



#virus

Data Science High Frequency Indicators Update Situation Normal, All Frozen Uniformly

The flow of COVID-19 related data this week was characterized by how similar it is to last week: we remain in a state of substantial shutdown with mounting economic stress.

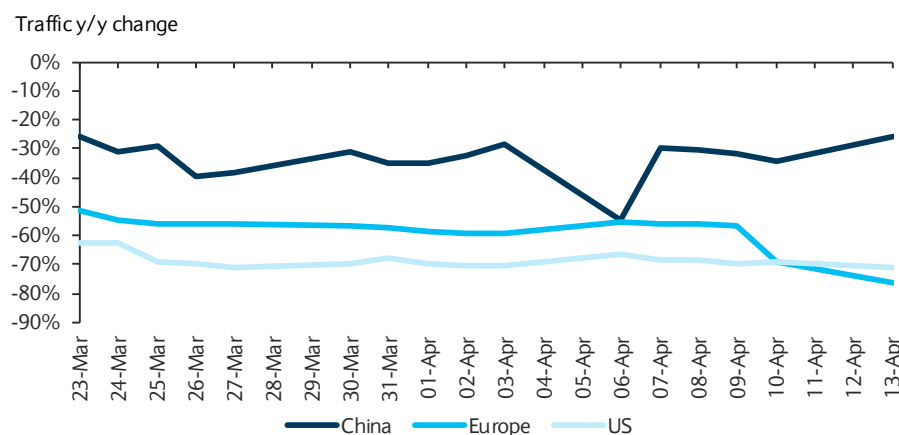
The growth of confirmed COVID-19 infections in the US is still slowing but not yet falling enough to trigger a re-opening of the economy.

Foot traffic series remain near the zero-bound, and auto traffic remains severely reduced (Figure 1), although there were some gains in China while the US was flat, and Europe down (though that might be a function of holidays rather than further weakening).

The pace of jobless claim early indicators appears slightly improved, but that suggests a report roughly in line with consensus (currently in the area of 5mn initial claims). Given that would have been a record high only a few weeks ago, and represents a jump of >3pp in the unemployment rate, it does not count as much of an improvement, in our view.

FIGURE 1

Road traffic in China crept up, but is flat at a low level in the US, and falling in Europe



Source: TomTom, Barclays Research

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Data is Little Changed Since Last Week, as Job Losses Likely to Climb Further

This week's data was a microcosm of the impact of the COVID-19 virus overall: this week looks remarkably like last week, but with fewer jobs.

The growth of confirmed COVID-19 infections in the US is still slowing but not yet falling enough to trigger a re-opening of the economy. In our note *Social Distancing Is Almost Everywhere, and Working...Slowly*, we looked at the relationship between social distancing and growth in new confirmed cases. Although most US states now have enough distancing to reduce the growth of the virus, the late start by some will mean that case growth nationally will only fall slowly. Even as some of the most affected states (like New York) see case growth fall, others that started social distancing later will still have outbreaks growing quickly enough to offset some of those gains.

Our measures of general activity - foot traffic, transit usage, and airport usage remain near the zero-bound, and US and European auto traffic remains severely reduced (Figure 1). There were some modest gains in China, but given the length of time since the peak of the epidemic there, that may not be entirely encouraging for the speed of the recovery path in the US.

The pace of jobless claim early indicators appears slightly improved, but they have declined only a small amount over last week. That suggests an Initial Jobless Claims report on Thursday that will be roughly in line with consensus (currently in the area of 5mn initial claims). Given that would have been a record high only a few weeks ago, and would represent a jump of >3pp in the unemployment rate, it does not count as much of an improvement, in our view.

High Frequency Series Updates

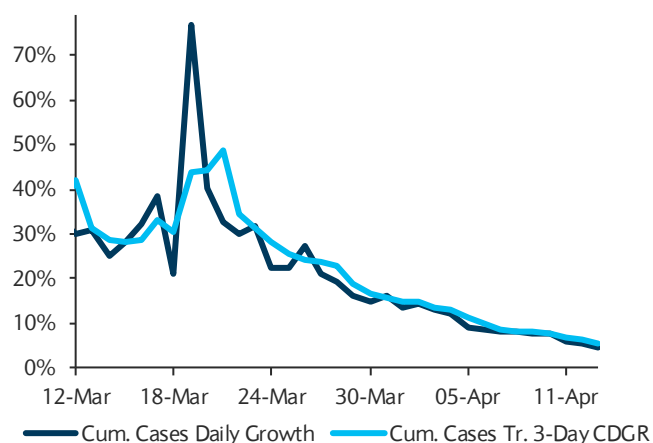
Tracking COVID-19 Confirmed Cases

There were 25,306 confirmed new cases of COVID-19 in the US yesterday, a decrease of 3,611 from 28,917 new cases the day before. The cumulative total cases grew to 580,619 from 555,313 the day before. The 3-day trailing daily CDGR in cumulative cases was 5%.

There were 129,854 new tests administered for COVID-19 in the US yesterday, a decrease of 10,198 from 140,052 new tests the day before. The positive test rate was 19%, down from 21% the day before.

FIGURE 2

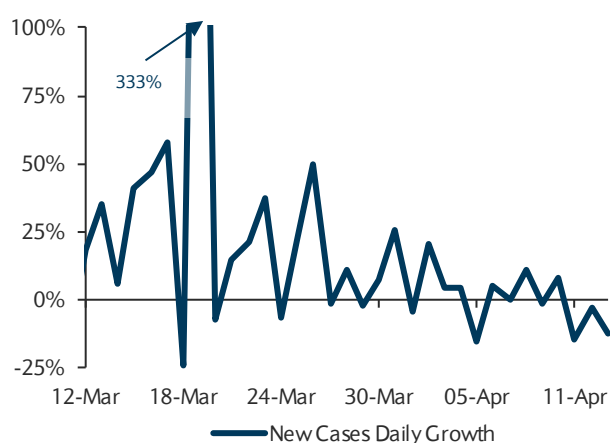
US Daily Growth in Cumulative Total Cases



Note: Chart since the US crossed the 100-case threshold. Source: Johns Hopkins, Barclays Research

FIGURE 3

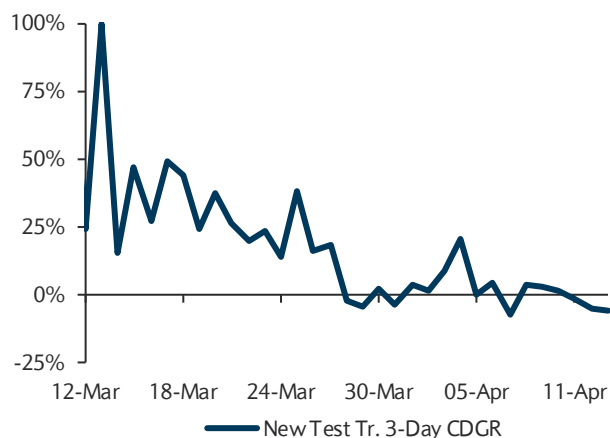
US Daily Growth in New Cases



Note: Chart since the US crossed the 100-case threshold. Source: Johns Hopkins, Barclays Research

FIGURE 4

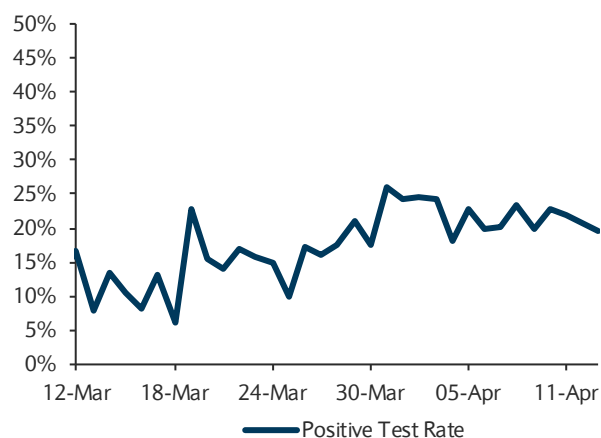
Growth in New Total Tests



Source: the COVID Tracking Project, Barclays Research

FIGURE 5

Positive Test Rate



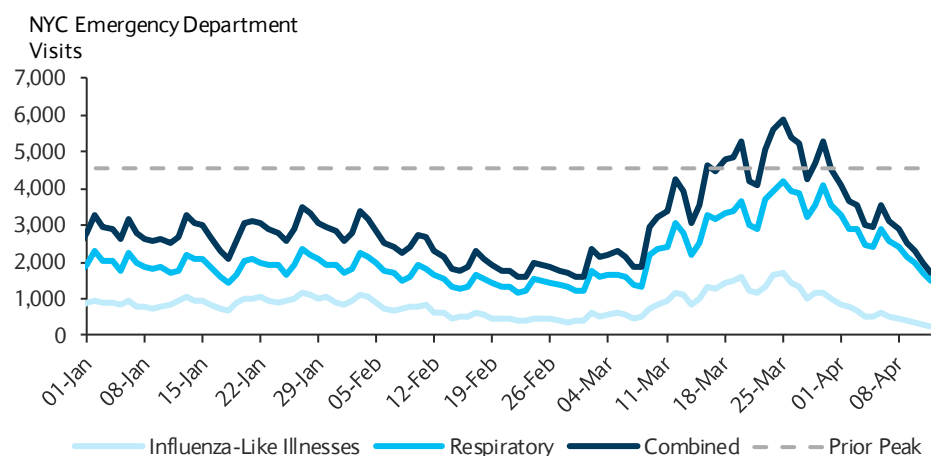
Source: Johns Hopkins, the COVID Tracking Project, Barclays Research

New York City Hospital Emergency Room Admissions

In New York City, the number of emergency room visits has sharply declined from record highs. They have fallen to the levels of, or even below, those seen in February before the COVID-19 related spike in volumes emerged in the data. Even the peak in ICU cases and hospital system strain may now have passed for NYC, with New York's governor Cuomo suggesting the "worst is over".¹

FIGURE 6

NYC hospital emergency room visits for combined flu-like and respiratory illnesses have fallen sharply



Source: New York City Department of Health, Barclays Research

For details about how we look at emergency room admissions, see [Data Science High Frequency Indicators: NYC Emergency Room Admissions Are Already at Peaks](#), March 16, 2020.

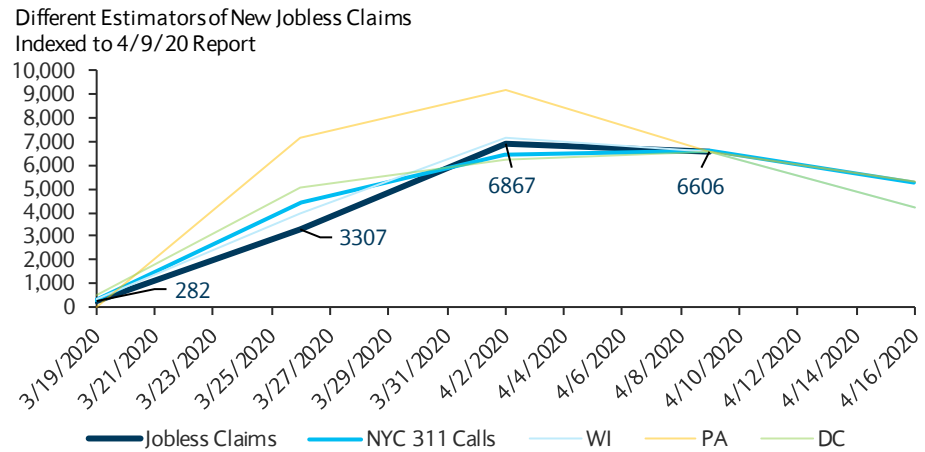
Jobless Claims

NYC 311 calls about unemployment have proven to be quite useful in anticipating the jump in national Initial Jobless Claims filings released every Thursday. After a series of record-setting weeks, the NYC 311 calls have finally shown a clear decline over the prior week. That has also been the case for jobless claims disclosed from a selection of states that report their data daily (Figure 10). Taken together, these datapoints suggest that new claims may finally be slowing. That said, the degree of decline appears to be moderate. Even a reduction to the current consensus level of just over 5mn new claims would represent >3pp increase in the unemployment rate, and would have been the largest-ever single-week increase only a few weeks ago. It suggests that things in the economy are still dramatically worsening (albeit at a modestly lower pace).

¹ 'Worst Is Over,' Cuomo Says as 7 States Ally to Reopen Economy, New York Times, April 13, 2020

FIGURE 7

Calls to NYC 311 about unemployment insurance started are tracking at almost exactly the same pace as the prior week, which corresponded to 6.6mn Initial Jobless Claims



Source: NYC Open Data, Barclays Research

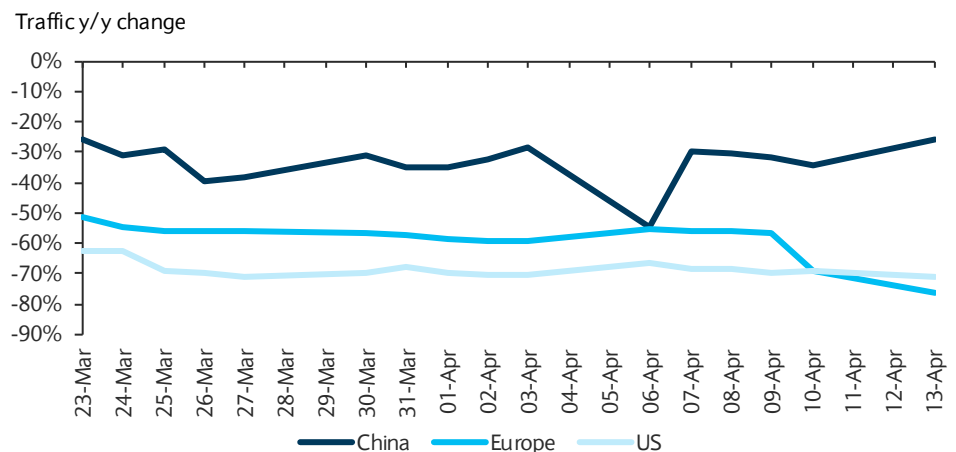
For details about how we look at the relationship between 311 unemployment calls and initial jobless claims, see *311 Calls About Unemployment Lead Weekly Jobless Claims*, March 24, 2020.

Road Traffic

Road traffic data is reported by TomTom for more than 400 cities globally, and is the rare high frequency indicator that can be applied equally to many countries. It suggests that there are incremental improvements in China, but none yet in the US, and perhaps still declines in Europe (those data may be affected by a holiday weekend).

FIGURE 8

Road traffic in China crept up, but is flat at a low level in the US, and falling in Europe



Source: TomTom, Barclays Research

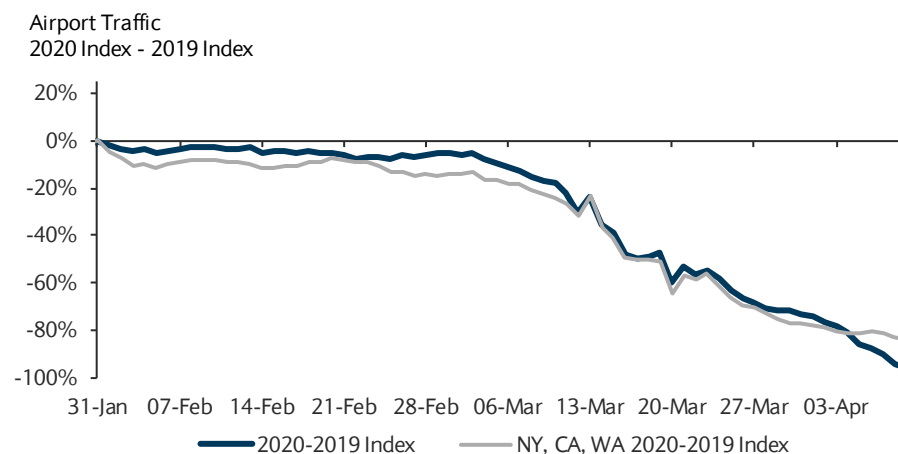
For details about how we look at road traffic, see *Data Science High Frequency Indicators: TomTom congestion data show impact of global lockdowns*, April 9, 2020.

Airports

Nationally, airport traffic has now declined >95% y/y. Like other transportation series like NYC subway ridership, it is now in the region of a hard floor.

FIGURE 9

Traffic at airports across the US is now down 96%, suggesting it might finally be ready to bottom



Source: Complementics, Barclays Research

For details about how we look at airport traffic, see [Data Science High Frequency Indicators: US Airport Traffic Is Down and Falling](#), March 12, 2020.

NYC Subways

Subway ridership has appeared to remain at the now flattened steady rate of down >90% (Figure 10-11).

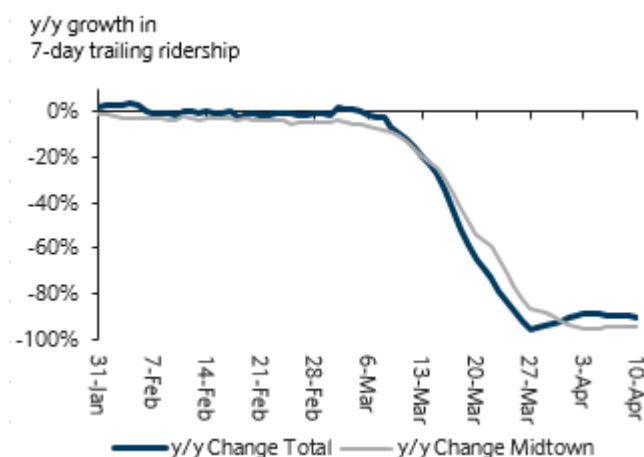
For details about how we look at subway ridership, see [Data Science High Frequency Indicators: NYC Subway Ridership Is Declining](#), March 10, 2020.

S&P 500 Headquarters

S&P 500 company headquarters staffing is also starting to flatten as it approaches zero. The median company has reduced headquarters staffing by almost 95%. This is a modest further reduction from last week.

FIGURE 10

NYC subway ridership is down to near zero



Source: MTA, Barclays Research

FIGURE 11

There was a small bump in daily ridership this week, but it looks more like a data artifact than a sustained change

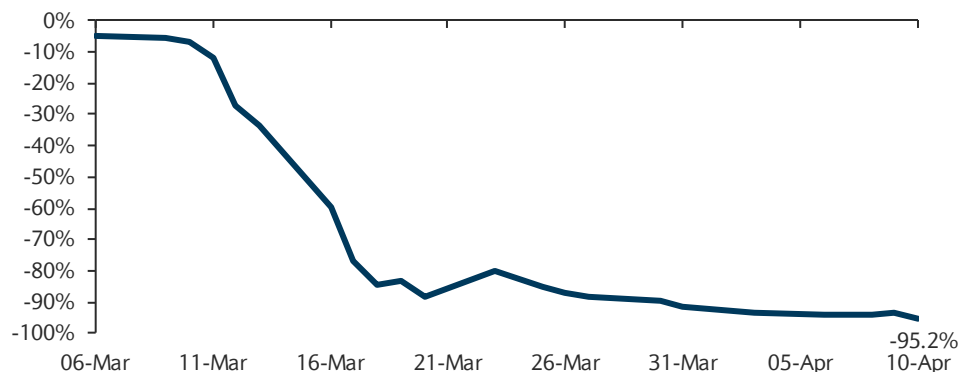


Source: MTA, Barclays Research

FIGURE 12

S&P 500 company HQ staffing is holding steady at very reduced levels

Median Reduction in HQ Staff
vs. Baseline (5d Trailing)



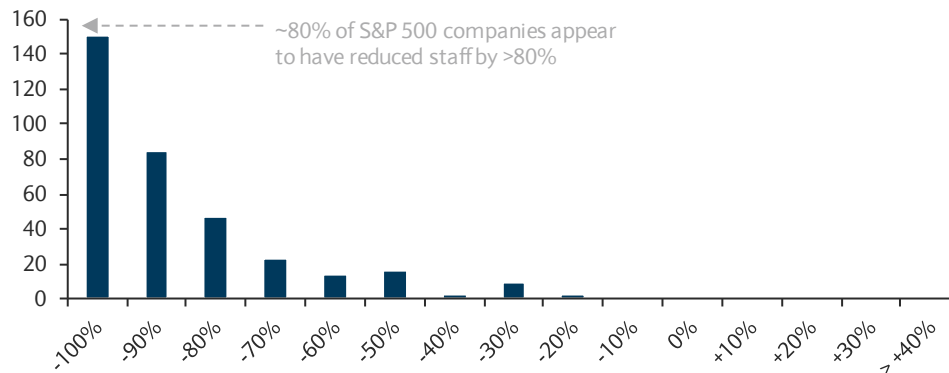
Source: Complementics, Barclays Research

And 80% of S&P 500 constituents have cut staffing by more than 80% (Figure 13), a figure that is basically constant since last week.

FIGURE 13

About 80% of S&P 500 companies have reduced headquarters staff by 80% or more, essentially unchanged from last week

Count of Number of Companies Reducing
HQ Staff by % Reduction vs. Baseline (March 13)



Source: Complementics, Barclays Research

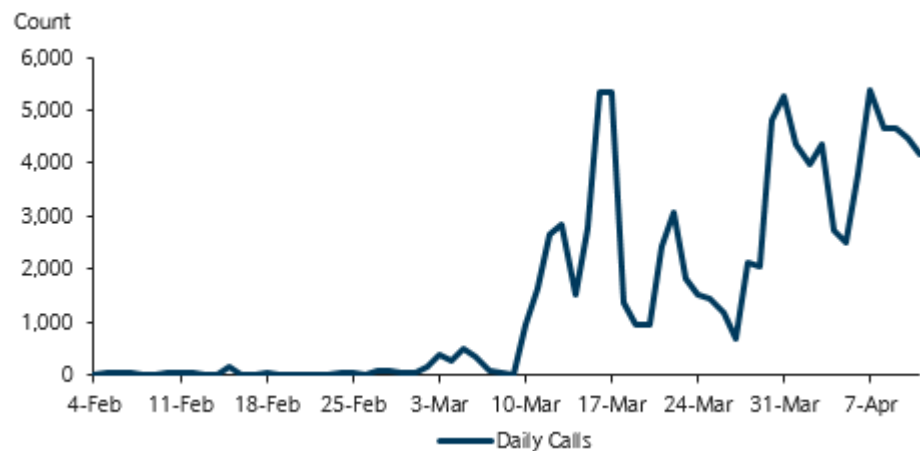
For details about how we look at S&P HQ staffing, see [Data Science High Frequency Indicators: S&P Companies Have Committed to Social Distancing](#), March 16, 2020.

NYC 311 Calls for COVID-19 Information

311 calls for COVID-19 information have lingered near highs recently, seemingly in contrast to other data that shows falling cases in New York.

FIGURE 14

NYC 311 calls seeking information about COVID-19 have actually rebounded despite other evidence that the outbreak is waning in New York City



Source: NYC Open Data, Barclays Research

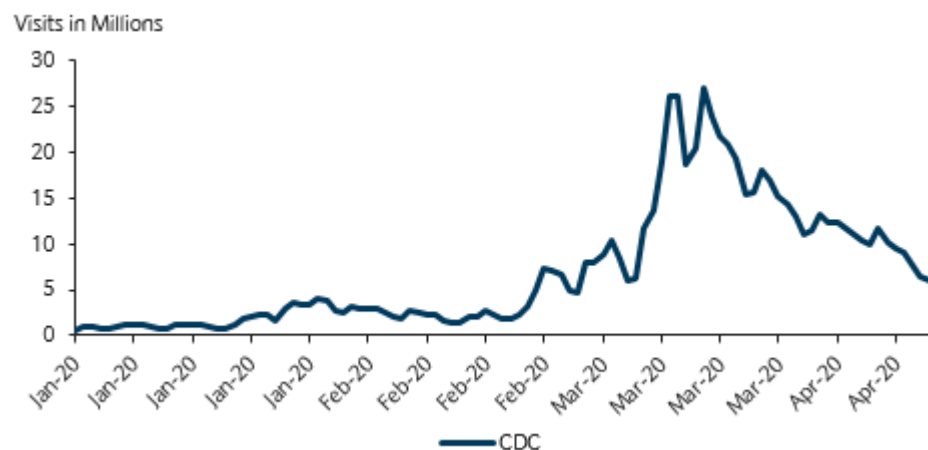
For details about how we look at 311 call volume, see [Data Science High Frequency Indicators: COVID-19 Calls to NYC's 311 Are Starting to Spike](#), March 13, 2020.

Visits to the CDC Website

Visits to the CDC website have continued their declines off mid-March peaks (Figure 15).

FIGURE 15

Visits to CDC website have now sustained a multi-week decline from their peak



Source: analytics.usa.gov, Barclays Research

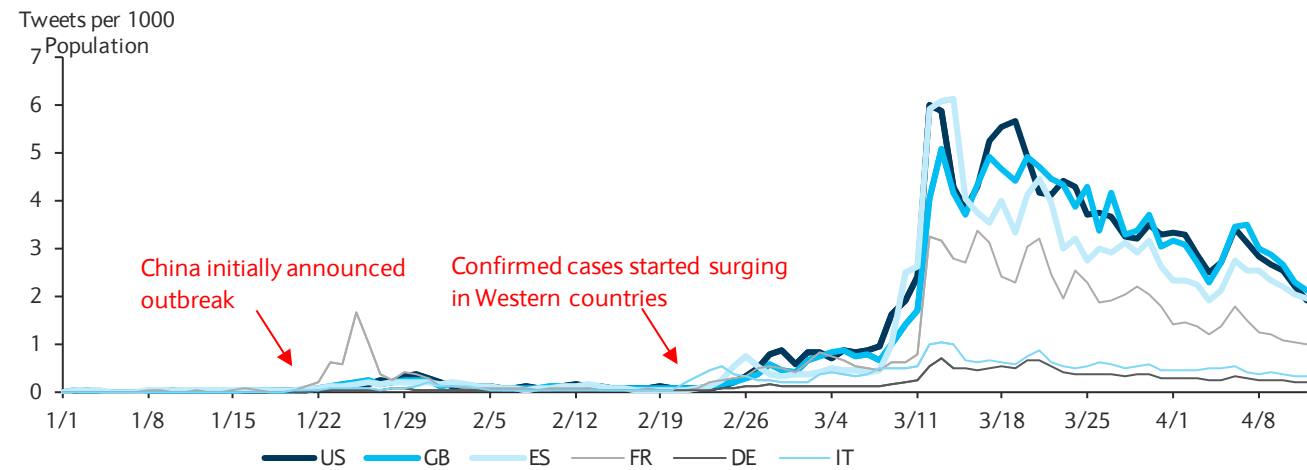
For details of how we look at CDC website traffic, see [Data Science High Frequency Indicators: Visits to CDC Websites Have Spiked](#), March 16, 2020.

Twitter

Tweets that are “virus” or “covid” related have continued their steady decline after a sharp uptick for several weeks (Figure 16). They remain at a higher level than usual, however, suggesting that engagement remains high even if the overall level has fallen about halfway from the peak.

FIGURE 16

Population normalized count of “virus” or “covid” related tweets, by country



Source: Twitter, United Nations, Barclays Research

For details about how we look at tweet volume, see [Data Science High Frequency Indicators: COVID-19 Tweet Surges Vary by Country](#), March 16, 2020.

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