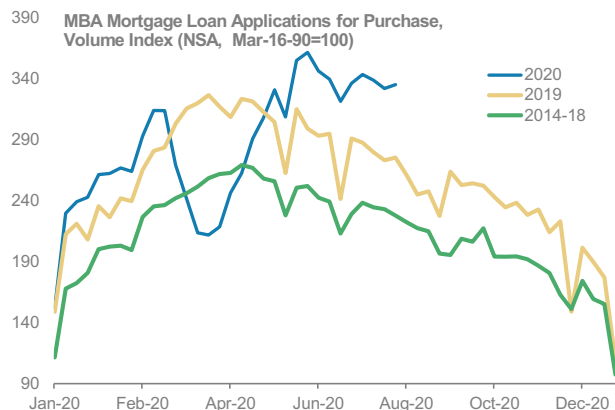
Source: J.D. Power, Morgan Stanley Research

Exhibit 15: US restaurant reservations steadily rising


Source: Opentable, Morgan Stanley Research

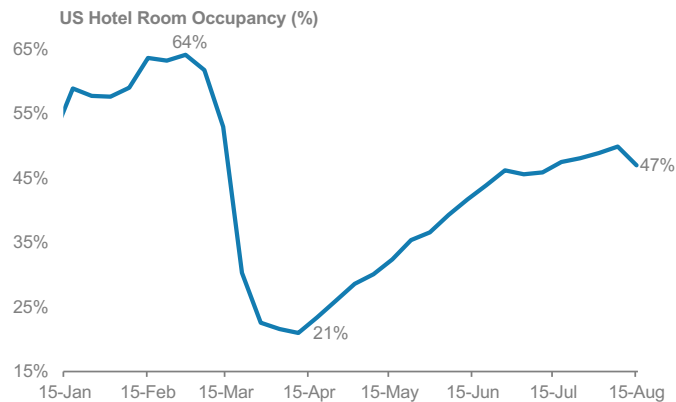
Exhibit 16: US housing starts and permits close to pre COVID-19 levels in July


Source: Census, Haver Analytics

Exhibit 17: Mortgage applications in the US continues to be well above 2019 levels


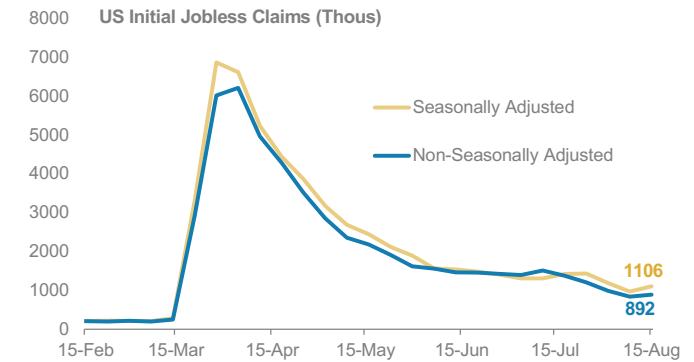
Source: MBA, Haver Analytics

Exhibit 18: US hotel room occupancy fell last week to 47%



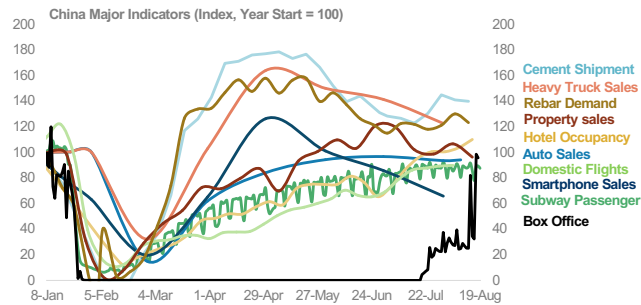
Source: STR, Morgan Stanley Research

Exhibit 19: US jobless claims rose slightly last week



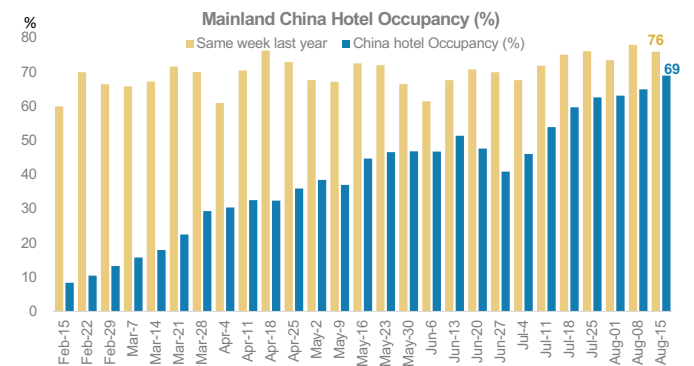
Source: US Department of Labor, Morgan Stanley Research

Exhibit 20: China's services sectors catching up after initially lagging



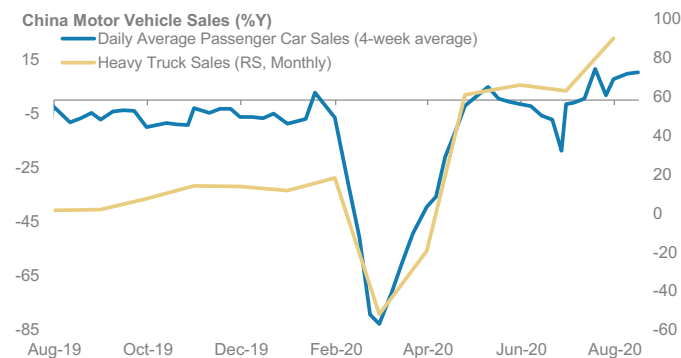
Source: CEIC, Wind, STR, CPCA, company data, TravelSky, Morgan Stanley Research

Exhibit 21: Hotel occupancy in China now above 90% of last year's level



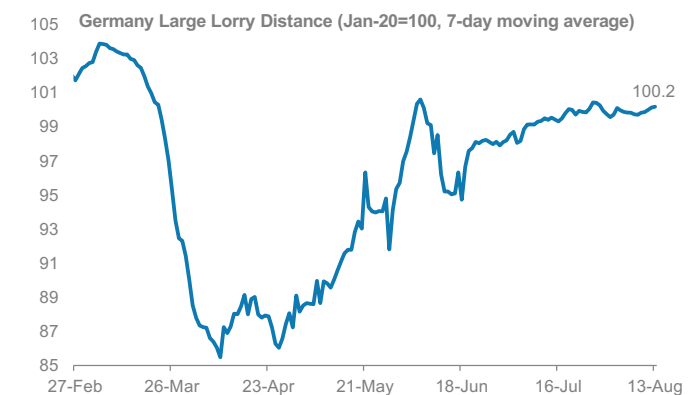
Source: Gaode, Wind, Morgan Stanley Research

Exhibit 22: China's daily passenger car sales continue to expand

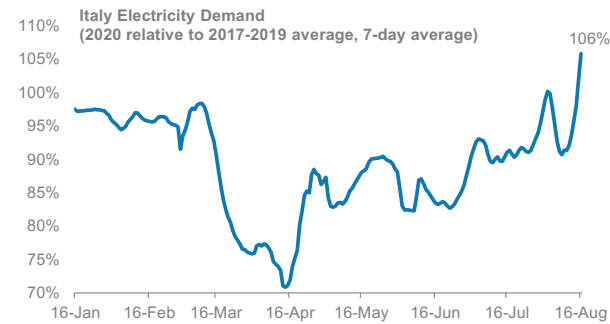


Source: CPCA, CEIC, Company Data, Morgan Stanley Research

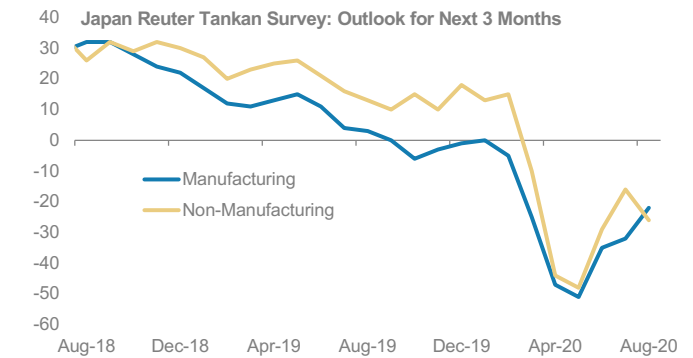
Exhibit 23: Germany's large lorry mileage back to Jan-20 levels



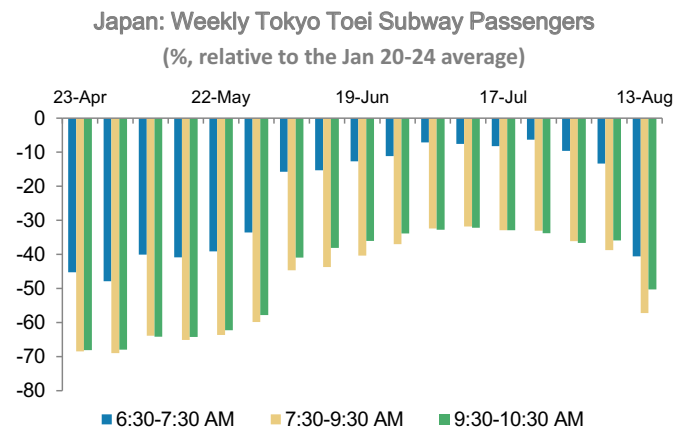
Source: Destatis, Morgan Stanley Research

Exhibit 24: Italy's power demand has risen above 2017-19 levels


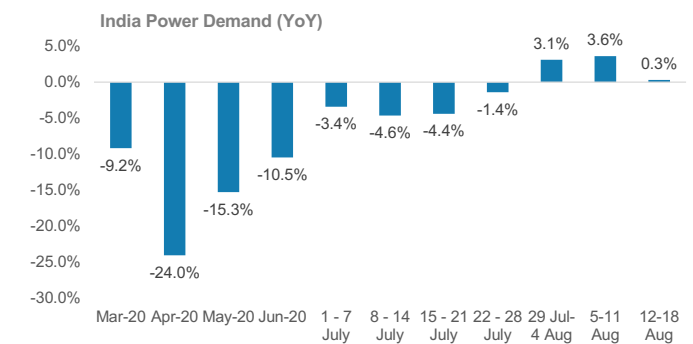
Source: ENTSO-E, Morgan Stanley Research

Exhibit 25: Further improvement in Japan's manufacturing sector outlook while non-manufacturing sector weakened


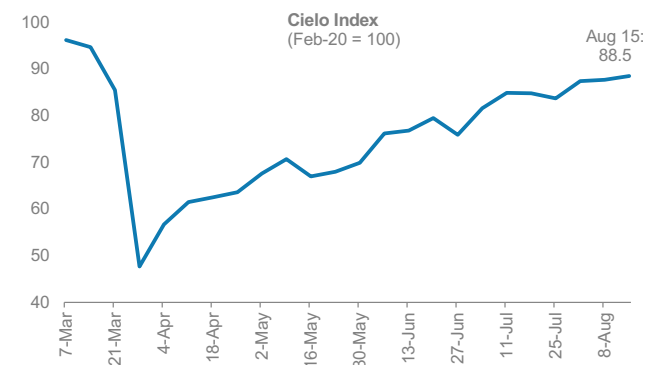
Source: Reuters, Morgan Stanley Research

Exhibit 26: Tokyo's subway traffic dropped significantly last week on the back of rising new cases


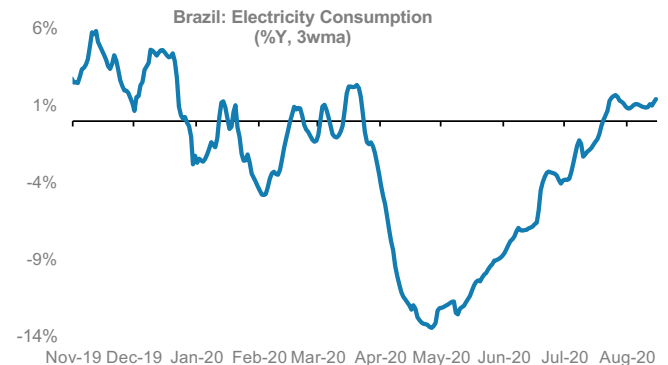
Source: Tokyo Metropolitan Government, Morgan Stanley Research

Exhibit 27: Weekly power demand growth in India moderated last week


Source: Ministry of Power, Morgan Stanley Research

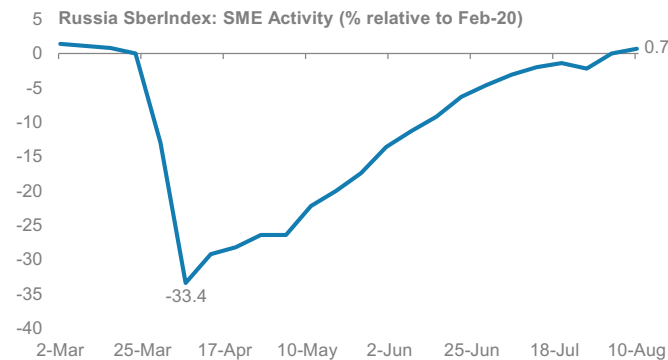
Exhibit 28: Brazil's weekly retail sales measured by Cielo Index up to 89% of Feb-20 level


Source: Cielo, Morgan Stanley Research

Exhibit 29: 4th week of positive growth in Brazil's electricity consumption


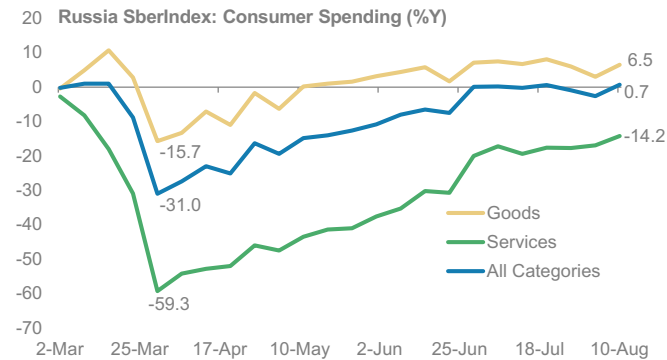
Source: ONS, Morgan Stanley Research

Exhibit 30: Sberbank's measure of Russia's SME activity has risen above Feb-20 levels



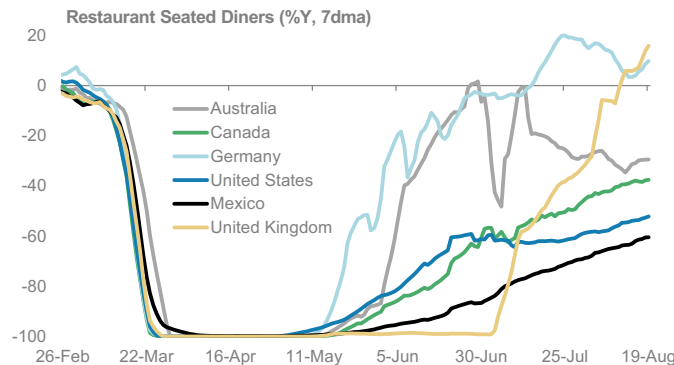
Source: Sberbank, Morgan Stanley Research

Exhibit 31: Russia's overall consumer spending is now growing YoY



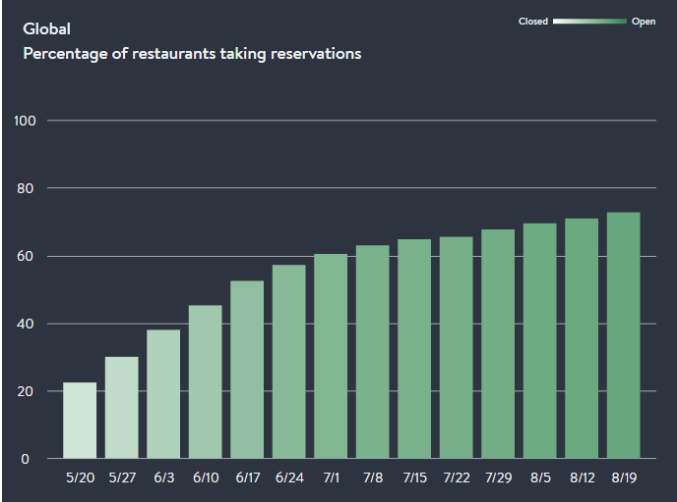
Source: Sberbank, Morgan Stanley Research

Exhibit 32: Restaurant bookings: Broad-based improvement this week



Source: Opentable, Morgan Stanley Research

Exhibit 33: Over 70% of restaurants globally* have reopened



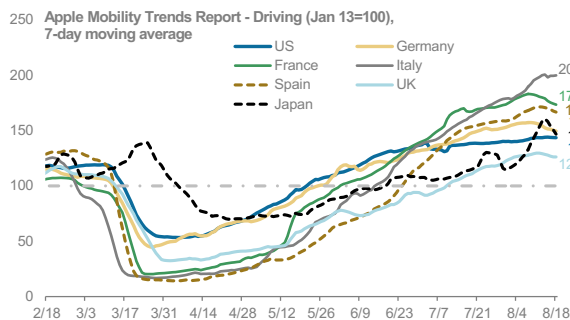
Source: Opentable; *Opentable tracks restaurants in the US, Canada, Germany, Australia, UK, Ireland and Mexico.

Mobility Trends

Mobility trends: Europe continues to outperform:

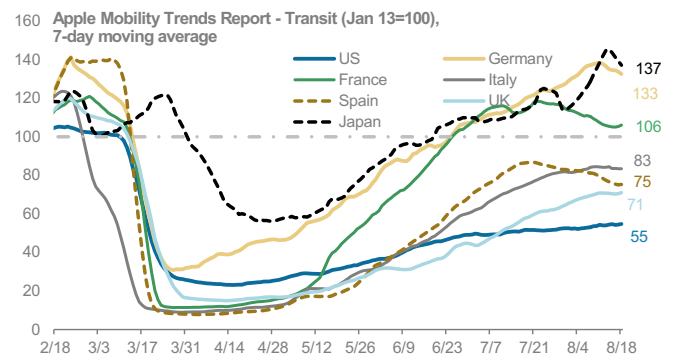
- In the US, mobility (driving) is stable this this week.
- In Europe, driving and transit mobility trends is moderating at the margin.
- In China, passenger subway traffic is range bound.
- Mobility in CEEMEA is flat and has ticked down in Latam.

Exhibit 34: Driving trends moderated in major DMs



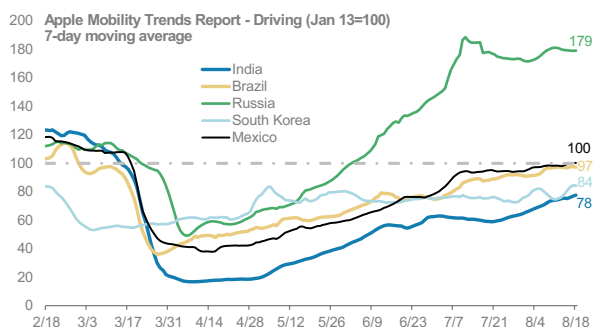
Source: Apple, Morgan Stanley Research; Note that May 11 and May 12 data are not reported thus not included in the 7-day moving average.

Exhibit 35: Transit trends picked up in UK and France, weakened in other DMs



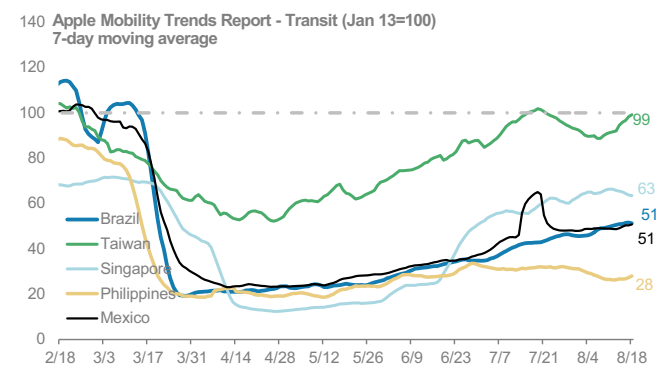
Source: Apple, Morgan Stanley Research; Note that May 11 and May 12 data are not reported thus not included in the 7-day moving average.

Exhibit 36: Driving mobility back to normal in Mexico, rose in Korea



Source: Apple, Morgan Stanley Research; Note that May 11 and May 12 data are not reported thus not included in the 7-day moving average.

Exhibit 37: Transit mobility picked up in Taiwan, remained subdued in other EMs



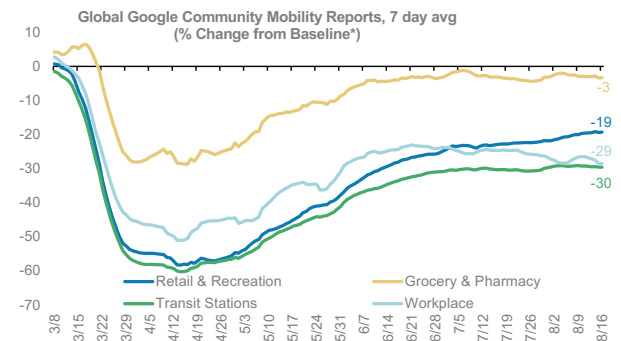
Source: Apple, Morgan Stanley Research; Note that May 11 and May 12 data are not reported thus not included in the 7-day moving average.

Exhibit 38: Google's community mobility trends softened a bit in most economies

Google Community Mobility Reports (% Change from Baseline*)							
Data as of Aug 16	Retail & Recreation	Grocery & Pharmacy	Transit Stations	Workplace			
United States	-16	-	-5	-24	-	-17	-
Germany	1	+	34	-4	+	4	+
France	0	-	20	-	0	2	-
Italy	-14	-	-12	0	+	4	-
Spain	-24	-	6	-34	-	7	-
Japan	-19	-	-3	-30	-	-18	-
United Kingdom	-29	-	-18	-32	-	-10	-
India	-61	+	-28	-45	-	-15	-
Brazil	-40	-	-3	-36	-	-3	-
South Korea	2	+	23	-3	+	-15	-
Mexico	-33	+	-9	-33	+	-4	+

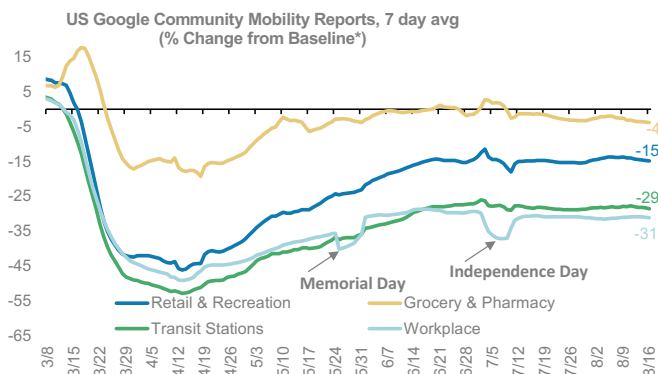
Source: Google, Morgan Stanley Research; Data released on Aug 18. *The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3 – Feb 6, 2020. Green plus signs show an improvement relative to last week, and red minus signs show further deterioration relative to last week.

Exhibit 39: Global mobility fell in workplace, relatively flat in other sectors



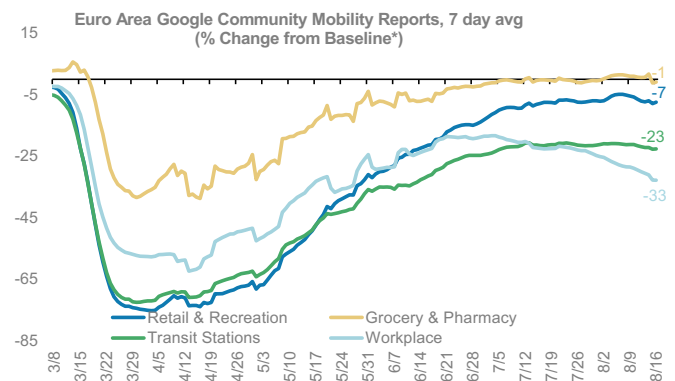
Source: Google, Morgan Stanley Research; Data released on Aug 18. *The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3 – Feb 6, 2020. Note that aggregates are PPP-weighted.

Exhibit 40: US: Mobility trends remain largely flat



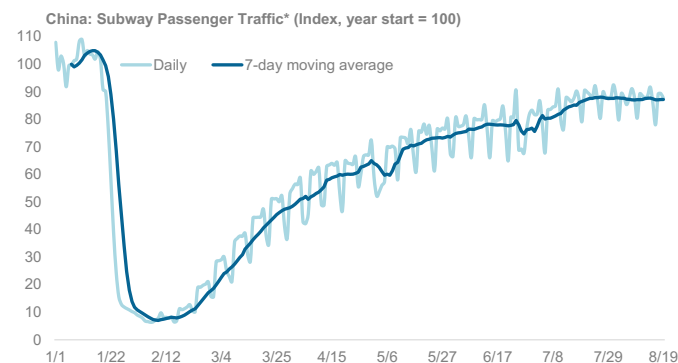
Source: Google, Morgan Stanley Research; Data released on Aug 18. *The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3 – Feb 6, 2020.

Exhibit 41: Euro area: Mobility rose above baseline in grocery & pharmacy, weakened further in workplace



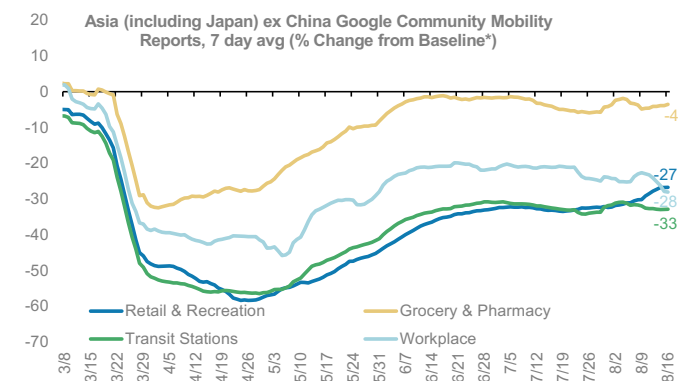
Source: Google, Morgan Stanley Research; Data released on Aug 18. *The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3 – Feb 6, 2020. Note that aggregates are PPP-weighted.

Exhibit 42: China's subway passenger traffic range bound

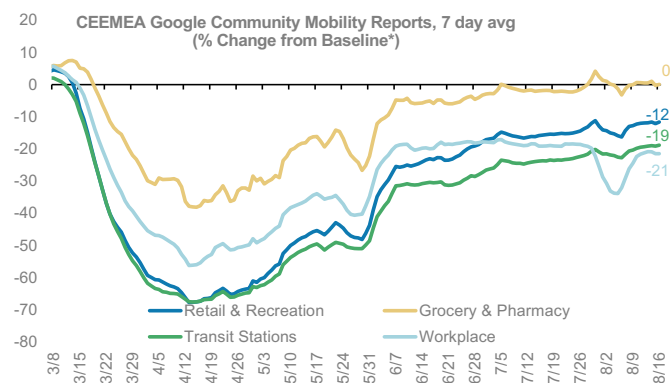


Source: Municipal Transportation Commission and Local Metro Companies, Wind, Morgan Stanley Research; *Eight cities include Chengdu, Chongqing, Guangzhou, Nanjing, Shanghai, Suzhou, Xi'an and Zhengzhou.

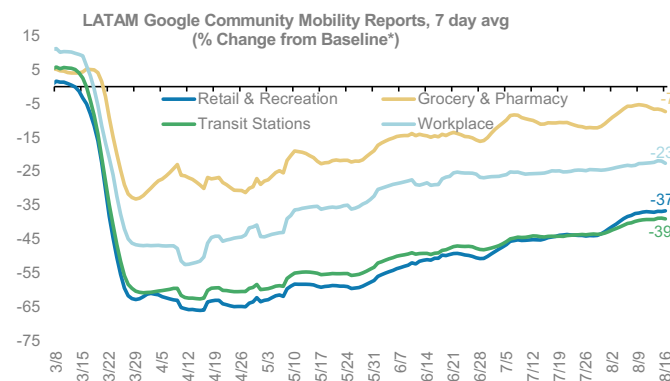
Exhibit 43: Asia ex China: Mobility improved in retail & recreation but dropped in workplace



Source: Google, Morgan Stanley Research. Data released on Aug 18; *The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3 – Feb 6, 2020. Note that aggregates are PPP-weighted.

Exhibit 44: CEEMEA: Relatively flat compared to the prior week


Source: Google, Morgan Stanley Research; Data released on Aug 18. *The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3 – Feb 6, 2020. Note that aggregates are PPP-weighted.

Exhibit 45: LatAm: Ticked down in workplace and grocery & pharmacy


Source: Google, Morgan Stanley Research; Data released on Aug 18. *The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3 – Feb 6, 2020. Note that aggregates are PPP-weighted.

Mobility and COVID-19 Statistics in Major Economies and US Top 20 States

In this section, we track the mobility and COVID-19 case statistics for the key economies and top 20 US states (by GDP). The following exhibits show the major economies as well as top 20 US states by GDP, and we also include statistics on new cases, new fatalities, positivity rates as well as current hospitalization data for US states (note for China and Brazil, test positivity rate data are not available).

Exhibit 46: Tracking mobility and Covid-19 situations in key economies

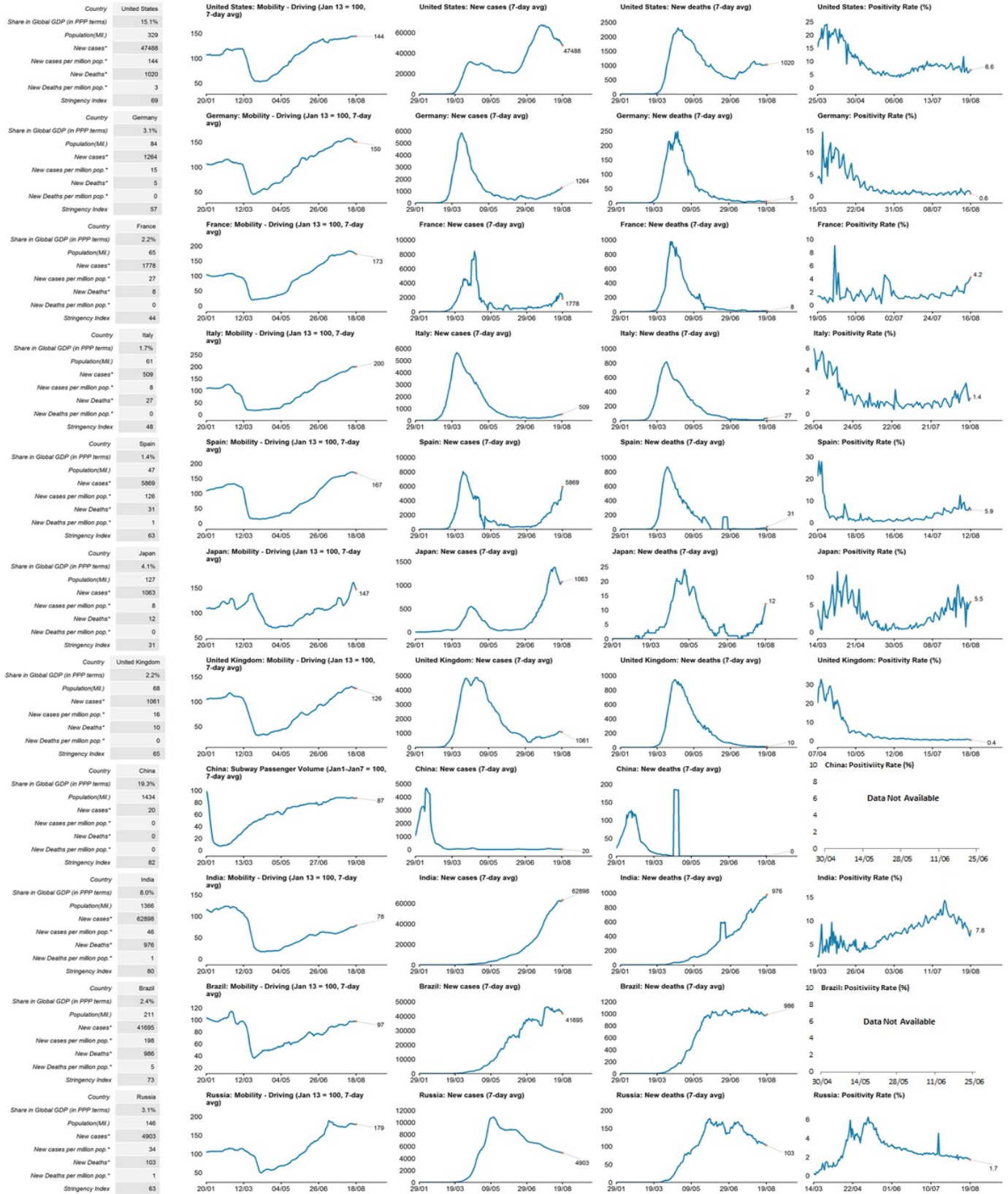
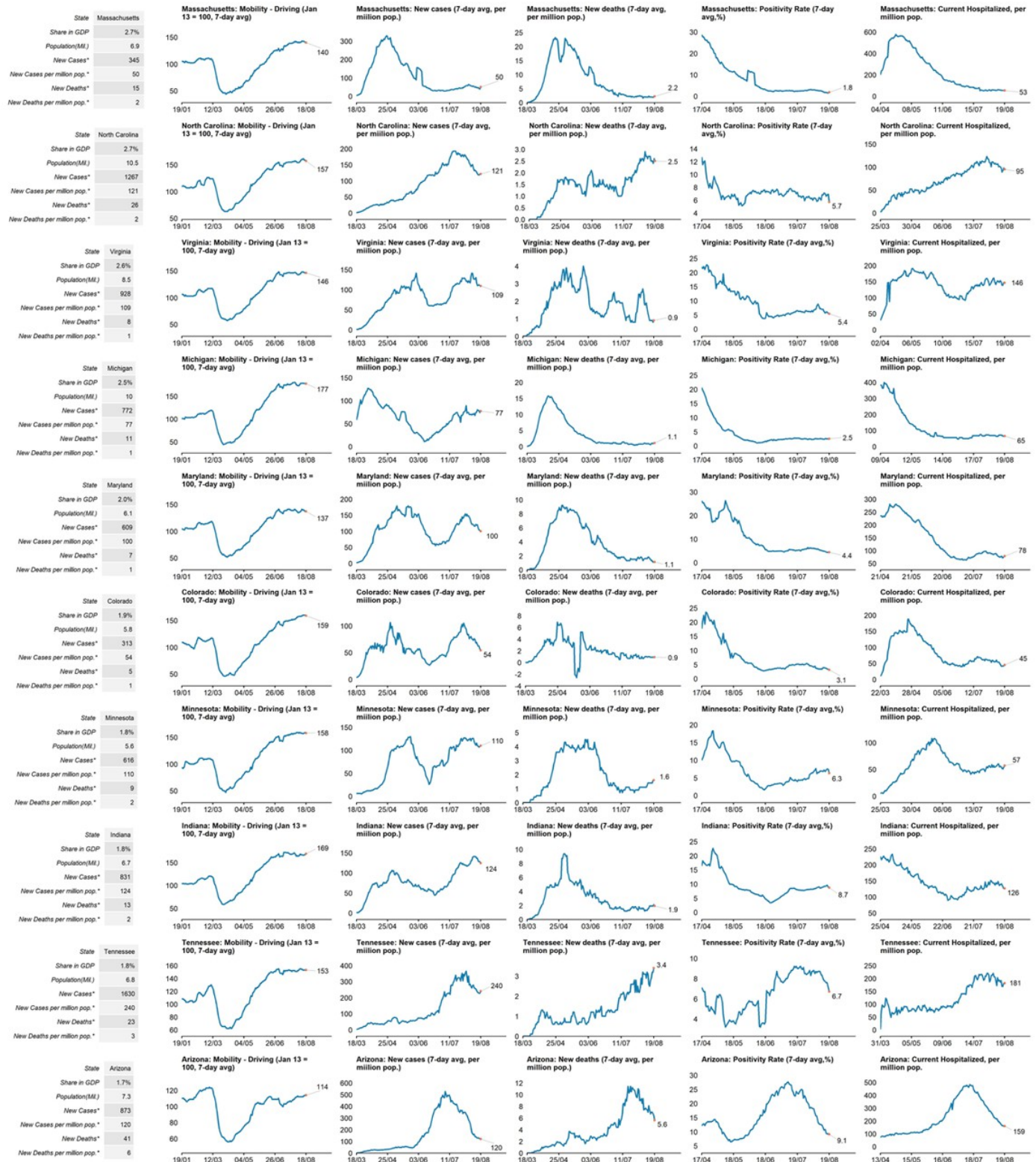


Exhibit 47: Top 20 US states by GDP mobility and COVID-19 statistics – ranked by GDP size


Source: The COVID Tracking Project, Apple, Johns Hopkins University, Haver Analytics, Morgan Stanley Research; *7-day moving average. Washington has paused testing data while they are switching to a new methodology.

Exhibit 48: Top 20 US states by GDP mobility and COVID-19 statistics – ranked by GDP size


AlphaWise Interactive Tool – Mobility Dashboard

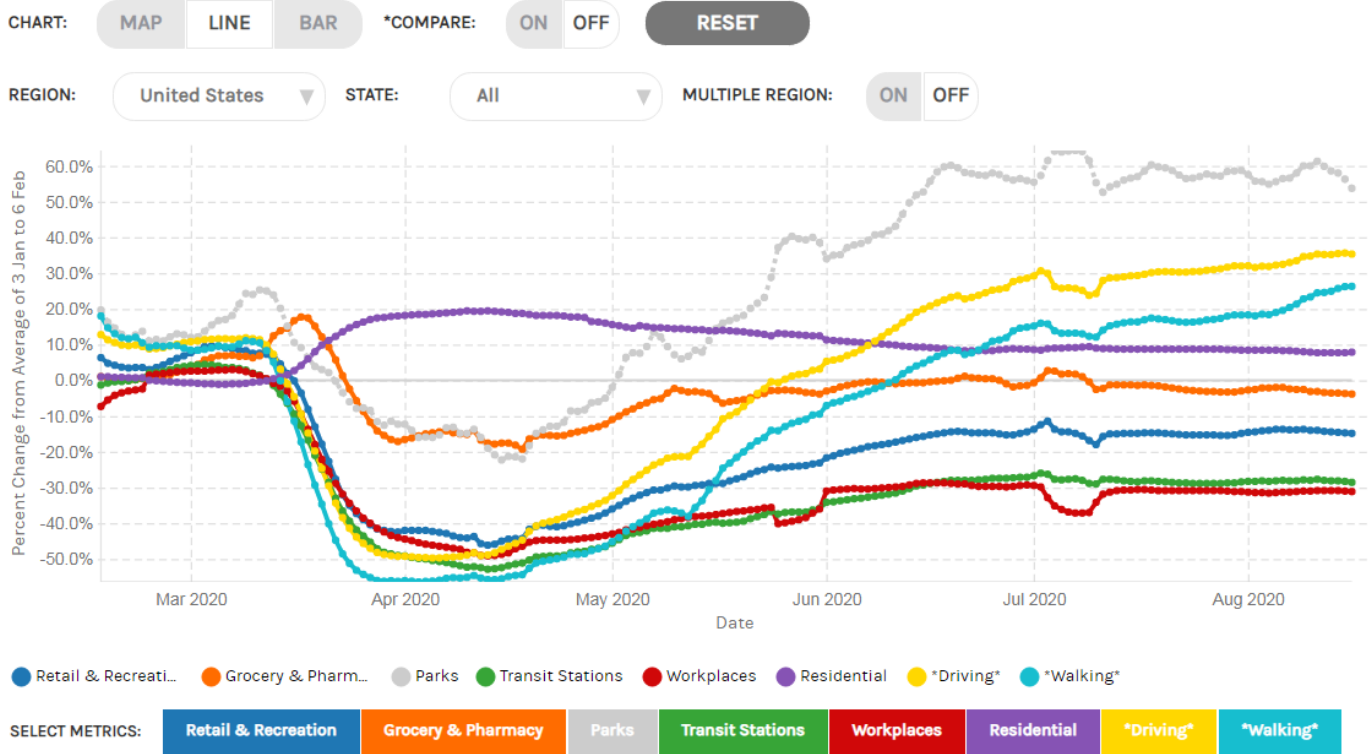
This AlphaWise interactive tool tracks mobility for 31 economies, with accompanying statewide data, where available.

To use the interactive, use the drop-down menus to select the economy. You are also able to compare data across economies and states by toggling the "compare" button.

AlphaWise COVID-19 Dashboard

Shows the different mobility index on selected region. Hover over the chart to see respective values for specific date or region.

alphawise **α**



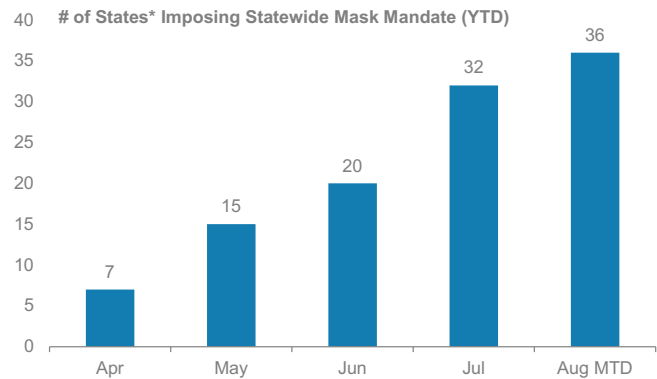
AlphaWise, Google LLC "Google COVID-19 Community Mobility Reports", Apple Mobility Data, Morgan Stanley Research

Tracking the Reopening

Here is an update on the status of reopening across major economies:

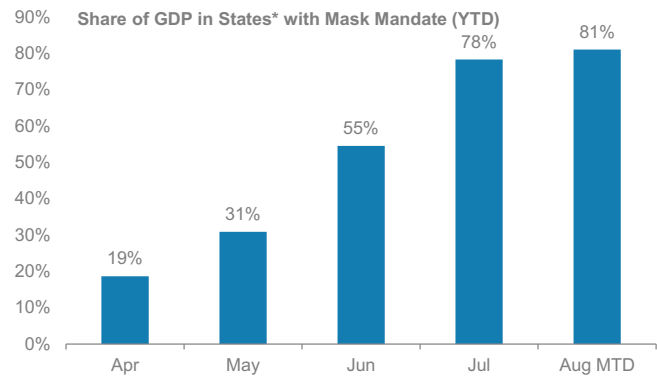
- In the US, an increasing number of schools that were reopened closed down again. In states including Indiana, Louisiana, Oklahoma, Tennessee and Georgia more schools have closed to in-person learning this month due to students and staffers testing positive for the virus.
- In the euro area, cases continue to rise, major economies have either paused further easing of restrictions or introduced business closures. In Germany, the government has ruled out any further easing of restrictions after a spike in infections. The chancellor urged people to stick to the rules such as wearing masks, and said travelers returning from risk areas had to have a negative test or else go into quarantine. In Italy, the government shut down discos and clubs this week and made face masks mandatory in some areas during night time, which was the first reimposition of restrictions. Similarly in Spain, nightlife establishments were ordered to shut down, and bars and restaurants now have to close by 1am. The Health Minister also advised against gatherings of more than 10 people.
- In UK, theatres, casinos and bowling alleys are now allowed to open as part of the latest easing of lockdown measures in the country. Physically distanced crowds are now allowed back into indoor venues, and wedding receptions of up to 30 people are also permitted.
- In India, the Unlock 3.0, the third phase of reopening, is under way. This week, the Delhi government allowed hotels to reopen for business. Weekly markets were also allowed to resume on a trial basis. In the northeastern state of Assam, schools are slated to reopen from September 1. All teachers and school employees will be required to test for the virus between August 21 and 30.
- In Brazil, major tourist sites in Rio de Janeiro are now open after five months of closure. Visitors will be required to wear masks and socially distance. The city authorities have also announced that the big traditional year-end celebrations will be held as a series of smaller celebrations around the city, and people are urged to watch them online.

Exhibit 49: 35 states and Washington, DC in the US have issued mask mandates ...



Source: Morgan Stanley Research. *Includes Washington, DC.

Exhibit 50: ... making up of 81% of the total GDP



Source: Morgan Stanley Research. *Includes Washington, DC.

Exhibit 51: Social distancing guidelines in key economies

Country	Start of Lockdown	Current Announced Date Till Which Social Distancing Guidelines are Effective Until	Comments
US*	March 19 th to April 7 th	April 24 th to June 10 th	New cases continue to rise in the US, and more states have paused or partially reverted their reopening plans. California and New Mexico have shut down all restaurant indoor dining service across the states. Indoor dining also remains closed in Miami-Dade county (state of Florida), the city of Baltimore (state of Maryland) and in Chicago (state of Illinois). Many other states, like Arizona, Colorado and Delaware, have also decided to shut down bars to curb the spread of the virus.
Germany	March 22 nd	Certain contact restrictions remain in place with most other restrictions now decided at the regional level	Decisions about further easing measures have now been largely delegated to the 16 federal states, depending on local circumstances. Many restrictions have now been lifted, with shops and schools now open again, members of different households allowed to meet up, and the Bundesliga resuming play without spectators. Larger public events will remain banned until October 31 however. Tourist travel to the EU and a number of other countries is now allowed again. This week, amid rising new cases, Angela Merkel announced a pause of easing restrictions further.
France	March 17 th	Lockdown officially lifted on May 11 th . State of emergency ended on July 10 th and was replaced by a Bill which allows the government to impose restrictions on gatherings	Small non-essential shops have been allowed to open from May 11, and following President Macron's address on June 15, restaurants and bars have fully reopened across the country. The requirement for a 2-week quarantine was dropped for EU countries except for visitors from Spain, and the UK, who are still advised to quarantine upon arrival to France. Forms are no longer needed to go out from May 11, apart for trips of more than 100km. Gatherings of fewer than 10 people are also permitted; the elderly and vulnerable are allowed out but are advised to be cautious. Beaches have also reopened. Amid a recent rise in new cases, Labor ministry announced that face masks will be required in enclosed shared office spaces starting Sep 1, wearing of face masks already mandatory in public indoor spaces in France.
Italy	March 10 th	Lockdown lifted on May 3, State of emergency extended to October 15	Stationary and book shops and stores selling clothes for children were allowed to re-open from April 14, same as forestry and timber production. Manufacturing, construction and wholesale retail resumed on May 4. Retail and museums, cafes, restaurants and hairdressers were allowed to re-open on May 18. Intraregional travel curbs was lifted on June 3. Travellers from EU and UK are also allowed since June 3. Schools to remain closed until September. Amid the recent rise in new infections, the government ordered the shutdown of discos and clubs and it compulsory to wear a mask outdoors in some areas during the night-time.
Spain	March 16 th	Lockdown gradually lifted starting on April 13, State of emergency ended on June 21	Construction and non-essential manufacturing resumed activity on April 13. Small business that can operate by appointment re-opened on May 4. Further relaxation took place on May 11, with some regions moving to phase 1 of the 4-phase plan detailed by the government. The state of emergency ended on June 21, with the whole country going to the so-called 'new normal'. Changes in restrictions are now coordinated at the regional level. Many restrictions are now lifted, particularly regarding restaurants and bars, shops, outdoor markets, place of worship, hotels, cultural spaces, despite continued precautions. Also on June 22 Spain opened its external borders to travellers from the Schengen area, while intraregional travel curbs were also be lifted. Despite this, there are currently multiple outbreaks in the country, with the latest including the shutdown of nightlife establishments and banning of drinking on the street.
Japan	State of emergency (SOE) announced on Apr 7 th in seven prefectures including Tokyo, and later expanded to nationwide from Apr 16 th ; no hard lockdown	May 25 th	As economic activity resumes, the number of new Covid-19 cases has been on the rise again, especially in Tokyo. The government has decided to exclude Tokyo residents from the new "Go To Travel" program in which a part of travel expenses would be subsidized. This week, The Tokyo metropolitan government asked restaurants and karaoke bars to limit their operating hours and the Governor said that Tokyo is considering issuing its own version of a state of emergency in the future depending on the number of cases in the coming days. Regional state of emergency has also been announced in Aichi and Okinawa Prefecture.
UK	March 24 th	State of emergency still in place but retail and hospitality sector reopened	Outdoor markets, stores and car dealerships have been allowed to reopen on June 1, and gatherings of up to 6 people were allowed too; non-essential retail reopened from June 15 while restaurants and personal care services (e.g. hairdressers) restarted work on July 4, with the '1 meter or more' social distancing rule. Other lifting of measures will depend on the progress of the outbreak. When teleworking is not possible, travelling to the workplace is allowed and Prime Minister Johnson encouraged return to work – although without using public transport, where possible. Air bridges have been announced with more than 60 countries, largely European destinations – these are countries where UK travellers will be allowed to visit without being subject to quarantine – either when going abroad or returning the UK. Spain and Belgium have recently been removed from the air bridge list due to the outbreak of Covid-19 in those countries, and amid local outbreaks in the UK, in the town of Preston, and Greater Manchester, different households are banned from socializing indoors.
China	January 23 rd	Feb 21 st	Daily confirmed new cases in China dropped to 35 on average during past week (vs. 62 during the week of July 29-August 4), as the softening domestic infections led by Xinjiang (18 in the past week vs. 49 during July 29-August 4) outweighed the rebound in imported cases (16 vs. 7 during July 29-August 4). Dalian lifted the lockdown measures in all medium-risk areas on August 10, after no local infections for four consecutive days.
India	March 24 th	June 8 th	The government announced "Unlock 3.0" guidelines on July 29. Under "Unlock 3.0", restrictions on the movement of individuals during night will be removed, and the government will allow yoga institutes and gymnasiums to open from August 5. There will also be no restrictions on intra- and inter-state travels. However, strict enforcement of lockdown in containment zones are still in place until August 31. Schools, colleges and coaching institutions will remain closed till August 31. Besides, metro rail, cinema halls, swimming pools, entertainment parks, theatres, bars, auditoriums, assembly halls will also remain closed.
Brazil	Late March	Varies by state	Reopening is well in progress. In Sao Paulo, around half of the businesses were open on June 10 and shopping malls were re-opened on June 11, where strict distancing roles were still followed. Shopping malls require masks and take people's temperature while also limiting access to 20% of capacity. Cinemas in the malls were not allowed to open yet and eateries in food plazas could only sell meals for delivery. Restaurants and bars have now been allowed to open in Sao Paulo and Rio de Janeiro. On July 29, Brazil reopened international air travel to foreign tourists, which had been banned since March. On August 15, the mayor of Rio de Janeiro announced reopening of major tourist sites in the city.
Russia	March 30 th	May 11 th	The government lifted the lockdown on May 12 in a gradual manner and emphasized that individual regions would need to tailor their approach to varying local conditions. Moscow eased lockdown restrictions on June 1 as planned with parks and shopping centers allowed to reopen and people allowed out to do limited exercise. Restaurants, cafes, hairdressers and gyms remain closed. Salons, veterinarians, employment agencies and cemeteries in Moscow opened on June 9, followed by dental practices, museums and libraries a week later. Remaining restrictions on restaurants and gyms were lifted on June 23. From July 15, Russia no longer required foreigners without coronavirus to self-isolate for 14 days after arrival but still would need travelers to provide a negative test result.

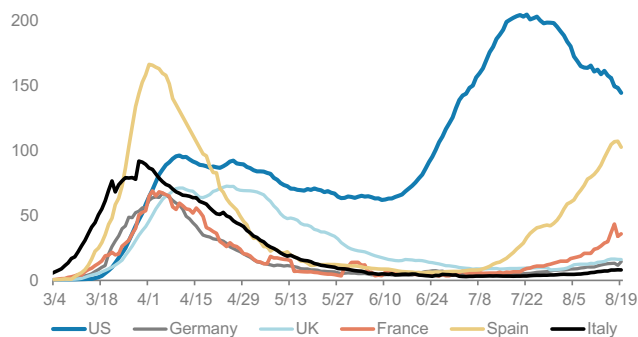
Source: National sources, various news websites, Morgan Stanley Research; *For the US, we use the dates on which states announced stay-at-home orders. California is the first state that announced stay-at-home order on March 19, and South Carolina is the last state that announced stay-at-home order on April 7. Alaska's stay-at-home order ended on April 24, and Virginia's stay-at-home order ended on June 10.

Current situation on COVID-19

This section provides an update on the number of cases, deaths and other key statistics related to the COVID-19 outbreak.

Exhibit 52: Daily new COVID-19 cases per 1mn population in DMs

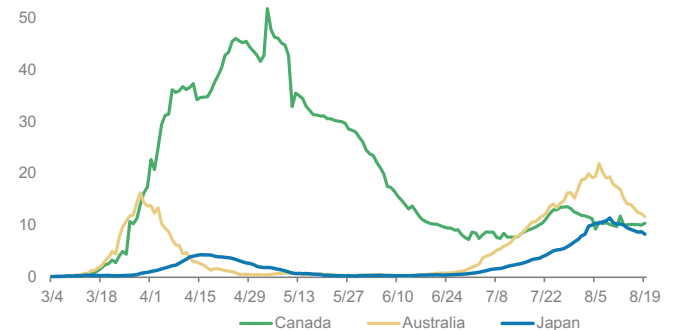
Daily new COVID-19 cases per 1 mil population, 7 day avg



Source: WHO, Johns Hopkins University, Morgan Stanley Research

Exhibit 53: Daily new COVID-19 cases per 1mn population in DMs (continued)

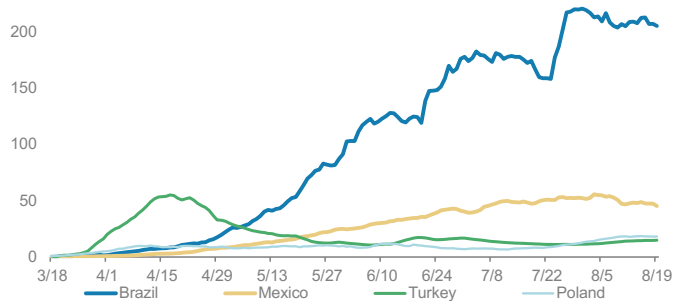
Daily new COVID-19 cases per 1 mil population, 7 day avg



Source: WHO, Morgan Stanley Research

Exhibit 54: Daily new COVID-19 cases per 1mn population in EMs

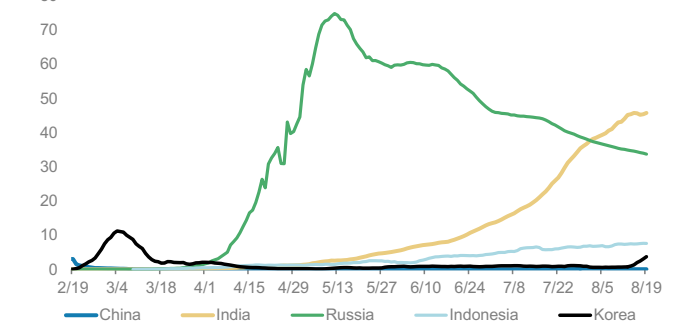
Daily new COVID-19 cases per 1 mil population, 7 day avg



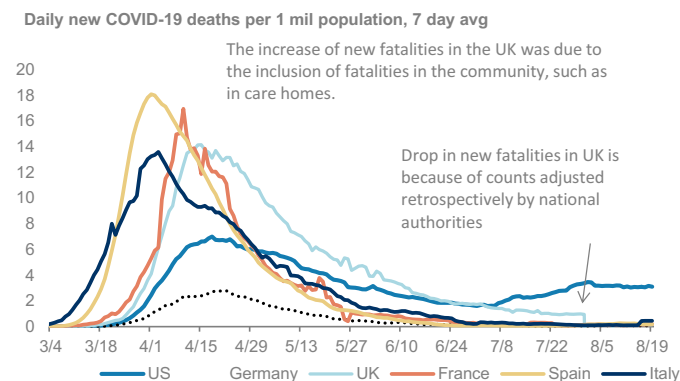
Source: WHO, Morgan Stanley Research

Exhibit 55: Daily new COVID-19 cases per 1mn population in EMs (continued)

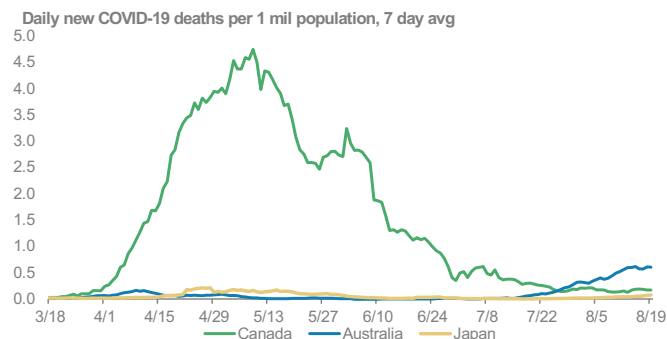
Daily new COVID-19 cases per 1 mil population, 7 day avg



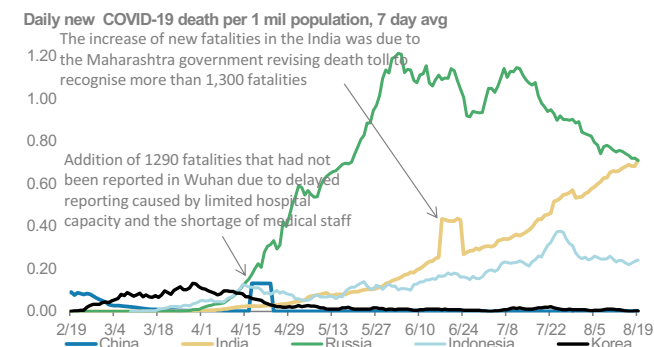
Source: WHO, Morgan Stanley Research

Exhibit 56: Daily new COVID-19 deaths per 1mn population in DMs


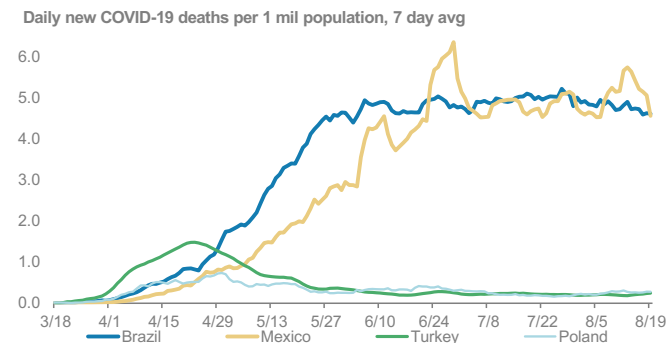
Source: WHO, Johns Hopkins University, Morgan Stanley Research.

Exhibit 57: Daily new COVID-19 deaths per 1mn population in DMs (continued)


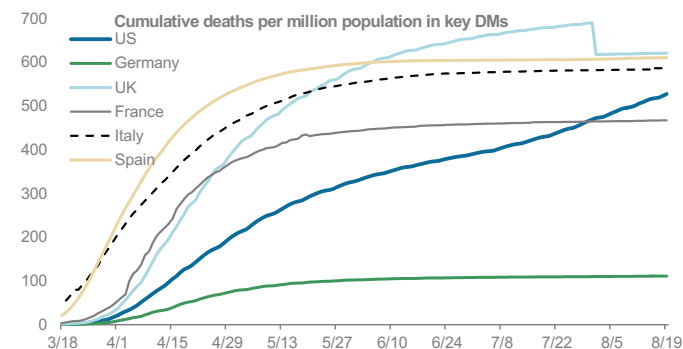
Source: WHO, Morgan Stanley Research

Exhibit 58: Daily new COVID-19 deaths per 1mn population in EMs


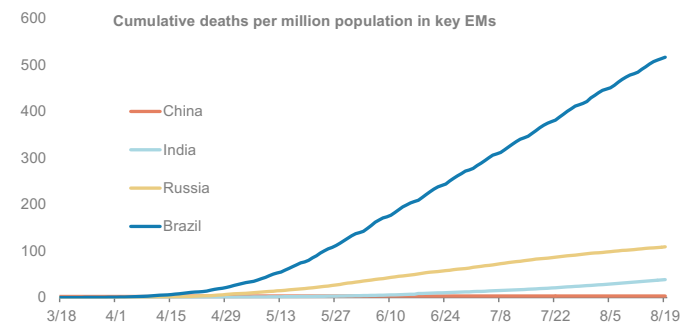
Source: WHO, Morgan Stanley Research

Exhibit 59: Daily new COVID-19 deaths per 1mn population in EMs (continued)


Source: WHO, Morgan Stanley Research

Exhibit 60: Cumulative deaths per million population in key DMs


Source: WHO, Johns Hopkins University, Morgan Stanley Research

Exhibit 61: Cumulative deaths per million population in key EMs


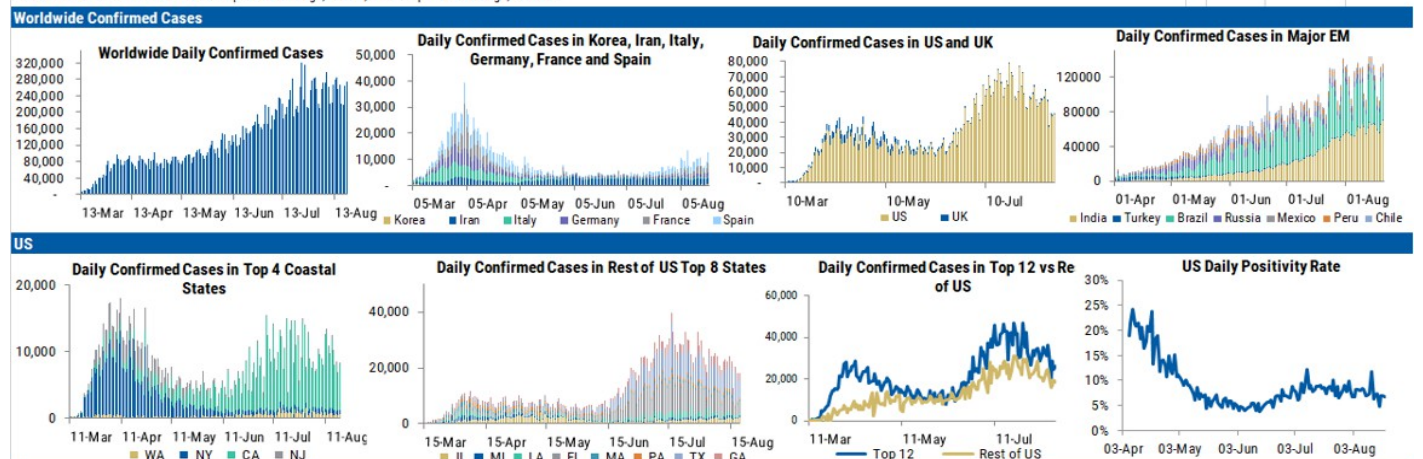
Source: WHO, Morgan Stanley Research

Exhibit 62: Global COVID-19 Monitor

Global Covid-19 Monitor

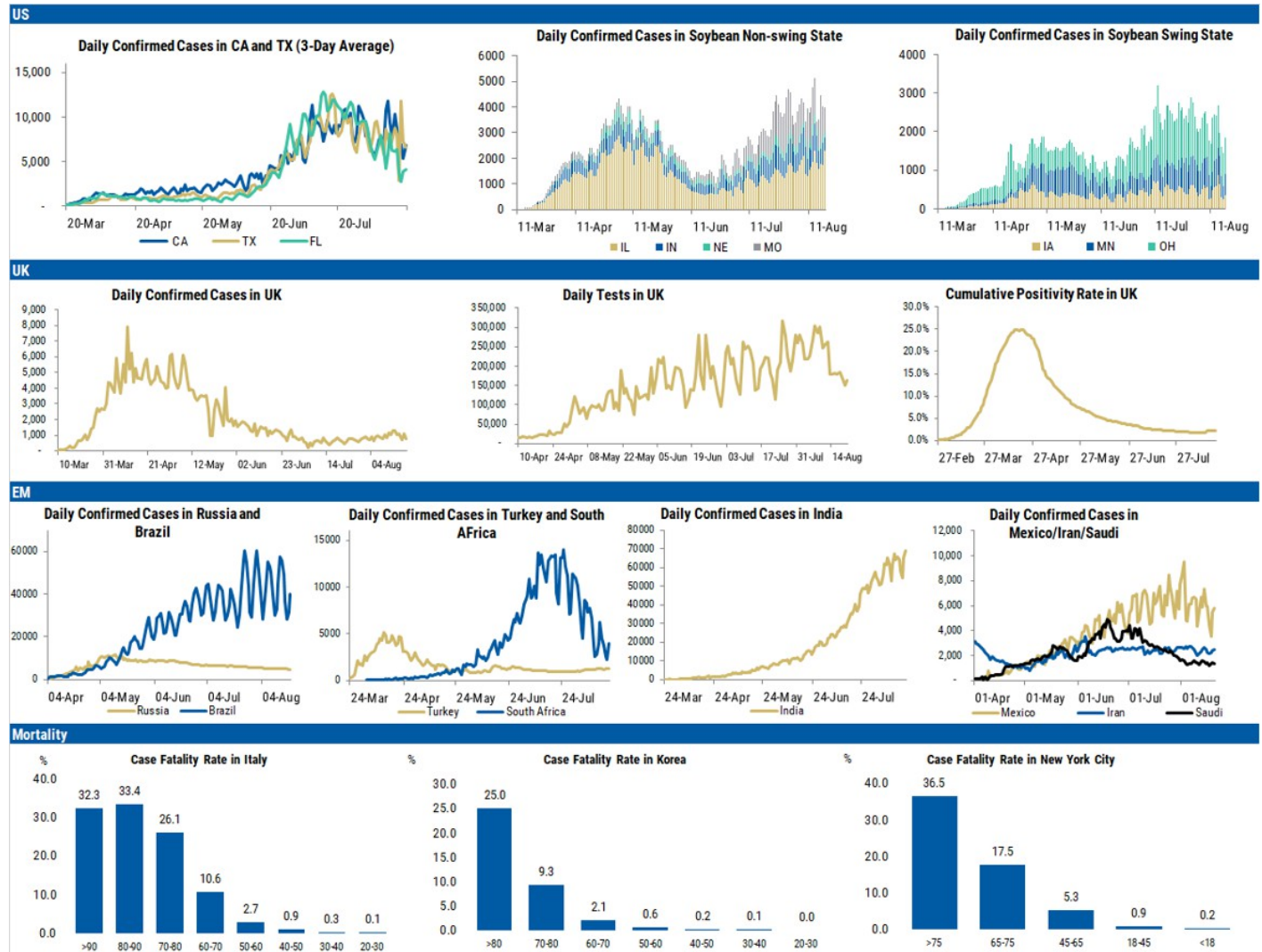
20-Aug-20

WW/US	Confirmed Cases				Tested Cases				Testing Positivity Rate			Fatality				Mortality			Infected/1mm		Test/1mm		
Country	Cumulative	DoD	Pre DoD	3D Avg	Cumulative	DoD	Pre DoD	3D Avg	Cumulative	Daily	3D Avg	Country	Cumulative	DoD	Pre DoD	3D Avg	Country	Cumulative	DoD	Pre DoD	3D Avg	Population	Population
Worldwide	22,577,641	273,547	263,682	234,082	+	NA	NA	NA	NA	NA	NA	US	784,307	7,178	4,164	4,896	+	3.5%	NA	NA	NA	NA	NA
Covered*	17,879,580	202,653	192,024	165,909	+	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RoW	4,698,061	70,894	71,658	68,173	+	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
*Include all countries covered in the report																							
WW/US	Confirmed Cases				Tested Cases				Testing Positivity Rate			Fatality				Mortality			Infected/1mm		Test/1mm		
Country	Cumulative	DoD	Pre DoD	3D Avg	Cumulative	DoD	Pre DoD	3D Avg	Cumulative	Daily	3D Avg	Country	Cumulative	DoD	Pre DoD	3D Avg	Country	Cumulative	DoD	Pre DoD	3D Avg	Population	Population
US	5,700,931	44,957	43,947	42,062	+	68,944,867	680,934	642,814	690,571	-	8%	7%	6%	+	US	176,337	1,263	1,358	823	+	3.1%	17368	210044
CA	647,209 (11%)	6,795	5,359	6,263	+	10,140,683	91,644	115,259	122,643	-	6%	7%	5%	+	CA	11,686	164	179	99	+	1.8%	16380	256647
FL	584,047 (10%)	4,115	3,838	3,432	+	4,306,239	27,199	26,164	25,438	+	14%	15%	13%	+	FL	9,938	174	223	138	+	1.7%	26556	195801
TX	585,454 (10%)	6,605	7,232	7,293	-	4,517,189	16,544	24,478	59,656	-	13%	40%	12%	+	TX	10,517	253	144	123	+	1.8%	19865	153269
NY	457,600 (8%)	764	718	632	+	7,272,403	80,425	66,891	67,158	+	6%	1%	1%	+	NY	32,937	5	12	10	-	7.2%	23523	373834
GA	243,982 (4%)	2,305	2,816	2,170	+	2,075,697	15,378	32,902	24,084	-	12%	15%	9%	+	GA	4,849	55	67	42	+	2.0%	22974	195452
IL	213,221 (4%)	2,295	1,740	1,692	+	3,490,903	50,299	34,175	36,503	+	6%	5%	5%	-	IL	8,017	24	26	19	+	3.8%	16826	275486
NJ	194,276 (3%)	301	330	387	-	2,557,712	24,967	21,675	23,787	+	8%	1%	2%	-	NJ	16,030	0	9	14	-	8.3%	21873	287960
MA	124,415 (2%)	352	222	288	+	1,496,640	20,073	11,653	14,022	+	8%	2%	2%	-	MA	8,876	28	6	7	+	7.2%	17833	214523
LA	139,903 (2%)	778	640	796	-	1,704,974	14,983	15,702	17,660	-	8%	5%	5%	+	LA	4,609	55	28	40	+	3.3%	30860	376085
PA	130,950 (2%)	664	600	585	+	1,494,467	14,901	12,247	11,961	-	9%	4%	5%	-	PA	7,619	32	30	13	+	5.8%	10214	116565
MI	104,091 (2%)	689	653	540	+	2,395,188	32,663	22,318	23,582	+	4%	2%	2%	-	MI	6,618	10	16	7	+	6.4%	10362	238445
WA	70,708 (1%)	563	494	556	+	1,018,371	543	260	527	+	7%	104%	105%	-	WA	1,822	12	25	15	-	2.6%	9285	133734
Top 12	8,495,856 (61%)	26,226	24,642	24,634	+	42,470,466	389,619	383,724	427,022	-	8%	7%	6%	+	Top 12	123,518	812	765	527	+	3.6%	18938	230073
Rest of US	2,205,075 (39%)	18,731	19,305	17,428	+	26,474,401	291,315	259,090	263,549	+	8%	6%	7%	-	RoU	52,819	451	593	296	+	2.4%	15351	184306
*Color code in US (confirmed cases and fatality) reflects the comparison across US states only																							
Other DM	Confirmed Cases				Tested Cases				Testing Positivity Rate			Fatality				Mortality			Infected/1mm		Test/1mm		
Country	Cumulative	DoD	Pre DoD	3D Avg	Cumulative	DoD	Pre DoD	3D Avg	Cumulative	Daily	3D Avg	Country	Cumulative	DoD	Pre DoD	3D Avg	Country	Cumulative	DoD	Pre DoD	3D Avg	Population	Population
UK	321,098	812	1,089	969	-	14,988,134	163,083	150,210	168,143	-	2%	0%	1%	-	UK	41,397	16	12	7	+	12.9%	4833	225589
Spain	387,985	3,715	2,128	1,490	+	NA	NA	NA	NA	NA	NA	Spain	28,797	127	24	18	+	7.4%	8299	NA	NA	NA	NA
Italy	255,278	642	401	399	+	7,713,154	71,095	53,976	40,483	+	3%	1%	1%	-	Italy	35,412	7	5	4	+	13.9%	4229	127787
France	225,043	3,776	2,238	1,915	+	NA	NA	NA	NA	NA	NA	France	29,781	0	0	0	+	13.2%	3448	NA	NA	NA	NA
Germany	229,700	1,595	1,419	1,209	+	NA	NA	NA	NA	NA	NA	Germany	9,314	9	9	5	+	4.1%	2744	NA	NA	NA	NA
Canada	123,490	336	282	422	-	4,925,446	45,274	40,129	46,342	-	3%	1%	1%	-	Canada	9,049	4	13	7	-	7.3%	3279	130767
Sweden	85,411	192	174	308	-	NA	NA	NA	NA	NA	NA	Sweden	5,802	12	3	2	+	6.8%	8457	NA	NA	NA	NA
Japan	57,550	865	1,018	1,036	-	1,236,180	22,035	27,677	16,705	+	5%	4%	6%	-	Japan	1,128	13	16	10	+	2.0%	455	9766
Australia	24,236	463	214	246	+	NA	NA	NA	NA	NA	NA	Austral	463	25	17	20	+	1.9%	2400	NA	NA	NA	NA
*Some of the European countries dont update number over the weekend																							
EM	Confirmed Cases				Tested Cases				Testing Positivity Rate			Fatality				Mortality			Infected/1mm		Test/1mm		
Country	Cumulative	DoD	Pre DoD	3D Avg	Cumulative	DoD	Pre DoD	3D Avg	Cumulative	Daily	3D Avg	Country	Cumulative	DoD	Pre DoD	3D Avg	Country	Cumulative	DoD	Pre DoD	3D Avg	Population	Population
Brazil	3,460,413	48,541	48,637	31,347	+	NA	NA	NA	NA	NA	NA	Brazil	111,189	1,170	1,365	907	+	3.2%	16308	NA	NA	NA	NA
India	2,835,822	69,196	65,022	59,139	+	31,742,782	801,518	899,864	792,723	+	9%	9%	7%	+	India	53,994	980	1,089	977	+	1.9%	2060	23060
Russia	937,321	4,828	4,748	4,870	-	33,217,468	248,709	268,759	249,071	-	3%	2%	2%	-	Russia	15,989	117	132	85	+	1.7%	6424	227642
South Africa	596,060	3,916	2,258	2,830	+	3,455,671	25,324	14,677	17,439	+	17%	15%	16%	-	South Africa	12,423	159	282	196	-	2.1%	10081	58446
Mexico	537,031	5,792	5,506	4,508	+	1,211,552	14,845	15,012	8,567	+	44%	39%	53%	-	Mexico	58,481	707	751	410	+	10.9%	4175	9420
Peru	490,062	4,403	4,403	4,403	+	NA	NA	NA	NA	NA	NA	Peru	26,834	176	377	267	-	5.5%	14878	NA	NA	NA	NA
Chile	390,037	1,182	1,353	1,651	-	NA	NA	NA	NA	NA	NA	Chile	10,578	32	33	50	-	2.7%	20416	NA	NA	NA	NA
Iran	350,279	2,444	2,385	2,255	+	NA	NA	NA	NA	NA	NA	Iran	20,125	153	168	160	-	5.7%	4185	NA	NA	NA	NA
Saudi Arab	302,686	1,363	1,409	1,336	+	NA	NA	NA	NA	NA	NA	Saudi A	3,506	36	34	34	+	1.2%	8704	NA	NA	NA	NA
Turkey	253,108	1,303	1,263	1,229	+	5,969,629	87,223	82,318	74,373	+	4%	1%	2%	-	Turkey	6,039	23	20	20	+	2.4%	3009	70967
Indonesia	144,945	1,902	1,673	1,858	+	1,934,923	19,884	14,371	17,413	+	7%	10%	11%	-	Indone	6,346	69	70	69	+	4.4%	531	7092
China	84,895	7	17	20	-	NA	NA	NA	NA	NA	NA	China	4,634	0	0	0	-	5.5%	59	NA	NA	NA	NA
Singapore	56,031	93	100	92	+	NA	NA	NA	NA	NA	NA	Singap	27	0	0	0	-	0.0%	9594	NA	NA	NA	NA
Korea	16,346	288	297	247	+	1,734,083	19,019	18,022	11,092	+	1%	2%	2%	-	Korea	307	1	0	0	+	1.9%	319	33852
Malaysia	9,235	16	7	15	+	NA	NA	NA	NA	NA	NA	Malays	125	0	0	0	-	1.4%	286	NA	NA	NA	NA
Hong Kong	4,587	26	36	51	-	NA	NA	NA	NA	NA	NA	HK	72	2	1	1	+	1.6%	613	NA	NA	NA	NA
*The color code: If latest DoD is above past 3D average, "Red", if below past 3D average, "Green" -																							



Source: Morgan Stanley Research Asia Macro Strategy Team, NHC, WHO, Korea CFC, CEIC, Johns Hopkins CSSE, NHS, ISS, Worldometer

Exhibit 63: Global COVID-19 Monitor (continued)



Source: Morgan Stanley Research, NHC, WHO, Korea CDC, CEIC, Johns Hopkins CSSE, NHS, ISS, Worldometer, Datastream

Source: Morgan Stanley Research Asia Macro Strategy Team, NHC, WHO, Korea CDC, CEIC, Johns Hopkins CSSE, NHS, ISS, Worldometer, Datastream

United States

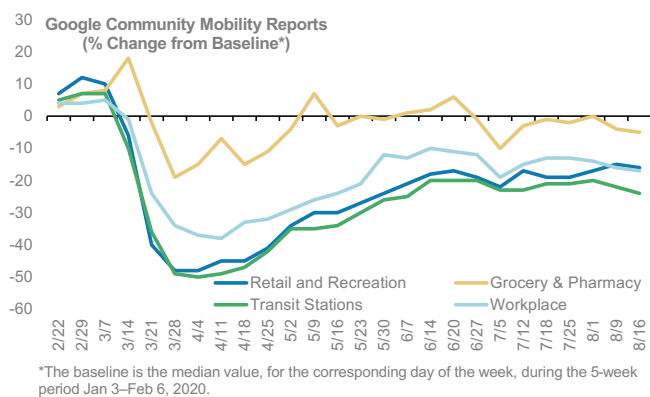
Ellen Zentner, Robert Rosener, Sarah Wolfe

High frequency indicators are not pointing to any material deterioration in the data for the first two weeks of August. Mobility data is little changed in recent weeks, but spending, hotel reservations, restaurant bookings, remain on a slow by steady upward trend. The expiration of the unemployment insurance benefits at the end of July could cause a slowdown in growth this month, though with further fiscal stimulus expected in September, households should be able to continue to spend and fuel the recovery.

- **After dipping in the first week of August, overall card payment volume growth rates are back on an upward trend in week 2.** Debit card spend was up 19.6%, higher than the prior 4-week average of 16.1%, while credit card spend was down 2.1%Y, better than the 4-week average of -3.3%. While grocery, drug store, and consumer goods spend remains strong, restaurant debit spend jumped back into positive territory in the latest week. Services spending also saw a jump this week, led by healthcare, home services, and personal and school services.
- According to [Showing Time](#), **real estate showings in North America 42.4% above their January 2020 level**, compared to +20.9% this time a year ago. this marks 12 weeks straight of showings above their 2019 levels.
- **Seated diners on Open Table are down 52%Y for the week ending August 19, up from -54% the week prior.** This is largely unchanged from the last week of June when the resurgence in cases began.

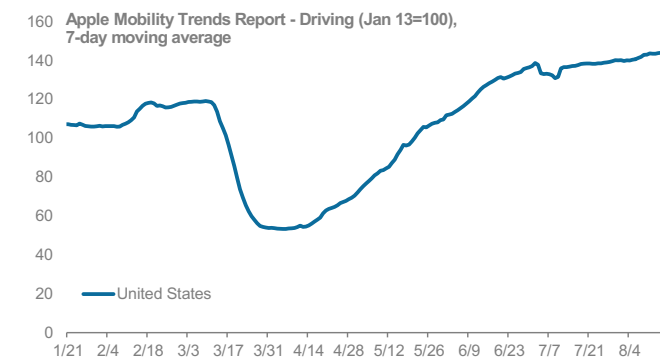
State-Level Tracking

Exhibit 64: Mobility still plateauing



Source: Google Mobility, Stanley Research

Exhibit 65: In line with apple mobility data



Source: Apple Mobility, Morgan Stanley Research

Exhibit 66: Google mobility by state

Google Community Mobility Reports (% Change from Baseline*)									
Data as of Aug 16	% of Total GDP	Retail & Recreation		Grocery & Pharmacy		Transit Stations		Workplace	
California	14.8%	-31	-	-11	-	-36	-	-21	-
Texas	9.5%	-18	-	-10	-	-25	-	-18	-
New York	7.7%	-28	-	-13	-	-43	-	-21	-
Florida	5.0%	-25	-	-16	-	-43	-	-23	-
Illinois	4.1%	-10	+	-2	+	-20	+	-12	+
Pennsylvania	3.9%	-10	-	-4	-	-20	-	-16	-
Ohio	3.3%	-10	-	-2	-	0	-	-12	-
New Jersey	3.0%	-27	-	-12	-	-36	-	-18	-
Georgia	2.9%	-14	-	-5	+	-28	+	-20	-
Washington	2.8%	-12	-	-2	-	-19	-	-17	-
Massachusetts	2.7%	-19	-	-14	-	-39	-	-16	-
North Carolina	2.7%	-12	+	-1	+	-19	-	-17	-
Virginia	2.6%	-16	-	-4	-	-24	-	-17	-
Michigan	2.5%	-4	-	1	-	-3	-	-10	-
Maryland	2.0%	-19	-	-9	-	-32	-	-18	-
Colorado	1.9%	-10	-	1	-	-21	-	-14	-
Minnesota	1.8%	-7	+	0	+	-26	+	-8	+
Indiana	1.8%	-3	-	4	-	14	-	-11	-
Tennessee	1.8%	-8	-	2	-	-6	-	-17	-
Arizona	1.7%	-25	-	-14	-	-30	-	-20	-
Wisconsin	1.6%	-1	+	8	+	5	+	-6	+
Missouri	1.5%	0	+	6	+	-1	+	-10	+
Connecticut	1.3%	-17	-	-14	-	-17	-	-15	-
Louisiana	1.3%	-18	-	-2	-	-21	-	-21	-
Oregon	1.2%	-12	-	-1	-	-8	-	-18	-
South Carolina	1.1%	-7	+	0	-	10	-	-17	-
Alabama	1.1%	-11	-	0	-	6	+	-17	-
Oklahoma	1.1%	-8	-	1	-	3	-	-12	-
Kentucky	1.0%	-11	-	2	-	0	-	-14	-
Iowa	0.9%	8	+	29	+	12	+	-7	+
Utah	0.9%	-6	-	8	-	-13	-	-20	-
Kansas	0.8%	-1	+	-3	-	15	+	-12	-
Nevada	0.8%	-21	-	-8	-	-33	-	-25	-
District of Columbia	0.7%	-51	-	-26	-	-64	-	-29	-
Arkansas	0.6%	-4	+	5	-	4	-	-14	-
Nebraska	0.6%	-4	-	3	-	12	-	-9	-
Mississippi	0.6%	-9	-	-2	-	4	-	-19	-
New Mexico	0.5%	-18	-	-7	-	-10	-	-16	-
Hawaii	0.4%	-38	+	-24	+	-67	-	-29	+
New Hampshire	0.4%	1	-	2	-	9	+	-8	-
Idaho	0.4%	9	-	16	-	37	-	-14	-
West Virginia	0.4%	-3	-	8	-	22	+	-12	-
Delaware	0.3%	-7	-	0	-	-17	-	-17	-
Maine	0.3%	18	+	24	-	58	+	-2	-
Rhode Island	0.3%	-15	-	-13	-	-33	-	-13	-
Alaska	0.3%	17	+	20	+	15	+	-10	-
North Dakota	0.3%	-1	+	4	+	4	-	-7	+
Montana	0.3%	12	+	29	-	54	-	-10	-
South Dakota	0.2%	23	-	43	-	62	-	-3	-
Wyoming	0.2%	18	-	35	-	62	+	-9	-
Vermont	0.2%	-3	+	10	+	-23	+	-14	+

Note: States are ordered by 2019 GDP size. Green plus signs show an improvement relative to last week, and red minus signs show further deterioration relative to last week. *The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3–Feb 6, 2020.
Source: Google Mobility, Morgan Stanley Research

Exhibit 67: By size of GDP, state mobility has plateaued in August: CA, TX, NY, FL, & IL...

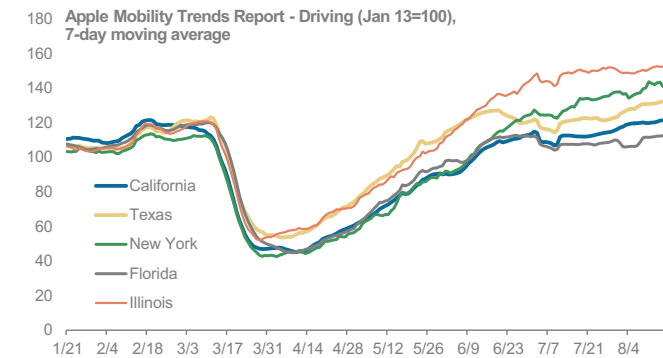


Exhibit 68: ...PA, OH, NJ, GA, & WA

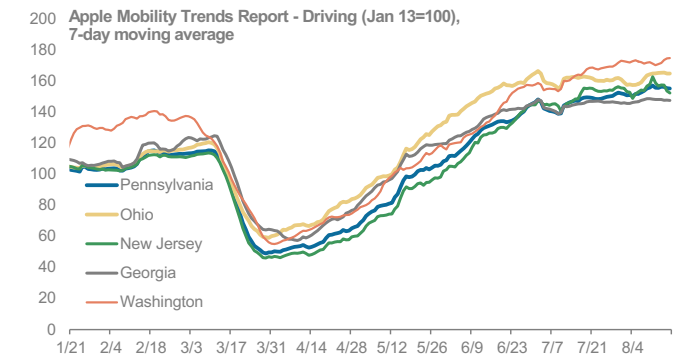


Exhibit 69: MA, NC, VA, & MI...

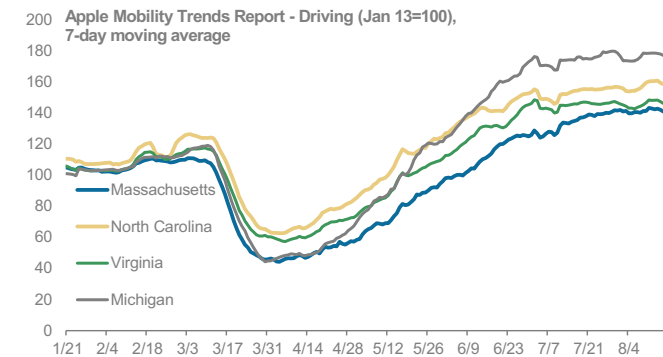


Exhibit 70: ...MD, CO, MN, IN, & TN

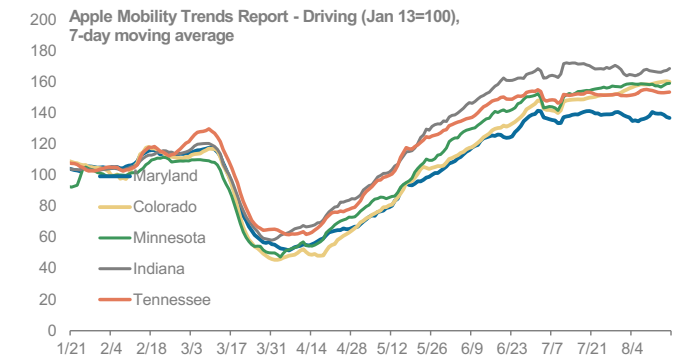


Exhibit 71: AZ, WI, MO, CT, & LA

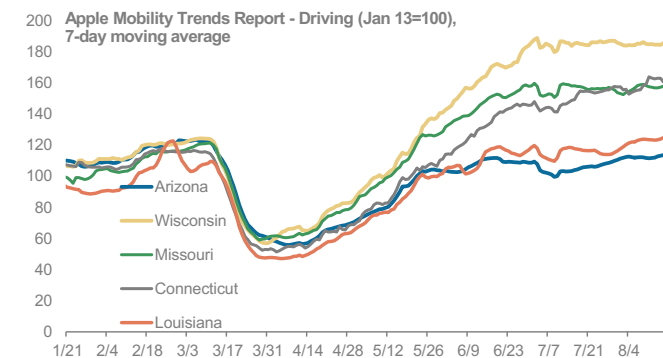
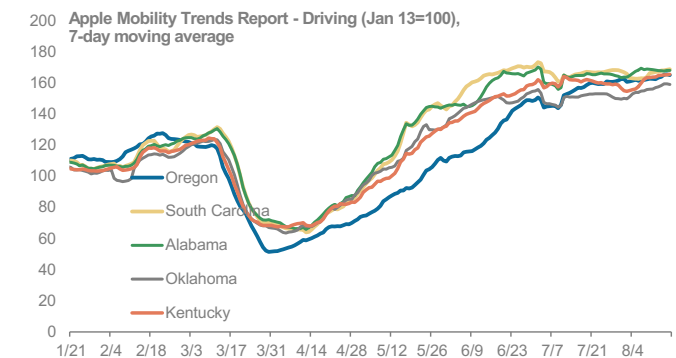
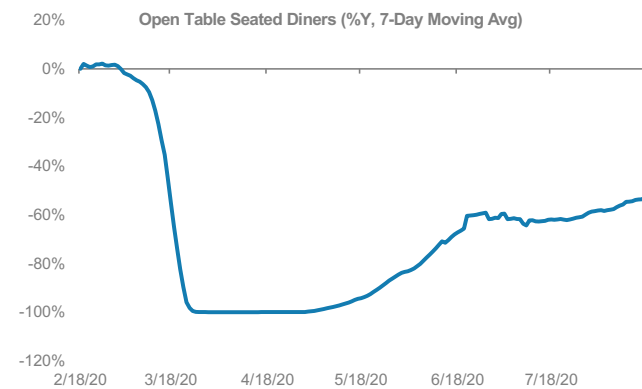


Exhibit 72: OR, SC, AL, OK, & KY



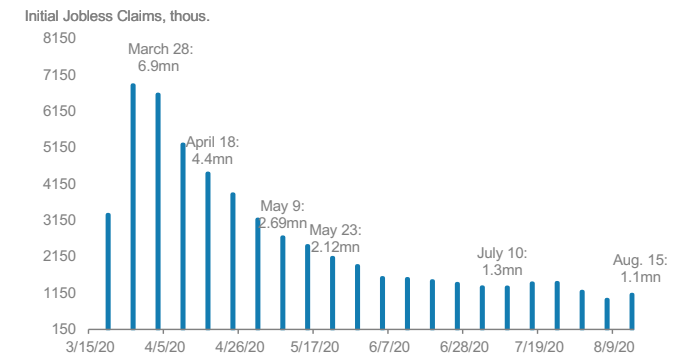
National Tracking

Exhibit 73: Restaurant reservations are on a steady upward trend



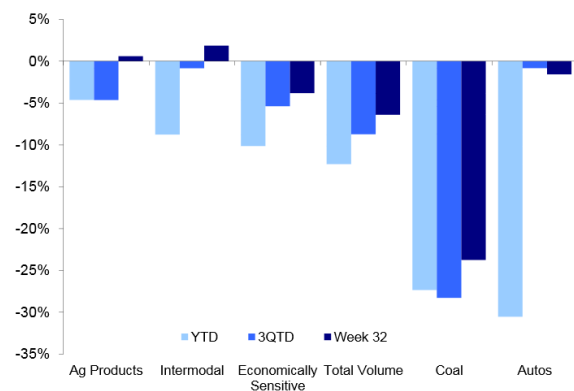
Source: OpenTable, Morgan Stanley Research

Exhibit 74: Initial jobless claims rose above 1mn after several weeks of improvement



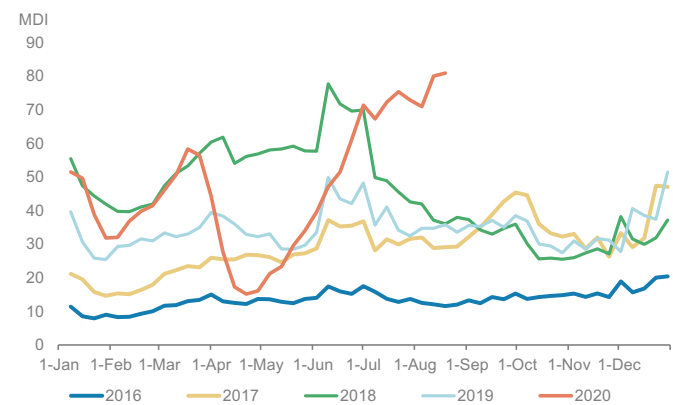
Source: Department of Labor, Morgan Stanley Research

Exhibit 75: Railcar traffic growth improved for all industries this week apart from autos



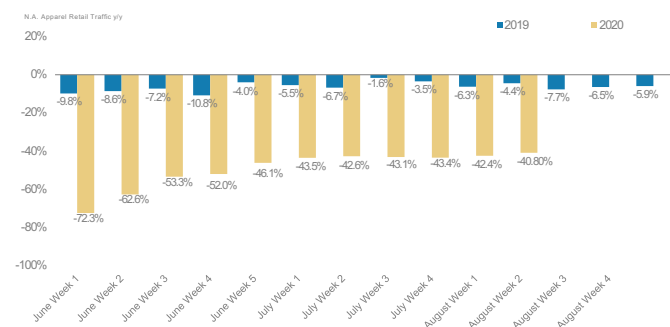
Source: American Railroad Association, Morgan Stanley Research

Exhibit 76: Trucking loads improved



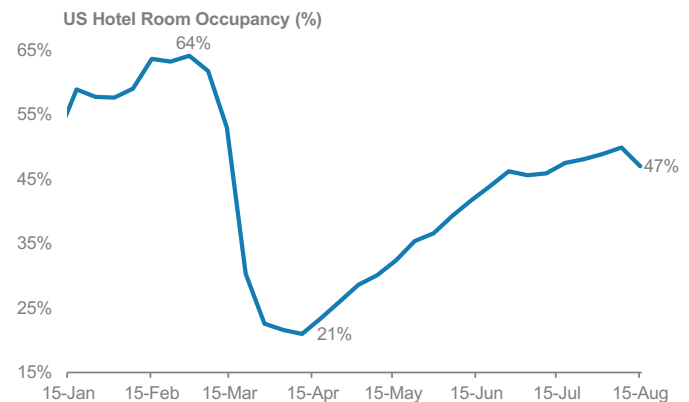
Source: TruckStop, Morgan Stanley Research

Exhibit 77: Retail traffic relative to a year ago mildly rose for second week...



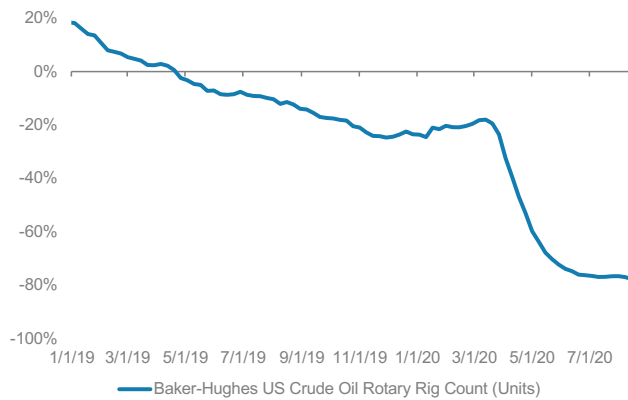
Source: STR, Morgan Stanley Research

Exhibit 78: ...while hotel room occupancy fell this week



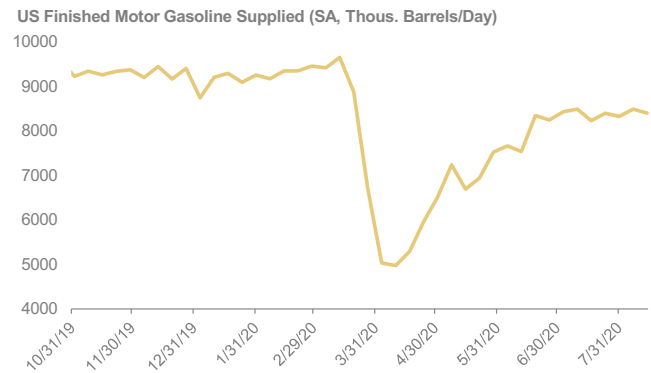
Source: STR, Morgan Stanley Research

Exhibit 79: Oil drilling activity level declined...



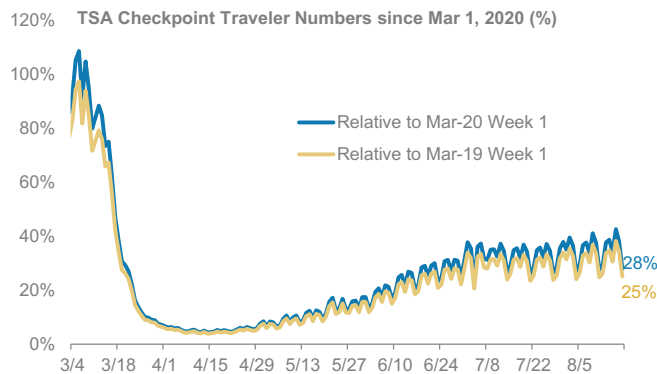
Source: Baker-Hughes, Morgan Stanley Research

Exhibit 80: ...and gasoline demand ticked lower this week



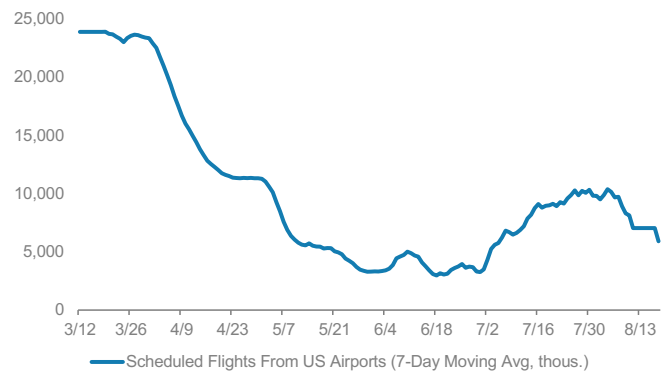
Source: Energy Information Association, Morgan Stanley Research

Exhibit 81: Airport passenger traffic moving sideways



Source: Transportation Security Administration, Morgan Stanley Research

Exhibit 82: Scheduled flights from US airports continue to decline



Source: Flightaware, Alphawise, Morgan Stanley Research

From our AlphaWise United States Consumer Pulse Survey Wave 14:

KEY INSIGHTS

- **Stabilization characterized the responses to most of the questions in this wave of our survey, with most responses on the virus and the economy seeing little aggregate change from prior surveys. Regional differences in trends showed a little more differentiation though.**
- **Concern over Covid-19's spread was stable**, with 71% of respondents citing it as a top concern vs. 61% in the beginning of June. California, Florida, Texas, New York, North Carolina, and Pennsylvania were somewhat less concerned over the virus compared to last week. Consumers in Illinois (78%), Ohio (72%) and New Jersey (76%) are becoming increasingly more concerned over the virus compared to two weeks ago.
- **Consumer confidence in the economy is in line with end of June and slightly up since mid-July**, with 37% of consumers who believe the U.S. economy will improve and 48% who expect economy to get worse (vs. 51% mid July). Among states, changes in attitudes around the economy largely mirror trends in concerns over the virus.
- **Among people intending to look for a new job, the number who plan to start or continue looking has continued rising, and at an accelerating rate.** We think this may coincide with both an increasingly stable outlook on the economy as well as a potential cliff in unemployment benefits.
- **Participation in eating out in restaurants is up to 35% (from 32% two weeks ago).** Visits to the mall also ticked up to 21% from 17% two weeks ago. Non-flight traveling continues to trend up to 25% this week compared to 21% a month ago. However we note a slight downward bias in intent to participate in these activities next month.

U.S. Consumer Pulse on COVID-19

Use the inputs below to explore the survey data, choose the chart type and set the layout. Showing: *"US Economy Outlook"*.

alphawise α

QUESTION:

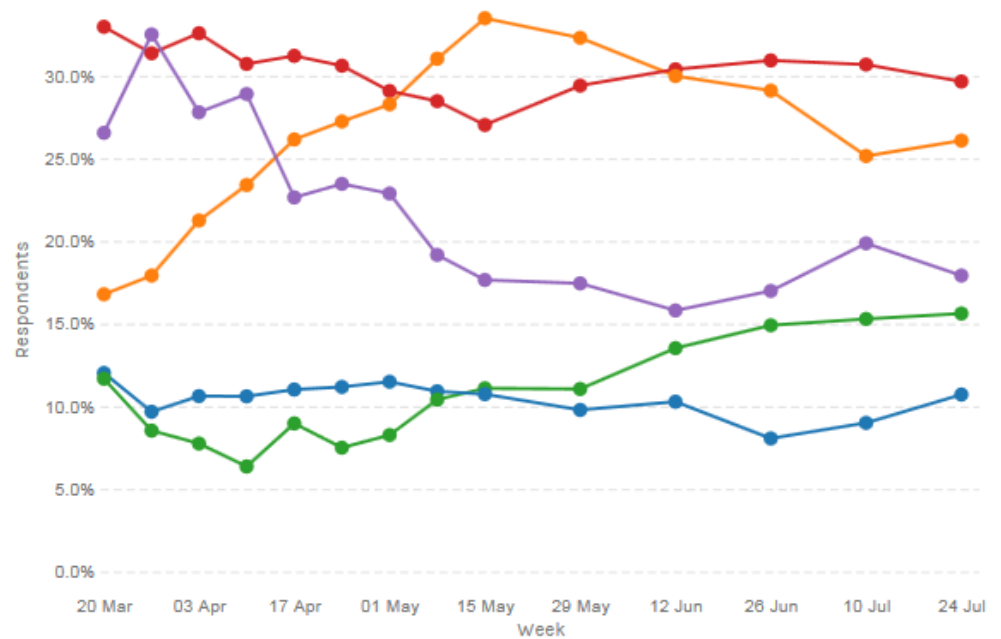
CHART: ☒ BAR ☐ LINE ☐ TAB ☐ CL

COLOUR:

STATE:

PERIOD:

AGE:



☒ Sample OK ☐ Sample < 35

☒ Get a lot worse
 ☒ Get a little worse
 ☒ Stay the same
 ☒ Get a little better
 ☒ Get a lot better

AlphaWise, Morgan Stanley Research

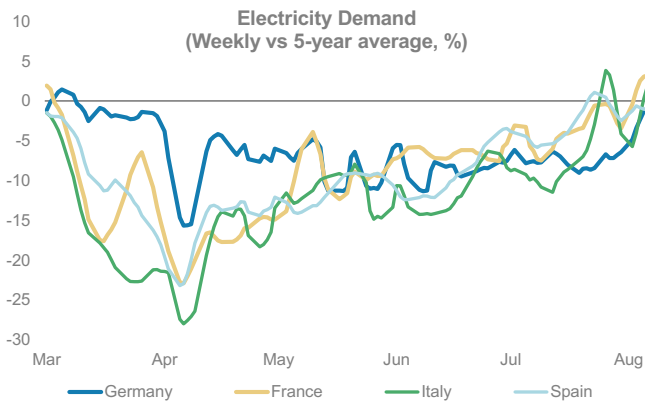
Euro Area

Jacob Nell, Joao Almeida, Markus Guetschow

We continue to see the number of new infections tick up across Europe, with Germany registering the highest daily new cases since late April on Monday, France making the wearing of masks mandatory in the workplace, and Italy closing nightclubs again. We nonetheless expect governments, armed with better testing and tracing capabilities, to react with more targeted and localised measures this time around, which should mitigate the economic impact of additional restrictions. Elsewhere, the European Parliament is demanding a greater role in overseeing how national governments spend the recovery fund money. Some commentators have suggested that getting Parliament on board might introduce some delays, but we remain optimistic about a timely compromise, and expect the fund to be approved and become operational at the start of next year.

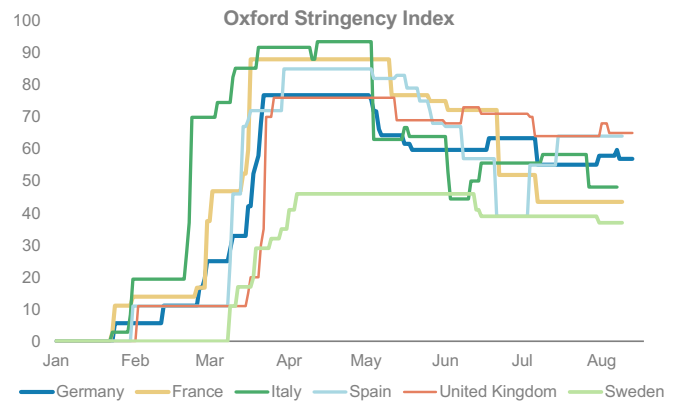
- **Electricity demand** has seen a surge in Germany in recent days, catching up with France, Italy and Spain. Power demand is now roughly back in line with their long-term averages.
- **The Oxford Stringency Index** continues to move sideways for now, but we expect to see a number of increases going forward, as some restrictions are re-imposed in response to rising case numbers.
- The **Google Mobility Index** is now broadly back in line with pre-crisis levels across the EA4. Spain continues to be the laggard, still around 10% below normal.
- **Congestion** continues to diverge across the continent, with France, Italy and Spain seeing further falls, while Germany has now moved above last year's average. We think that summer staycationing in the north and reduced tourist flows in the south is a plausible explanation.
- **Restaurant reservations** remain at elevated levels in Ireland, significantly above last year's level, while the situation in Germany seems to have fully normalised.
- **Lorry toll milage** in Germany continues to print in line with levels observed in previous years

Exhibit 83: Following a surge in Germany, power demand is now essentially back in line with normal levels



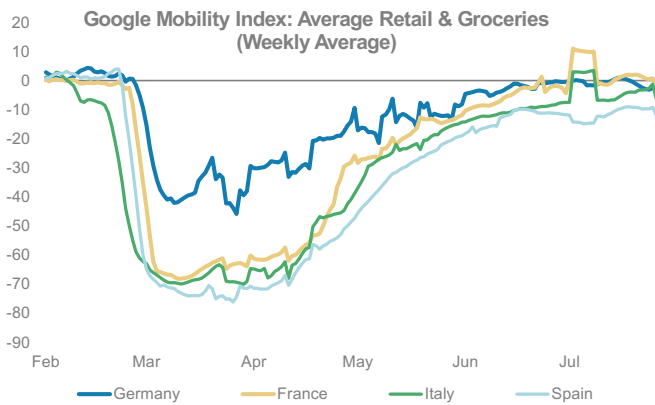
Source: ENTSO-E, Morgan Stanley Research

Exhibit 84: As new infections rise, we are likely to see the re-imposition of some restrictions



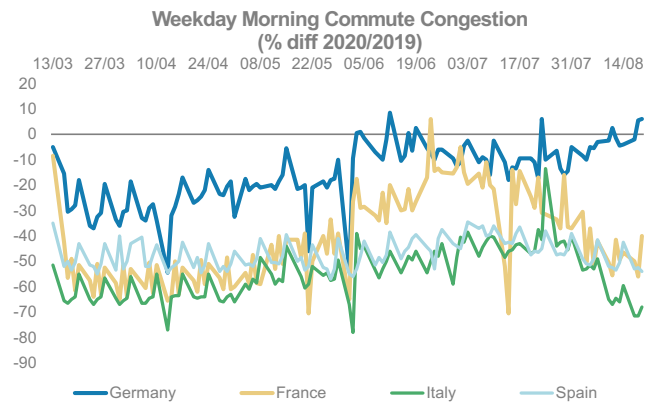
Source: Oxford University, Morgan Stanley Research

Exhibit 85: Google mobility has returned to pre-crisis levels, with Spain the sole laggard



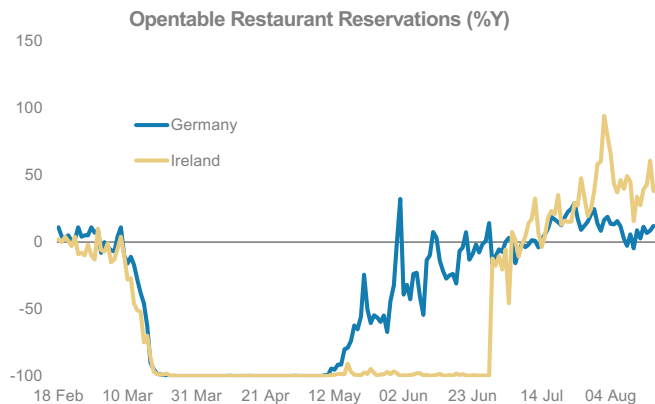
Source: Google, Morgan Stanley Research

Exhibit 86: Congestion continues to fall in the south, possibly due to reduced tourist flows



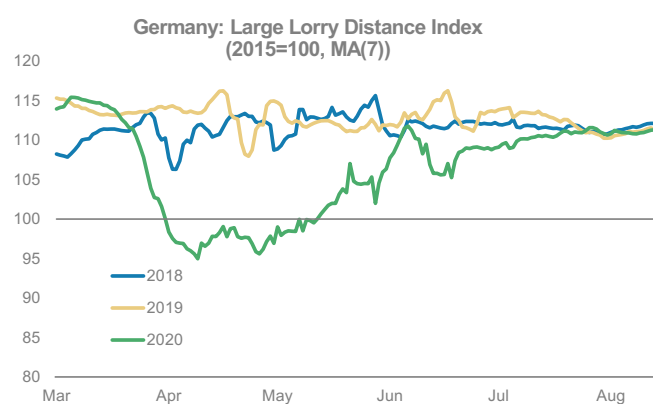
Source: TomTom, Morgan Stanley Research; Note: We look at Berlin and Hamburg for Germany, Paris and Marseille for France, Milan and Rome for Italy and Madrid and Barcelona for Spain.

Exhibit 87: Irish restaurant reservations remain elevated, German ones in line with historicals



Source: Opentable, Morgan Stanley Research

Exhibit 88: German lorry toll mileage is now almost indistinguishable from previous years



Source: Destatis, Morgan Stanley Research

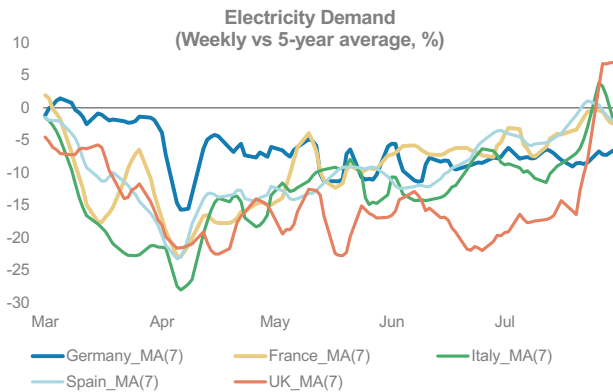
United Kingdom

Jacob Nell, Bruna Skarica

The UK's **high-frequency data continues to steadily improve**, with clear signs that recent government measures are bearing fruit: the Eat Out to Help Out scheme (50% or £10 discount per person, per meal in August, from Monday to Wednesday), for example, likely helped push the **seated dinner bookings above normal levels** in August. Moreover, in August, just 4% of **businesses** surveyed by the ONS remained **temporarily shut**, as lockdown eased further with some close-contact personal care services allowed to reopen as well. The share of **workers furloughed**, according to the ONS is **12% in August**, a drop from 17% in July. This is encouraging as it suggests workers are being reabsorbed into the labour market, as lockdown eases. However, 12% remains a relatively large share, and broadly in line with our assumption that should furlough end in the autumn, 10% of workers furloughed at some point through lockdown stand to lose their jobs, taking the jobless rate up to 7.9%. The planned tapering off of **fiscal measures** and their possible extension, hence, remain in focus.

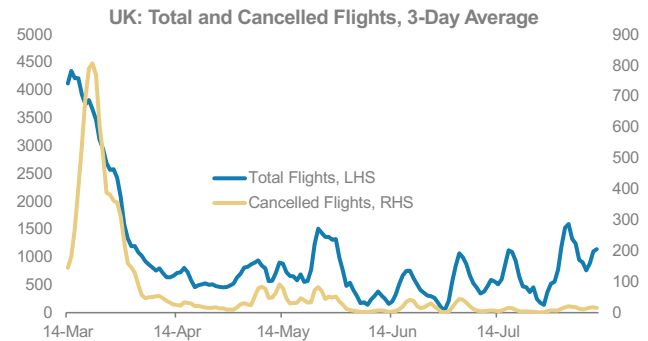
- The **number of flights** leaving and entering the UK remains **subdued**, despite the relaxation of arrival restrictions. The recent rise in cases in popular holiday destinations like Spain and France, and the associated reimposition of the quarantine requirement for travellers returning to the UK likely helped keep the flight numbers dampened, with staycationing a positive for the UK.
- **Navigation requests** have now largely **recovered to pre-crisis levels** with the exception of public transport. This, we think, is due to a relatively large share of workers continuing to work from home - 50% in mid-July, compared to ~30% on average across the euro area.
- **Restaurant reservations** recovered, with some of the recent pick-up likely a result of the government's Eat Out to Help Out scheme. It remains to be seen whether the hospitality sector will be able to maintain the August momentum into the autumn and if the scheme will also help the UK consumers to shake off any additional caution regarding going to restaurants, bars, pubs and the high street, stemming from a longer lockdown and a relatively worse outbreak.
- **The jobless rate** remains at just 3.9%, but it masks an underlying deterioration. ONS's measure of furloughed workers - workers **temporarily away from work** - remains elevated, at 12% in August as per their Business Impact of Coronavirus survey.

Exhibit 89: Electricity demand looked weak between May and July, but recently it shot up



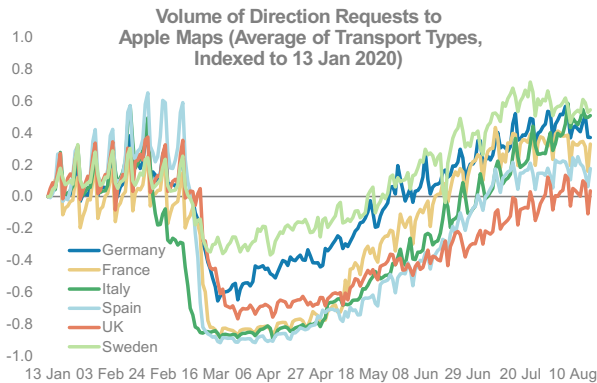
Source: ENTSO-E, Morgan Stanley Research

Exhibit 90: The number of flights is steadily picking up, although domestic holidays will likely prove to be more popular than going abroad



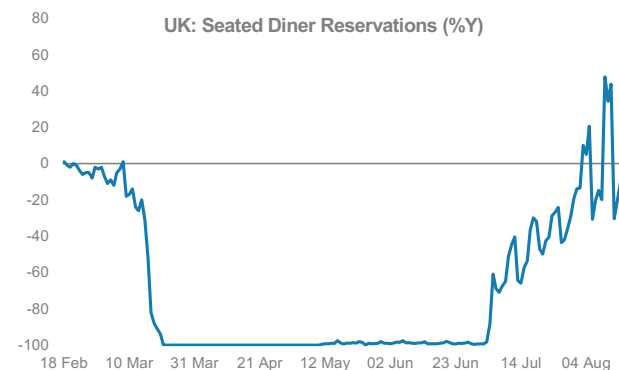
Source: Flightaware, AlphaWise, Morgan Stanley Research; Note: We look at the 10 busiest airports in the UK.

Exhibit 91: Navigation requests are back to near- normal levels, although this pick-up lagged European peers



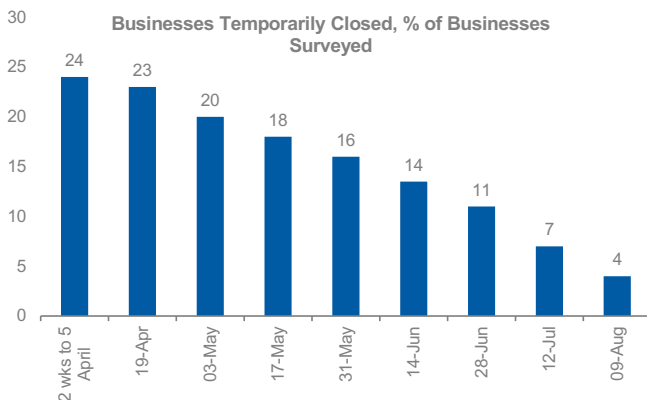
Source: Apple, Morgan Stanley Research

Exhibit 92: Surge in seated dinner bookings likely linked to the start of the Eat Out to Help Out scheme



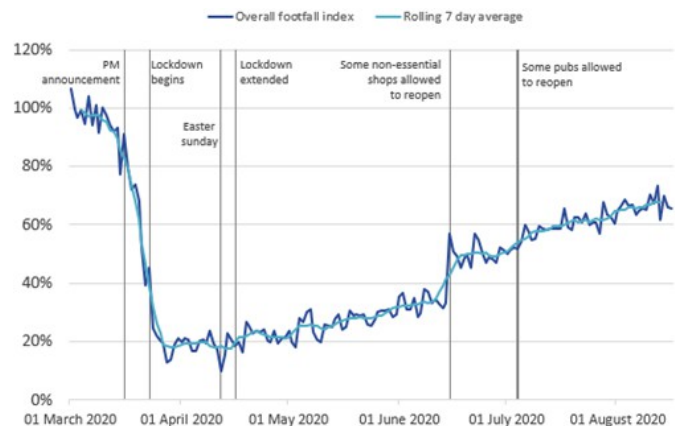
Source: Opentable, Morgan Stanley Research

Exhibit 93: Just 4% of businesses remain temporarily closed



Source: ONS, Morgan Stanley Research

Exhibit 94: Retail footfall improving but still far below normal levels



Source: ONS (Volume of footfall, %Y change between footfall on the same day), Morgan Stanley Research

Japan

Takeshi Yamaguchi, Hiromu Uezato

Future outlook mixed: The Reuters Tankan for August showed a substantial MoM improvement of +11pt in the manufacturing business conditions DI. While the level is low in absolute terms, it appears that a solid bottom has been established. The non-manufacturing DI also improved +3pt MoM, but the pace of improvement eased compared to last month's +6pt MoM gain. In the three-month forward outlook, a DI of -22 in manufacturing suggests expectations of a further +11pt improvement on current levels, but the non-manufacturing DI of -26 is 3pt worse than the current figure.

Still sluggish in Japan's mobility for Retail & Recreation: The nationwide AlphaWise mobility index indicates a mild recovery in Retail & Recreation mobility over Aug 3–9, but it is still down 10.7% vs. the baseline and on par with the start-of-July level, so our assessment is still that mobility is sluggish. METI's weekly POS data for the week of Aug 3-9 showed the big-box appliances retailers sales index (5 key items) return to YoY growth, up 4.2% YoY, although the average for the first 2 weeks of August is tracking behind previous year's levels for the first time in 4 months at -8.9% YoY.

Our updated provisional outlook after the 2Q20 GDP: We expect exports and production to recover strongly in the near term, but we expect the recovery in services-related areas to remain sluggish. Jul-Sep GDP is unlikely to fully make up for the drop in Apr-Jun. Refer to [Japan Economics: Apr-Jun GDP and Economic Outlook Table \(Provisional Update\)](#) (17 Aug 2020) for more detail.

Exhibit 95: METI's point-of-sales (POS) data indicates sales of necessities remain in positive YoY territory but trends are sluggish for supermarket sales

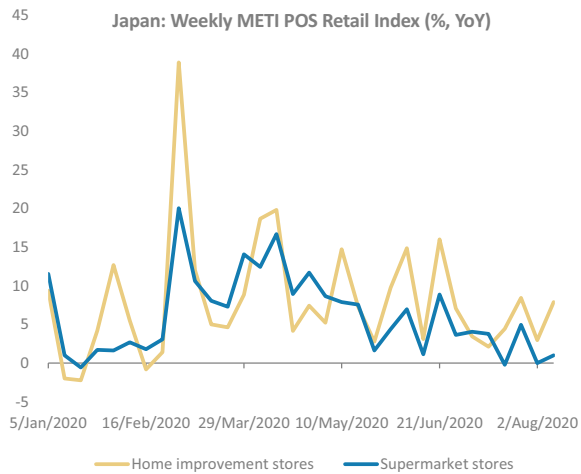


Exhibit 96: Current big-box appliance retailers sales (total for the 5 key items) lack strength when smoothed out

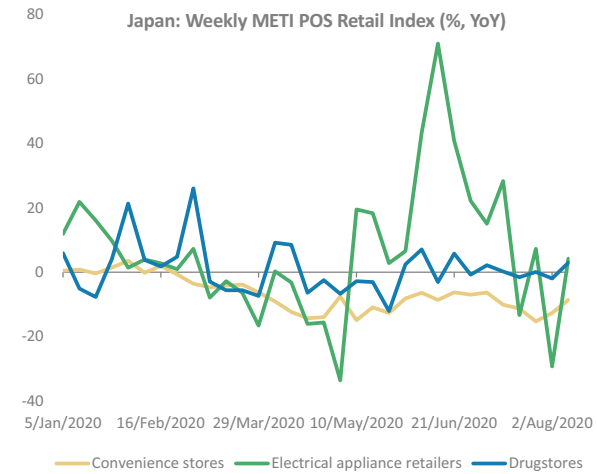


Exhibit 97: Morning rush-hour subway traffic has slightly decreased again on the back of increase in new cases

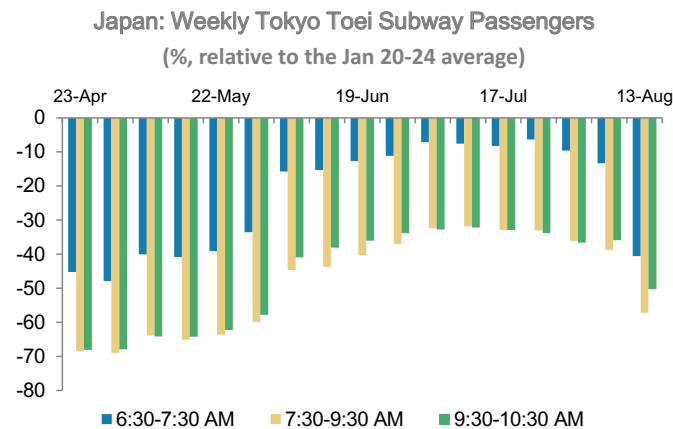


Exhibit 98: Special handout (¥100,000 per person) payout rate (%)

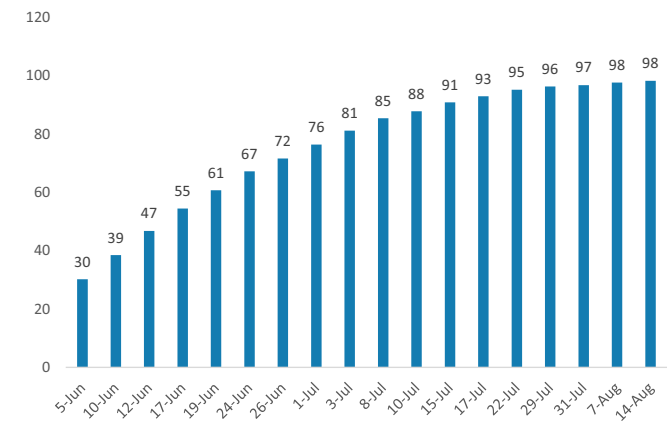
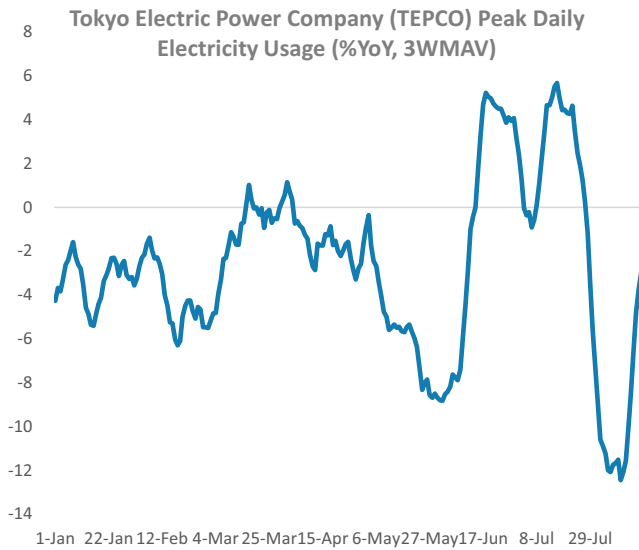
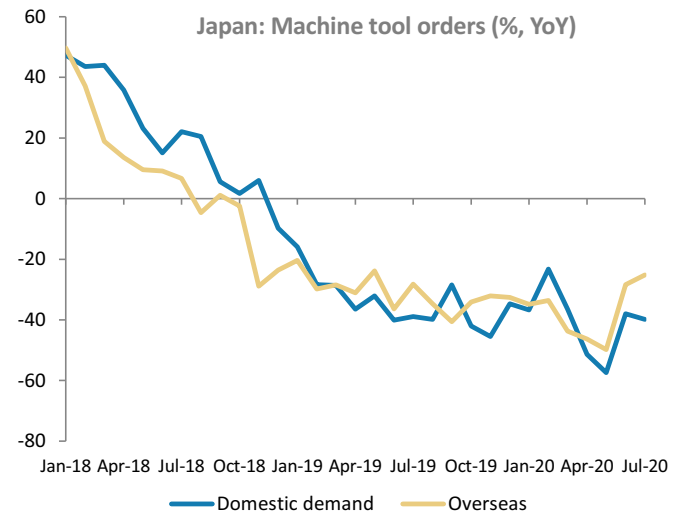


Exhibit 99: Daily electricity usage YoY has been normalizing again after the longer rainy season



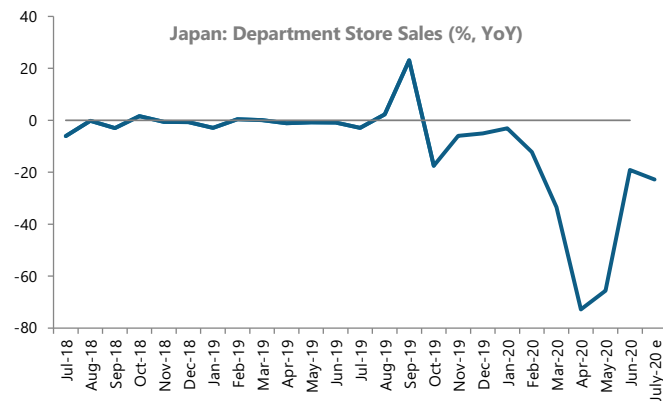
Source: TEPCO, Morgan Stanley Research

Exhibit 100: Both domestic/overseas machinery tool orders were mixed in July (latest: July 2020)



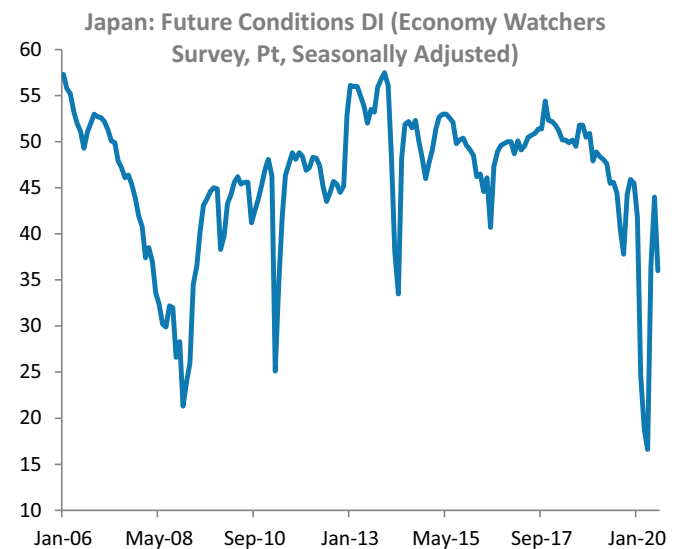
Source: Japan Machine Tool Builders' Association, Morgan Stanley Research

Exhibit 101: YoY decline in department store sales is expected to expand slightly from June (our estimate from major department stores)



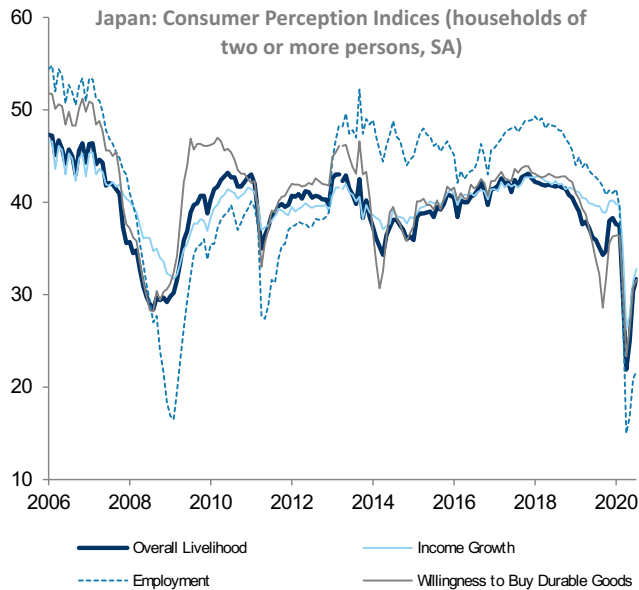
Note: e=our forecast
Source: JDSA, Morgan Stanley Research estimate

Exhibit 102: Economy Watchers Future Conditions DI, a leading indicator, declined again mainly due to the concerns for second wave (latest: July 2020)



Source: Cabinet Office, Morgan Stanley Research

Exhibit 103: Signs of bottoming in consumer confidence at a low level (latest: July 2020)



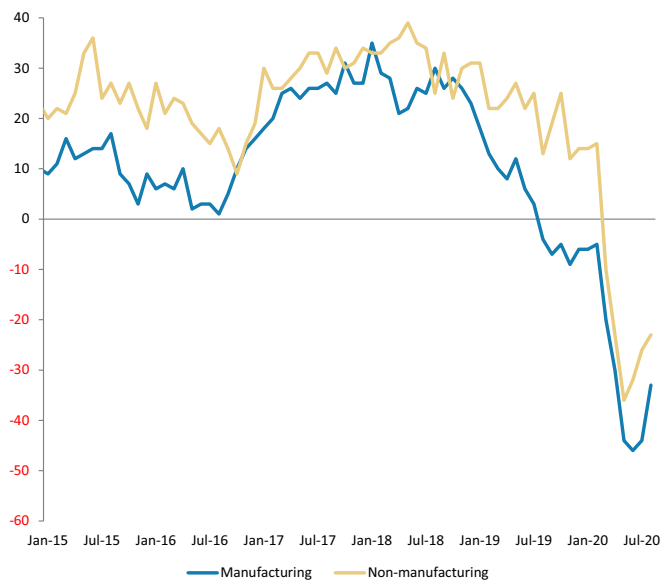
Source: Cabinet Office, Morgan Stanley Research; Note: Discontinuity between March and April 2013 due to survey method change.

Exhibit 104: New job offers have increased for 2nd consecutive months, while levels remain low (latest: Jun 2020)



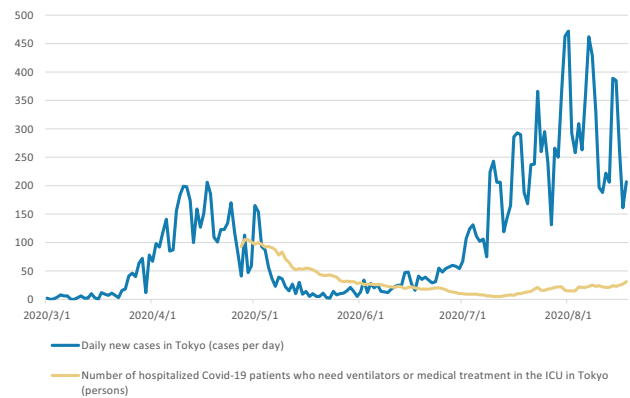
Source: MHLW, Morgan Stanley Research

Exhibit 105: Bottomed out in manufacturing sector followed by non-manufacturing sector : Reuters Tankan, economic conditions DI (latest = Aug 2020, pt)



Source: Reuters, Morgan Stanley Research

Exhibit 106: (Reference) The number of daily new cases and the 'severe' patients in Tokyo (ppl, as of Aug 18)



Note: The 'severe' patients in Tokyo are defined as those where the patient requires ICU or ventilator treatment.

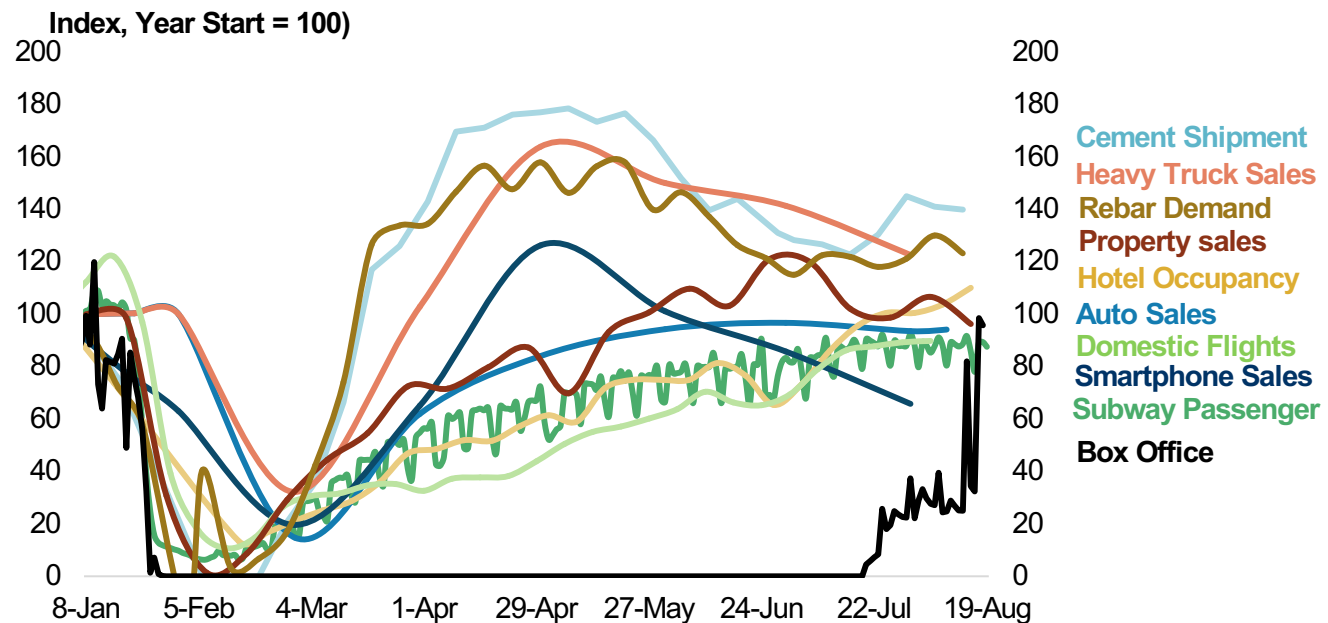
Source: Tokyo Metropolitan Government, Morgan Stanley Research

China

Robin Xing, Jenny Zheng, Zhipeng Cai, Helen Lai

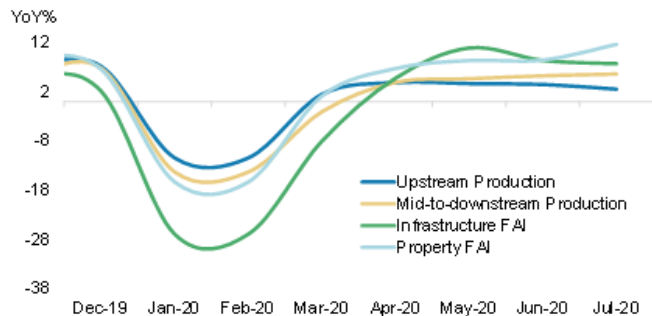
GDP growth on track to reach 4.7% YoY in 3Q (vs. 3.2% in 2Q): Growth momentum slightly moderated in July largely due to transitory factors - summer floods and payback from the June shopping festival. On the other hand, August MTD data shows that services demand is still on a healthy bounceback and will remain supportive to aggregate growth. Indeed, hotel occupancy ratio already reached 91% of its level last year, while daily movie box office more than doubled vs. late July. However, the flood situation and the attendant impact on construction sector is still fluid and bears monitoring, as select province lifted flood control response levels over the past week.

Exhibit 107: Services Improving, Flood Impact Likely Peaked



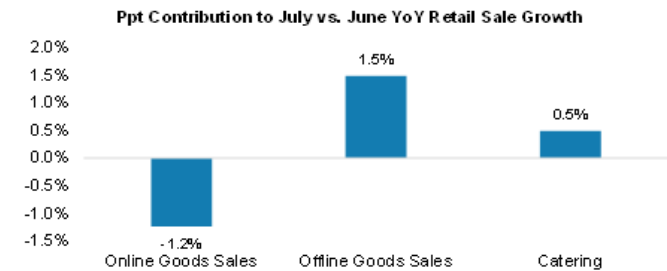
Source: NBS, CEIC, Wind, STR, CPCA, Company Data, TravelSky, Morgan Stanley Research

Exhibit 108: Property Sector and External Demand Offsetting Weaker Growth in Construction Owing to Flood Impact



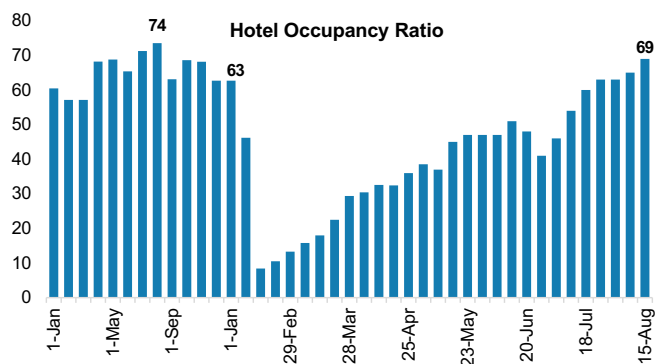
Source: NBS, CEIC, Morgan Stanley Research

Exhibit 109: Stronger Offline Goods Sales and Catering Offset Weaker Online Sales in July



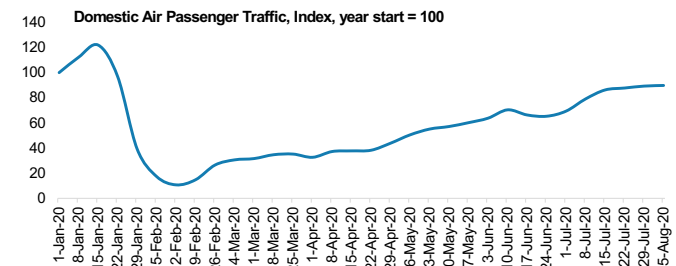
Source: NBS, CEIC, Morgan Stanley Research

Exhibit 110: Hotel Occupancy Rate Already Returned to 91% of Its Level in the Same Period Last Year



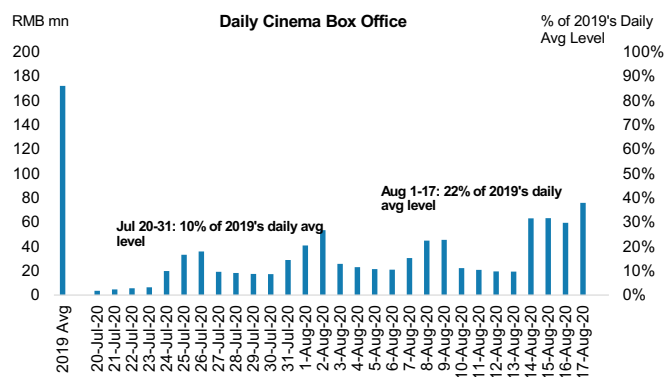
Source: STR, Morgan Stanley Research

Exhibit 111: Air Passenger Traffic Has Returned to 90% of January Level



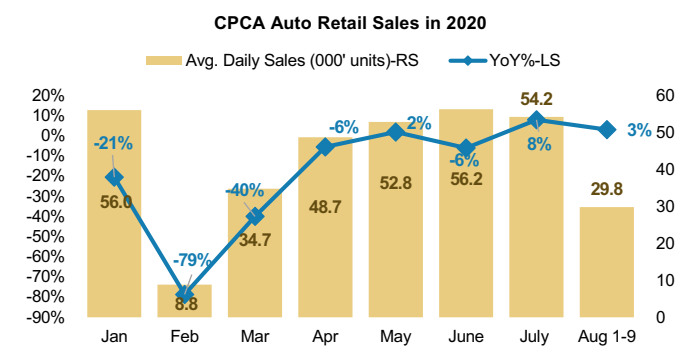
Source: TravelSky, AlphaWise, OAG, FlightAware, Morgan Stanley Research

Exhibit 112: Movie Box Office Has Returned to ~22% of 2019's Level in Aug MTD



Source: Wind, Morgan Stanley Research

Exhibit 113: CPCA Auto Sales Growth Slightly Moderated in Aug 1-9



Source: CPCA, Morgan Stanley Research

Exhibit 114: Cement Shipments Have Picked up Considerably from the Lows in July...

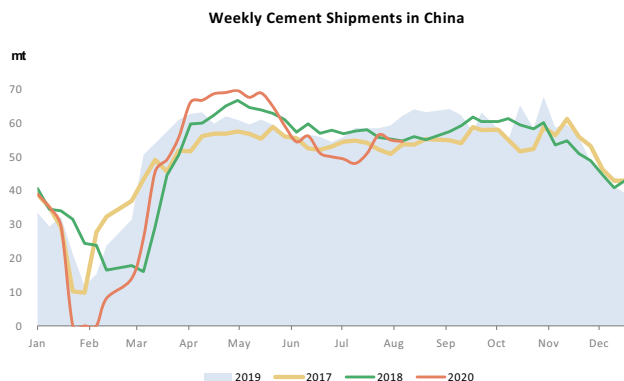


Exhibit 115: ... So Has Rebar Demand

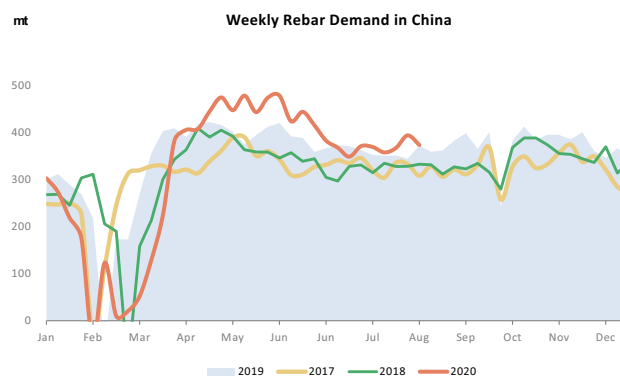


Exhibit 116: PBoC Net Injection Turned Positive in August MTD...

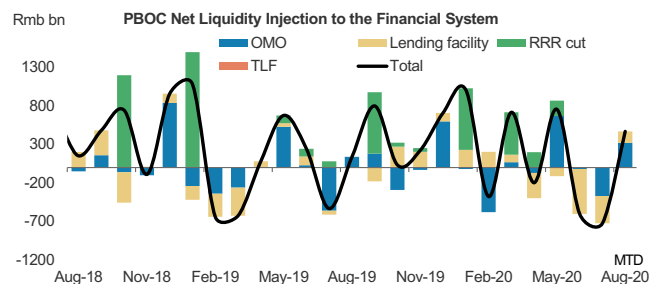


Exhibit 117: ...to Facilitate Reaccelerated Govt. Bond Issuance

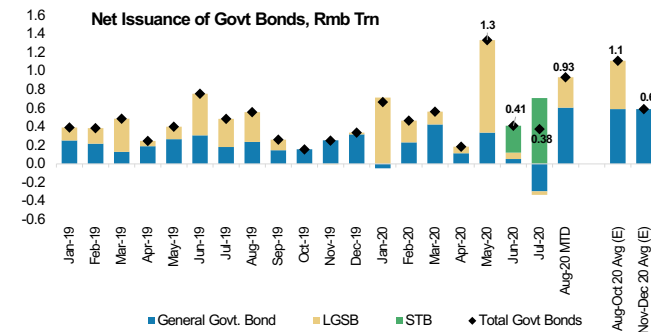
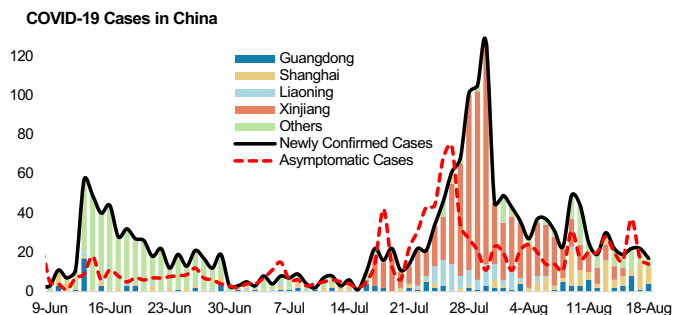


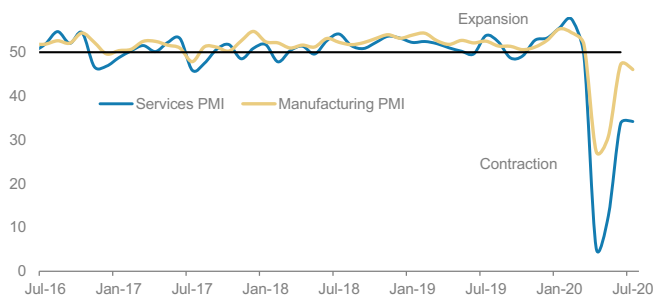
Exhibit 118: Covid-19 Cases Continued to Fall



India

Upasana Chachra, Bani Gambhir

Recent data suggests a gradual recovery trend: The country entered the third phase of opening up, "Unlock 3.0" from August 3 which allows further relaxation of economic activities. The localised lockdowns in several parts have been extended to August in an effort to contain the spread of Covid-19. Most economic indicators show gradual improvement, in line with our expectations. Services PMI registered a marginal improvement while PMI manufacturing contracted a tad to 46 in July from 47.2 in June. Power demand grew by 2%YoY in August vs. a contraction of 2.8%YoY in July. Weekly data from CMIE reflects further deteriorating labour market conditions with unemployment rate at a 9-week high. Mobility indicators related to recreation / retail and workplace have seen an improvement across states indicating gradual normalisation of economic activity.

Exhibit 119: Divergent trend in Manufacturing and Services PMI for July vs June

Source: Haver Analytics, Morgan Stanley Research

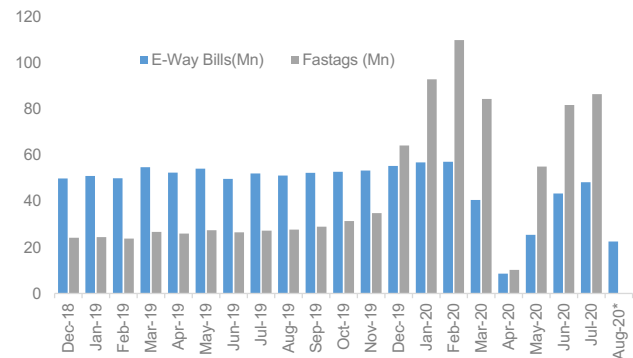
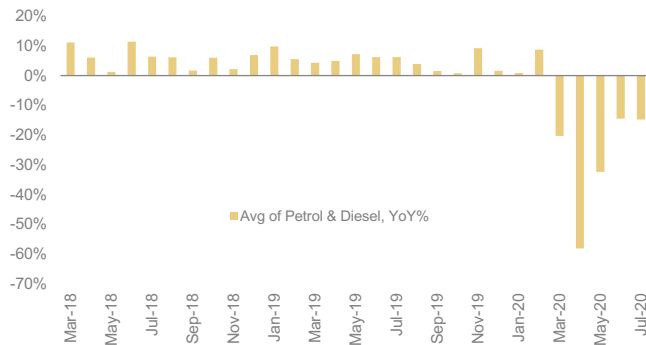
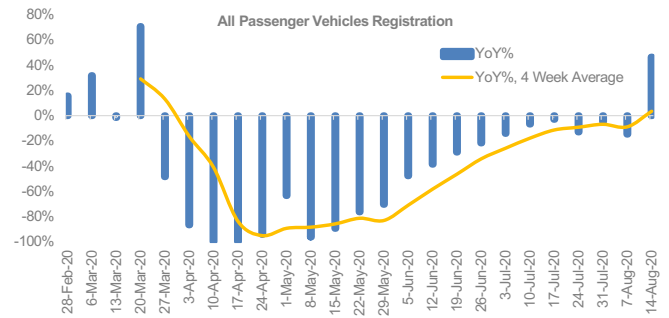
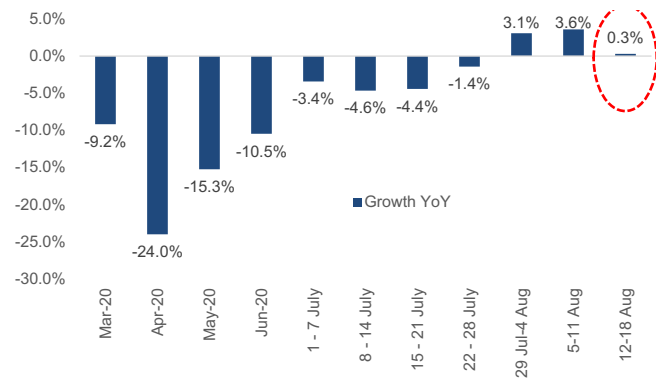
Exhibit 120: Trend in E-Way bills and FASTagsSource: GSTN, NPCI, Morgan Stanley Research
Note- Data for E-Way Bills for Aug-20 as on 16 Aug

Exhibit 121: Steady trend in fuel consumption


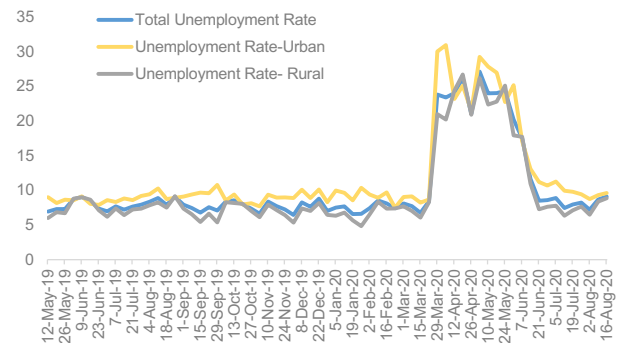
Source: PPAC, Morgan Stanley Research
Note: Data from newsflow

Exhibit 122: Trend in Vehicle Registration of all PVs


Source: Vaahan Vehicle Registration, Morgan Stanley Research
Note: Data for PV Registration can at times be lumpy, leading to volatility in growth rate.

Exhibit 123: Weekly Power Demand Grew by 0.3% YoY in the week ended August 18


Source: Ministry of Power, Morgan Stanley Research

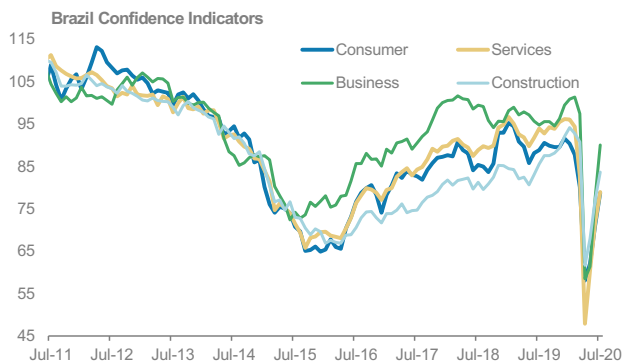
Exhibit 124: Further uptick in unemployment rate


Source: CMIE, Morgan Stanley Research

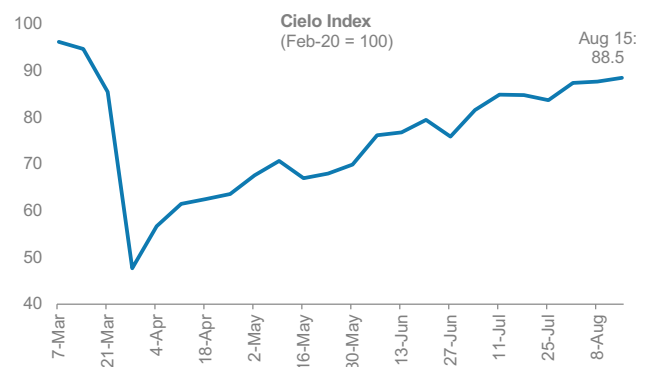
Brazil

Thiago Machado, Fernando Sedano

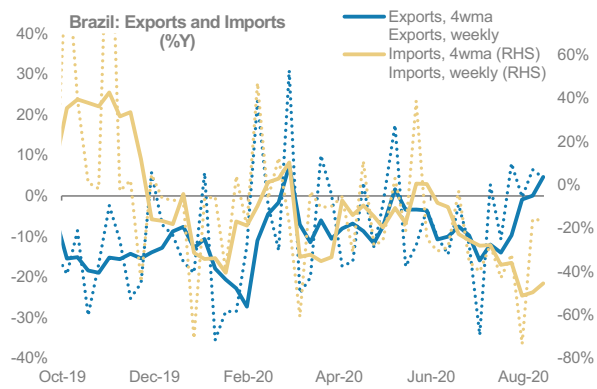
Another week of improvement: Retail sales, measured by the Cielo Index, continued on its recovery path this past week, now reaching ~89% of February level. Both exports and imports have improved, with the 4-week average exports growth advancing further into the expansionary territory. Electricity consumption growth ticked up to 1.4%Y this week, registering a 4th week of positive YoY growth. Our [Alphawise Survey Consumer Pulse Survey Wave 4](#) also depicts a better outlook for Brazil's economy. 36% of consumers (vs 27% in June) expected the economy to get better in the next 6 months, and the number of consumers that expected the economy to worsen also dropped, for the first time since March, below 50%.

Exhibit 125: Further improvement of confidence indicators in July

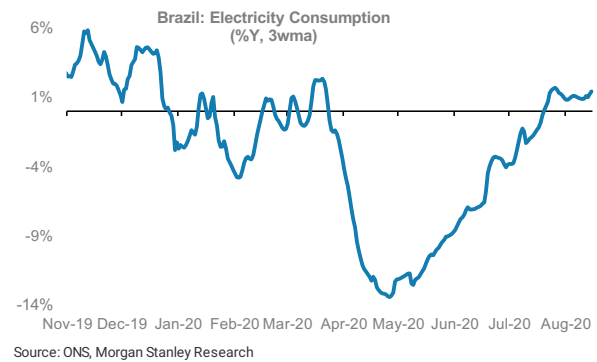
Source: FGV, Morgan Stanley Research

Exhibit 126: Retail sales measured by Cielo Index up to 89% of Feb-20 level

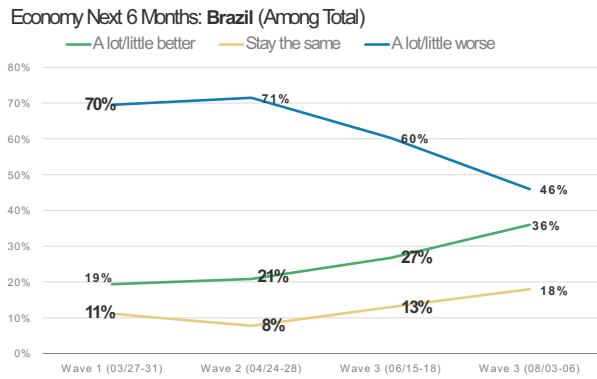
Source: Cielo, Morgan Stanley Research

Exhibit 127: Exports improved further


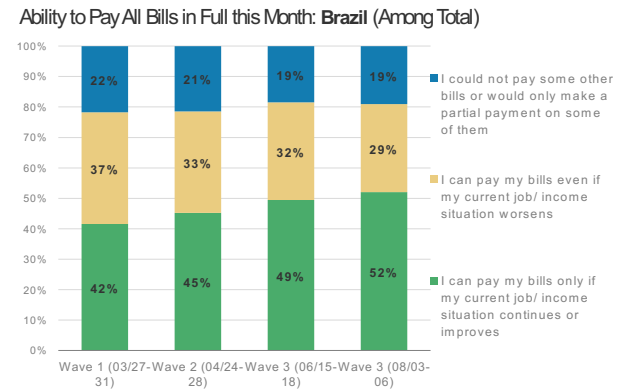
Source: MDIC, Morgan Stanley Research

Exhibit 128: 4th week of positive growth in electricity consumption


Source: ONS, Morgan Stanley Research

Exhibit 129: 36% (vs 27% in June) of consumers in Brazil think the economy will get better in the next six months


Source: AlphaWise Survey, Morgan Stanley Research

Exhibit 130: An increasing number of consumers (52% vs. 49% in June and 45% in April) say they will only be able to pay bills if their income situation continues or improves


Source: AlphaWise Survey

Disclosure Section

The information and opinions in Morgan Stanley Research were prepared or are disseminated by Morgan Stanley & Co. LLC and/or Morgan Stanley C.T.V.M. S.A. and/or Morgan Stanley México, Casa de Bolsa, S.A. de C.V. and/or Morgan Stanley Canada Limited and/or Morgan Stanley & Co. International plc and/or Morgan Stanley Europe S.E. and/or RMB Morgan Stanley Proprietary Limited and/or Morgan Stanley MUFG Securities Co., Ltd. and/or Morgan Stanley Capital Group Japan Co., Ltd. and/or Morgan Stanley Asia Limited and/or Morgan Stanley Asia (Singapore) Pte. (Registration number 199206298Z) and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H), regulated by the Monetary Authority of Singapore (which accepts legal responsibility for its contents and should be contacted with respect to any matters arising from, or in connection with, Morgan Stanley Research) and/or Morgan Stanley Taiwan Limited and/or Morgan Stanley & Co International plc, Seoul Branch, and/or Morgan Stanley Australia Limited (A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents), and/or Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813, which accepts responsibility for its contents), and/or Morgan Stanley India Company Private Limited, regulated by the Securities and Exchange Board of India ("SEBI") and holder of licenses as a Research Analyst (SEBI Registration No. INH000001105), Stock Broker (BSE Registration No. INB011054237 and NSE Registration No. INB/INF231054231), Merchant Banker (SEBI Registration No. INM000011203), and depository participant with National Securities Depository Limited (SEBI Registration No. IN-DP-NSDL-372-2014) which accepts the responsibility for its contents and should be contacted with respect to any matters arising from, or in connection with, Morgan Stanley Research, and/or PT. Morgan Stanley Sekuritas Indonesia and their affiliates (collectively, "Morgan Stanley"). For important disclosures, stock price charts and equity rating histories regarding companies that are the subject of this report, please see the Morgan Stanley Research Disclosure Website at www.morganstanley.com/researchdisclosures, or contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY, 10036 USA.

For valuation methodology and risks associated with any recommendation, rating or price target referenced in this research report, please contact the Client Support Team as follows: US/Canada +1 800 303-2495; Hong Kong +852 2848-5999; Latin America +1 718 754-5444 (U.S.); London +44 (0)20-7425-8169; Singapore +65 6834-6860; Sydney +61 (0)2-9770-1505; Tokyo +81 (0)3-6836-9000. Alternatively you may contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY 10036 USA.

Global Research Conflict Management Policy

Morgan Stanley Research has been published in accordance with our conflict management policy, which is available at www.morganstanley.com/institutional/research/conflictolicies. A Portuguese version of the policy can be found at www.morganstanley.com.br

Important Disclosures

Morgan Stanley is not acting as a municipal advisor and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Morgan Stanley Research does not provide individually tailored investment advice. Morgan Stanley Research has been prepared without regard to the circumstances and objectives of those who receive it. Morgan Stanley recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial adviser. The appropriateness of an investment or strategy will depend on an investor's circumstances and objectives. The securities, instruments, or strategies discussed in Morgan Stanley Research may not be suitable for all investors, and certain investors may not be eligible to purchase or participate in some or all of them. Morgan Stanley Research is not an offer to buy or sell or the solicitation of an offer to buy or sell any security/instrument or to participate in any particular trading strategy. The value of and income from your investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in securities/instruments transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. If provided, and unless otherwise stated, the closing price on the cover page is that of the primary exchange for the subject company's securities/instruments.

The fixed income research analysts, strategists or economists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality, accuracy and value of research, firm profitability or revenues (which include fixed income trading and capital markets profitability or revenues), client feedback and competitive factors. Fixed Income Research analysts', strategists' or economists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

With the exception of information regarding Morgan Stanley, Morgan Stanley Research is based on public information. Morgan Stanley makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. We have no obligation to tell you when opinions or information in Morgan Stanley Research change apart from when we intend to discontinue equity research coverage of a subject company. Facts and views presented in Morgan Stanley Research have not been reviewed by, and may not reflect information known to, professionals in other Morgan Stanley business areas, including investment banking personnel.

Morgan Stanley may make investment decisions that are inconsistent with the recommendations or views in this report.

To our readers based in Taiwan or trading in Taiwan securities/instruments: Information on securities/instruments that trade in Taiwan is distributed by Morgan Stanley Taiwan Limited ("MSTL"). Such information is for your reference only. The reader should independently evaluate the investment risks and is solely responsible for their investment decisions. Morgan Stanley Research may not be distributed to the public media or quoted or used by the public media without the express written consent of Morgan Stanley. Any non-customer reader within the scope of Article 7-1 of the Taiwan Stock Exchange Recommendation Regulations accessing and/or receiving Morgan Stanley Research is not permitted to provide Morgan Stanley Research to any third party (including but not limited to related parties, affiliated companies and any other third parties) or engage in any activities regarding Morgan Stanley Research which may create or give the appearance of creating a conflict of interest. Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be construed as a recommendation or a solicitation to trade in such securities/instruments. MSTL may not execute transactions for clients in these securities/instruments.

Morgan Stanley is not incorporated under PRC law and the research in relation to this report is conducted outside the PRC. Morgan Stanley Research does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors shall have the relevant qualifications to invest in such securities and shall be responsible for obtaining all relevant approvals, licenses, verifications and/or registrations from the relevant governmental authorities themselves. Neither this report nor any part of it is intended as, or shall constitute, provision of any consultancy or advisory service of securities investment as defined under PRC law. Such information is provided for your reference only.

Morgan Stanley Research is disseminated in Brazil by Morgan Stanley C.T.V.M. S.A. located at Av. Brigadeiro Faria Lima, 3600, 6th floor, São Paulo - SP, Brazil; and is regulated by the Comissão de Valores Mobiliários; in Mexico by Morgan Stanley México, Casa de Bolsa, S.A. de C.V. which is regulated by Comisión Nacional Bancaria y de Valores. Paseo de los Tamarindos 90, Torre 1, Col. Bosques de las Lomas Floor 29, 05120 Mexico City; in Japan by Morgan Stanley MUFG Securities Co., Ltd. and, for Commodities related research reports only, Morgan Stanley Capital Group Japan Co., Ltd; in Hong Kong by Morgan Stanley Asia Limited (which accepts responsibility for its contents) and by Morgan Stanley Asia International Limited, Hong Kong Branch; in Singapore by Morgan Stanley Asia (Singapore) Pte. (Registration number 199206298Z) and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H), regulated by the Monetary Authority of Singapore (which accepts legal responsibility for its contents and should be

contacted with respect to any matters arising from, or in connection with, Morgan Stanley Research) and by Morgan Stanley Asia International Limited, Singapore Branch (Registration number T11FC0207F); in Australia to "wholesale clients" within the meaning of the Australian Corporations Act by Morgan Stanley Australia Limited A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents; in Australia to "wholesale clients" and "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813, which accepts responsibility for its contents; in Korea by Morgan Stanley & Co International plc, Seoul Branch; in India by Morgan Stanley India Company Private Limited; in Vietnam this report is issued by Morgan Stanley Singapore Holdings; in Canada by Morgan Stanley Canada Limited, which has approved of and takes responsibility for its contents in Canada; in Germany and the European Economic Area where required by Morgan Stanley Europe S.E., regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin); in Spain by Morgan Stanley, S.V., S.A., a Morgan Stanley group company, which is supervised by the Spanish Securities Markets Commission (CNMV) and states that Morgan Stanley Research has been written and distributed in accordance with the rules of conduct applicable to financial research as established under Spanish regulations; in the United States by Morgan Stanley & Co. LLC, which accepts responsibility for its contents. Morgan Stanley & Co. International plc, authorized by the Prudential Regulatory Authority and regulated by the Financial Conduct Authority and the Prudential Regulatory Authority, disseminates in the UK research that it has prepared, and approves solely for the purposes of section 21 of the Financial Services and Markets Act 2000, research which has been prepared by any of its affiliates. RMB Morgan Stanley Proprietary Limited is a member of the JSE Limited and A2X (Pty) Ltd. RMB Morgan Stanley Proprietary Limited is a joint venture owned equally by Morgan Stanley International Holdings Inc. and RMB Investment Advisory (Proprietary) Limited, which is wholly owned by FirstRand Limited.

The trademarks and service marks contained in Morgan Stanley Research are the property of their respective owners. Third-party data providers make no warranties or representations relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages relating to such data. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P.

Morgan Stanley Research, or any portion thereof may not be reprinted, sold or redistributed without the written consent of Morgan Stanley.

Indicators and trackers referenced in Morgan Stanley Research may not be used as, or treated as, a benchmark under Regulation EU 2016/1011, or any other similar framework.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (DIFC Branch), regulated by the Dubai Financial Services Authority (the DFSA), and is directed at Professional Clients only, as defined by the DFSA. The financial products or financial services to which this research relates will only be made available to a customer who we are satisfied meets the regulatory criteria to be a Professional Client.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (QFC Branch), regulated by the Qatar Financial Centre Regulatory Authority (the QFCRA), and is directed at business customers and market counterparties only and is not intended for Retail Customers as defined by the QFCRA.

As required by the Capital Markets Board of Turkey, investment information, comments and recommendations stated here, are not within the scope of investment advisory activity. Investment advisory service is provided exclusively to persons based on their risk and income preferences by the authorized firms. Comments and recommendations stated here are general in nature. These opinions may not fit to your financial status, risk and return preferences. For this reason, to make an investment decision by relying solely to this information stated here may not bring about outcomes that fit your expectations.

© 2020 Morgan Stanley