



COVID-19 UPDATE: F-CAT >80% prob TX already peaked, >60% AZ and >50% FL... CA still parabolic

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Equity markets surged to start the week, and at first glance, one could say the weekend developments were better than expected, and thus, on the margin, risk on for markets. This is becoming a pattern, where the absence of "bad" or even catastrophic news is resulting in a general upwards drift in markets. And the incoming economic data remains better than expected -- a huge beat on June ISM Services at 57.1 vs 50.2 expected. Both PMIs (manufacturing and services) are solidly back >50 and affirming the US economy has bottomed.

Taking a step back, when the economy has bottomed, and stocks behave with an "underlying bid," we see this as an overall constructive environment and one that allows stocks to surprise to the upside. I still find it curious that many market skeptics cite the "high P/E" as a reason for caution. At the bottom of a market cycle (which we are in) and when earnings are depressed, P/E is naturally going to be stratospherically high--that was the case in 2009 as well.

And there remain a few "binary" events that could cause the market to abruptly re-position:

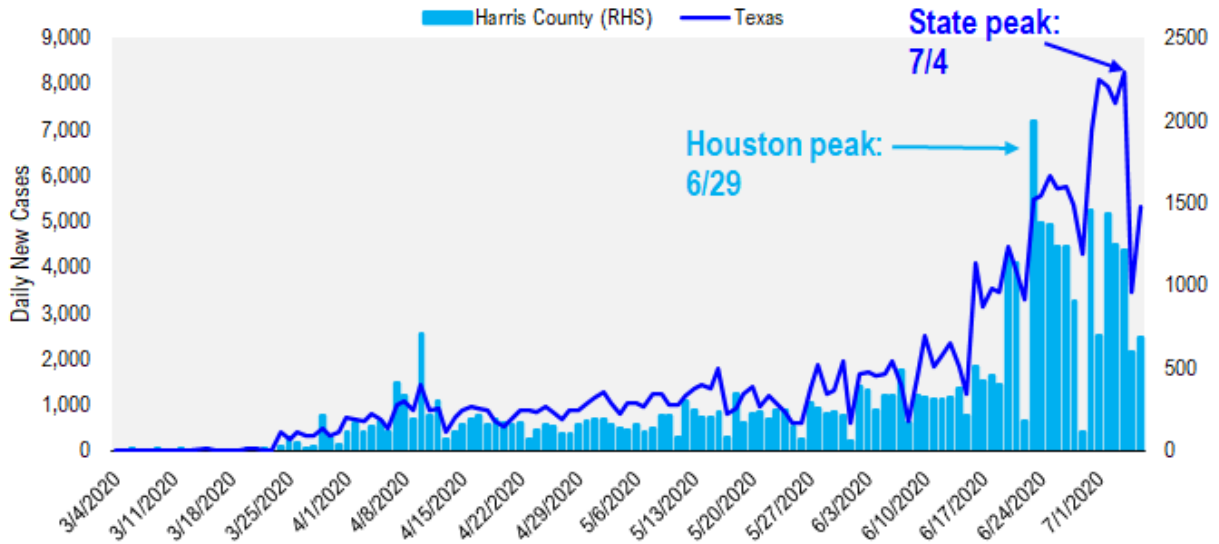
- Healthcare cure or vaccine developed
- FL, CA, AZ, TX, or F-CAT, could see cases rollover and mark the apex of current wave in US pandemic.

>80% chance Texas is past the peak...

In our view, TX is already past the peak. We discuss this in detail below (see commentary) but the high points are:

- Houston is the leading indicator, followed by Austin, San Antonio and Dallas
- Houston cases peaked 14D ago and are down 70% since (Austin ~80% decline)
- Positivity rate in Houston is now 11% vs 22% two weeks ago, even as tests 2X
- Houston case profile is tracking NYC shocking closely --> NYC took 18 days -75% and 32 days -90%

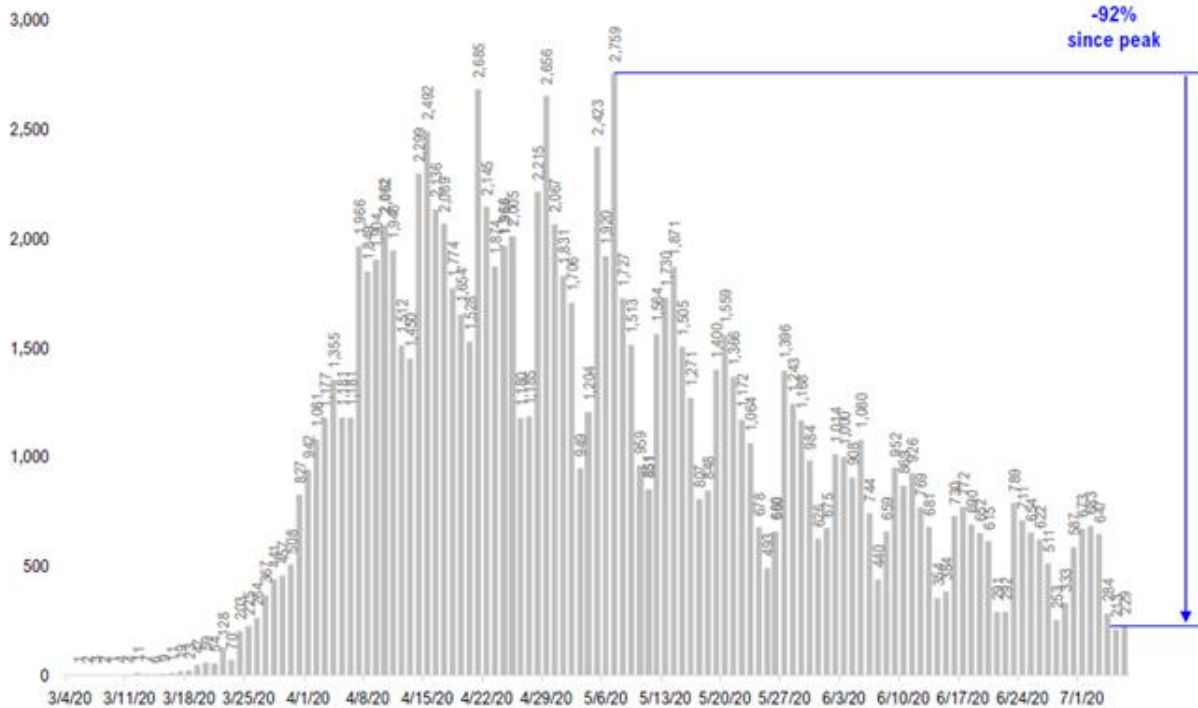
Thus, if Houston is past the peak and it was the center of the parabolic surge initially, then it is acting as the beacon akin to NYC in late March.



Source: Fundstrat and TX health dept.

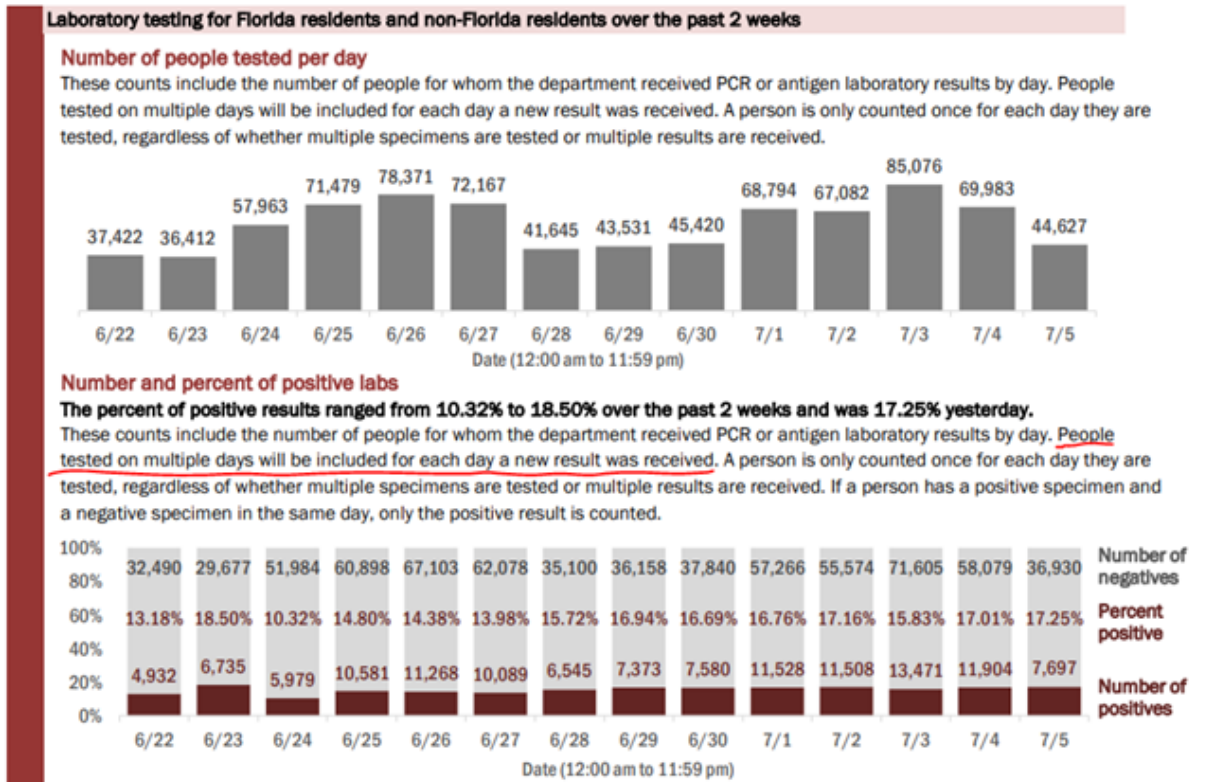
Daily cases are up on Monday (see below) but it is mainly a "true-up" from CA. And perhaps more importantly, daily deaths from COVID-19 remain in a downtrend. Recall, US cases have been surging for several weeks now and yet, we have not seen a similar surge in hospitalizations (nationwide) nor in deaths.

US daily COVID-19 Fatalities



Source: COVID-19 Tracking Project

As a side note, Florida is now explicitly stating they are "double-counting" COVID-19 cases. That is, if a person has multiple tests over a period of time, each time that person is positive, this is counted as a case. Thus, someone COVID-19 positive and tested multiple times is going to be showing up multiple times. Florida is not the only state to do this and it is due to states wanting to get cleaner "positivity" readings. And this methodology accomplishes that.



Source: FL Department of Health

STRATEGY: The market surge on Monday was led by "bond proxies" --> FANG, Tech

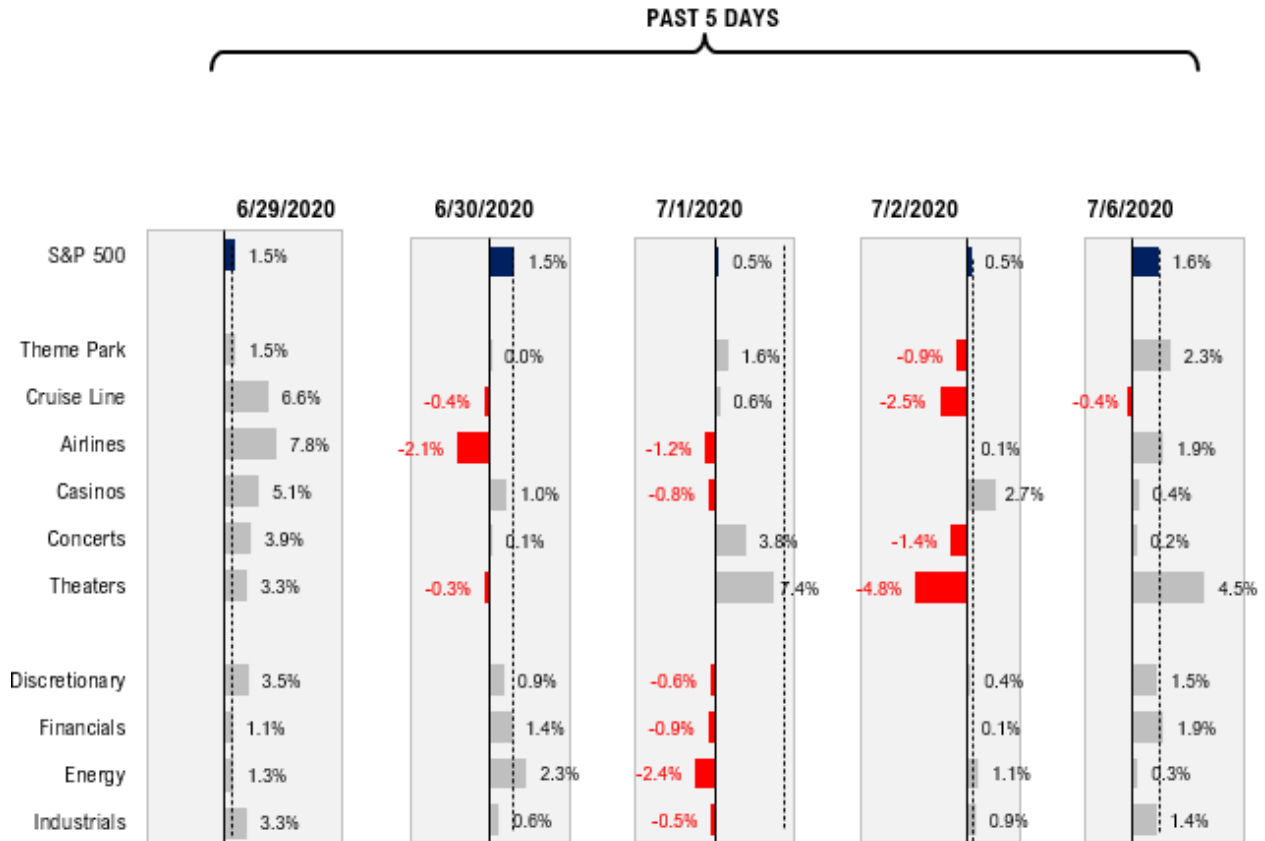
What I did find curious yesterday is the fact that yesterday's equity market surge was led by FANG and Tech. Now, these are leaders, so we should naturally expect leaders to keep leading. And this is the start of 3Q2020, so we should also expect inflows in the quarter to lead to a general inflow into whatever is leading (momentum strategy). But the reason this is curious, is that economic data continues to surprise to the upside (even TSA data was good). And if the market's perception of the healthcare side remains better (fewer deaths = no need to close), we should expect Cyclical to rally.

Thus, if we see equities surge and FANG leads, this could be:

- Asset allocation at start of quarter
- or reluctant cash coming off sidelines and into "bond proxies"

But if equities continue to surge this week and economic data is upbeat, and "closing" odds fall:
- we see a rotation into cyclical/epicenter.

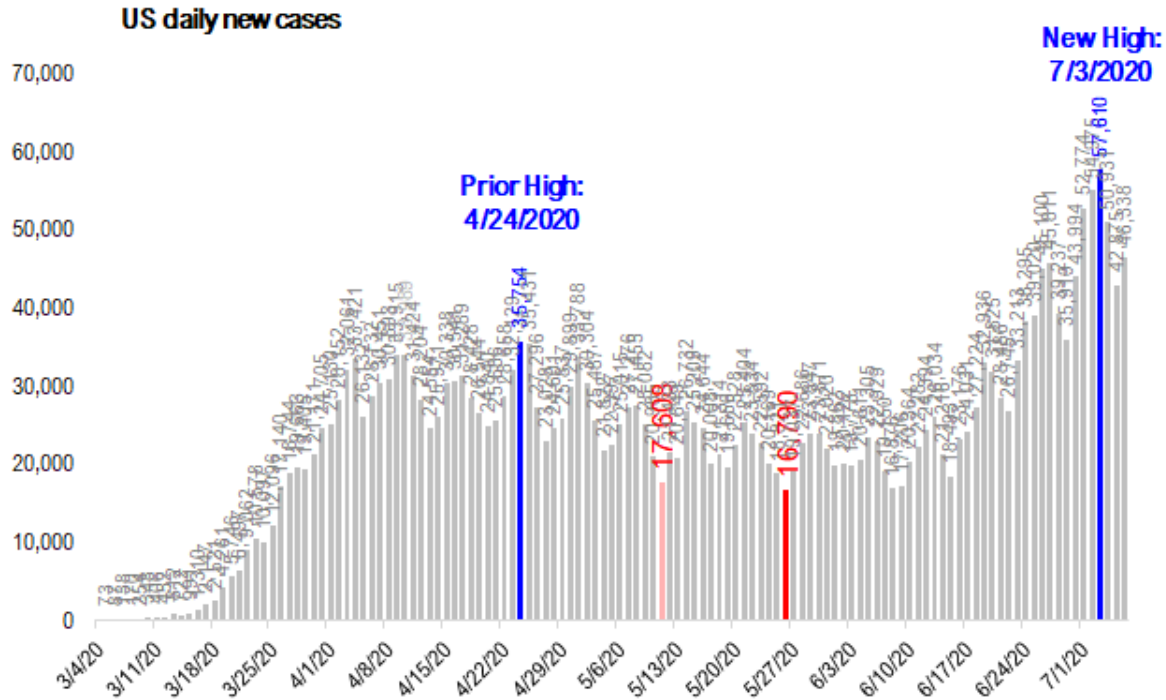
So we think yesterday's market reaction is more the former, rather than the latter. I know I sound a bit rambly, but as this daily chart shows, the epicenter/cyclical trade really struggled Wed and Thu last week (7/1 and 7/2) but yesterday, despite FANG/AMZN being the leader, cyclical kept pace. So this is what we are watching this week.



POINT #1: Daily rise modestly 46,338 (+3,463 vs 1D ago) despite massive CA "true-up"

Total cases in the US rose to 46,338, +3,463 vs 1D ago. The most positive aspect of this is the fact that even the rise is below the record 57,800 seen on Saturday.

- overall testing fell to 523k vs 650k, so there is a drop in tests explaining this
- CA reported +6,110 increase in cases at 11,529 vs 5,410 1D ago, but this is due to Los Angeles lab delays.



Source: COVID-19 tracking project

The rise in cases for Los Angeles is really a "catch-up" to reflect the paucity of cases in the prior two days. The 3D average is 2,633, so Los Angeles cases are still rising.

Date	County	Total Cases	Total Deaths	Daily New Cases	Daily New Deaths
7/1/2020	Los Angeles	105,291	3,402	1,651	33
7/2/2020	Los Angeles	107,144	3,454	1,853	52
7/3/2020	Los Angeles	107,236	3,454	92	0
7/4/2020	Los Angeles	107,256	3,454	20	0
7/5/2020	Los Angeles	115,133	3,454	7,877	0

Source: California Department of Public Health

One of our clients on the West Coast, JL (did not get his permission), shared the CA press release, and this abstract below explains it all.

The reported new cases for Thursday, July 2 are 2,643; Friday, July 3 are 3,187; and Saturday, July 4 are 1,402. Saturday's number is missing lab reports from one of the larger labs.

So, CA still has rising cases, but the absolute explosion reported on Monday is due to "catch-up" from the weekend effect.

6 states reported a large 1D increase

California	11,529 vs 5,410 (1D)	+6,119
Texas	5,318 vs 3,449	+1,869
North Carolina	1,546 vs 1,329	+217
Missouri	420 vs 221	+199
Puerto Rico	225 vs 29	+196
Washington	651 vs 469	+182
Total 6 states		+8,782

6 states reported large 1D declines

Florida	6,336 vs 10,059 (1D)	-3,723
Louisiana	1,101 vs 1,937	-836
Georgia	1,548 vs 2,197	-649
Tennessee	724 vs 1,291	-567
Nevada	491 vs 843	-352
Virginia	354 vs 639	-285
Total 6 states		-6,412

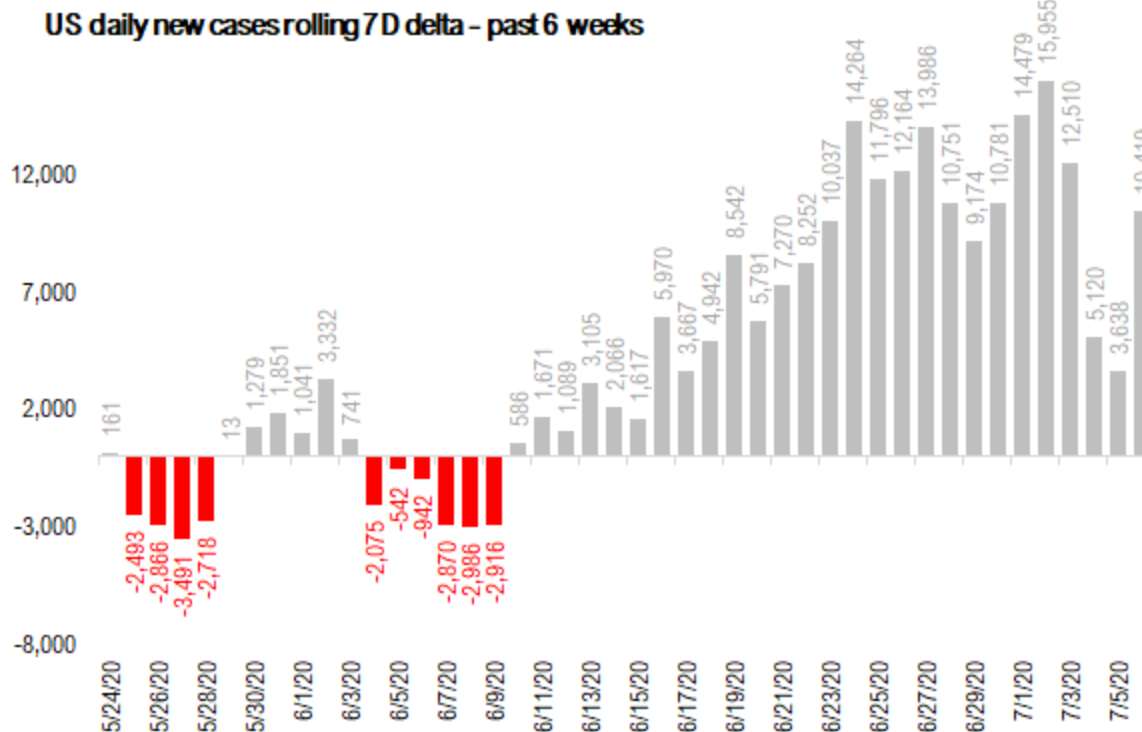
Daily Case Increases (by State) (07/06)

% total new cases (state cases/ total US cases)
% total US pop (state population/ total US population)

Sorted
Last 3-day trend growth rates

	7/4/20	7/5/20	7/6/20	
United States	50,931	42,875	46,338	+3,463
States:				
1 California	6,510	5,410	11,529	<-higher
2 Florida	11,458	10,059	6,336	
3 Texas	8,258	3,449	5,318	
4 Arizona	2,695	3,536	3,352	
5 Georgia	2,826	2,197	1,548	
6 North Carolina	1,413	1,329	1,546	
7 South Carolina	1,854	1,461	1,533	
8 Louisiana	0	1,937	1,101	
9 Kansas	0	0	982	
10 Alabama	997	1,091	925	
11 Ohio	926	968	805	
12 Kentucky	0	0	776	
13 Tennessee	1,428	1,291	724	
14 Washington	627	469	651	
15 Illinois	862	639	614	
16 New York	726	533	518	
17 Utah	676	410	517	
18 Nevada	857	843	491	
19 Wisconsin	738	522	484	
20 Pennsylvania	634	479	450	
21 Arkansas	587	605	439	
22 Oklahoma	580	283	434	
23 Minnesota	0	512	433	
24 Missouri	385	221	420	
25 Mississippi	990	226	357	
26 Virginia	716	639	354	
27 Indiana	517	576	323	
28 Idaho	376	363	319	
29 Iowa	612	312	304	
30 Michigan	398	343	295	
31 Maryland	380	291	272	
32 Connecticut	0	0	259	
33 New Mexico	287	193	251	
34 Puerto Rico	26	29	225	<-higher
35 New Jersey	291	369	209	
36 Colorado	247	199	192	
37 West Virginia	15	121	180	<-higher
38 Oregon	294	300	165	
39 Delaware	73	132	165	<-higher
40 Massachusetts	210	136	163	
41 Nebraska	167	102	117	
42 South Dakota	50	35	42	
43 Wyoming	24	28	41	<-higher
44 Montana	39	45	37	
45 North Dakota	57	37	33	
46 District of Columbia	12	35	33	
47 Alaska	48	27	28	
48 New Hampshire	0	40	17	
49 Guam	2	0	13	<-higher
50 Maine	24	18	8	
51 Hawaii	24	24	7	
52 Vermont	2	11	2	
53 U.S. Virgin Islands	13	0	1	
54 Rhode Island	0	0	0	
55 Northern Mariana Islands	0	0	0	
56 American Samoa	0	0	0	

Source: COVID-19 tracking project



Source: COVID-19 tracking project

POINT #2: F-CAT Update: >80% chance TX peaked. >60% for Phoenix and >50% Miami

Of F-CAT, Florida and California are still seeing "uncontained" growth in cases...

Recall, we believe the key "nucleus" county in each state of F-CAT will act as the leading indicator, and once that county has peaked, the state has likely past the apex. This, of course, is barring a new strain of the virus or a new series of super spreader events. The nucleus cities are:

- FL -> Miami
- CA -> Los Angeles
- AZ -> Phoenix
- TX -> Houston

Each of these 4 states has taken multiple course corrections, limiting further openings (Texas), restricting bars (TX, CA, AZ and now FL). So, there are now additional containment measures underway that should further help limit the spread. In fact, Miami Mayor Carlos Gimenez also took the additional step to close dine-in restaurants. So Miami is rolling back some of the easing.



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Statement from Miami-Dade County Mayor Carlos A. Gimenez on additional closures related to COVID-19 surge

MIAMI (July 06, 2020) — I am continuing to roll back business openings as we continue to see a spike in the percent of positive COVID-19 tests and an uptick in hospitalizations.

I am signing an emergency order that will close restaurants (except for takeout and delivery services), along with ballrooms, banquet facilities, party venues, gyms and fitness centers, and short-term rentals. These closings, among others that will be included in the order, will be effective Wednesday, July 8, 2020. We want to ensure that our hospitals continue to have the staffing necessary to save lives.

At this time, I plan to keep open various outdoor activities, including condominium and hotel pools with strict social distancing and masks rules, as well as summer camps and child daycare centers with strict capacity limits, requiring masks and social distancing of at least 6 feet.

Beaches will be open on Tuesday, July 7, 2020, but, if we see crowding and people not following the public health rules, I will be forced to close the beaches again.

Office buildings, retail stores and grooming services will remain open for now.

The 10 p.m. to 6 a.m. Countywide curfew will remain in force with exceptions for essential workers and for people who have a religious obligation.

We are still tracking the spike in the number of cases involving 18- to 34-year-olds that began in mid-June, which the County's medical experts say was caused by a number of factors, including young people going to congested places — indoors and outside — without taking precautions such as wearing masks and practicing social distancing. Contributing to the positives in that age group, the doctors have told me, were graduation parties, gatherings at restaurants that turned into packed parties in violation of the rules and street protests where people could not maintain social distancing and where not everyone was wearing facial coverings.

We can tamp down the spread if everyone follows the rules, wears masks and stays at least six feet apart from others. I am counting on you, our 2.8 million residents, to stop the spread so that we can get back to opening our economy.

Do your part. Report violations by calling 305-4-POLICE.

And if you don't have to go out, remember, you are safer at home.

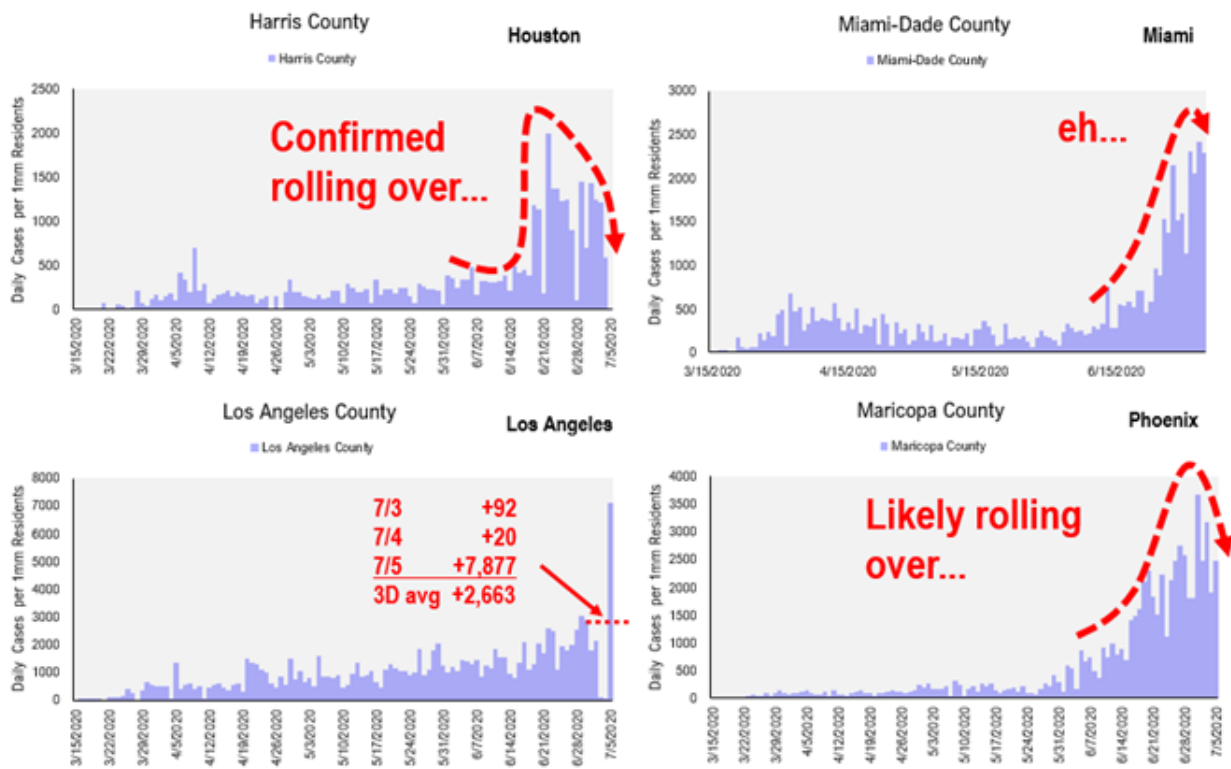
Source: Miami Mayor's Office

Houston 14 days past peak, Phoenix 5 days...

We think Texas has the highest probability of a peak, as Houston is 14 days since it established its local peak. The days since "local peak:"

- Houston 14 days, -70% from peak
- Phoenix 5 days, -14% from peak
- Miami none
- Los Angeles none

The daily confirmed cases for these 4 counties is shown below and as these charts show, Houston, Phoenix and Miami (potentially) are past peak cases. Los Angeles did not report full data for Saturday and Sunday, so there was a major "true-up" on Monday (see blurb below).



Source: Johns Hopkins

80% chance Texas has peaked...

Why do we think there is a >80% chance Texas has peaked? Here is our rationale:

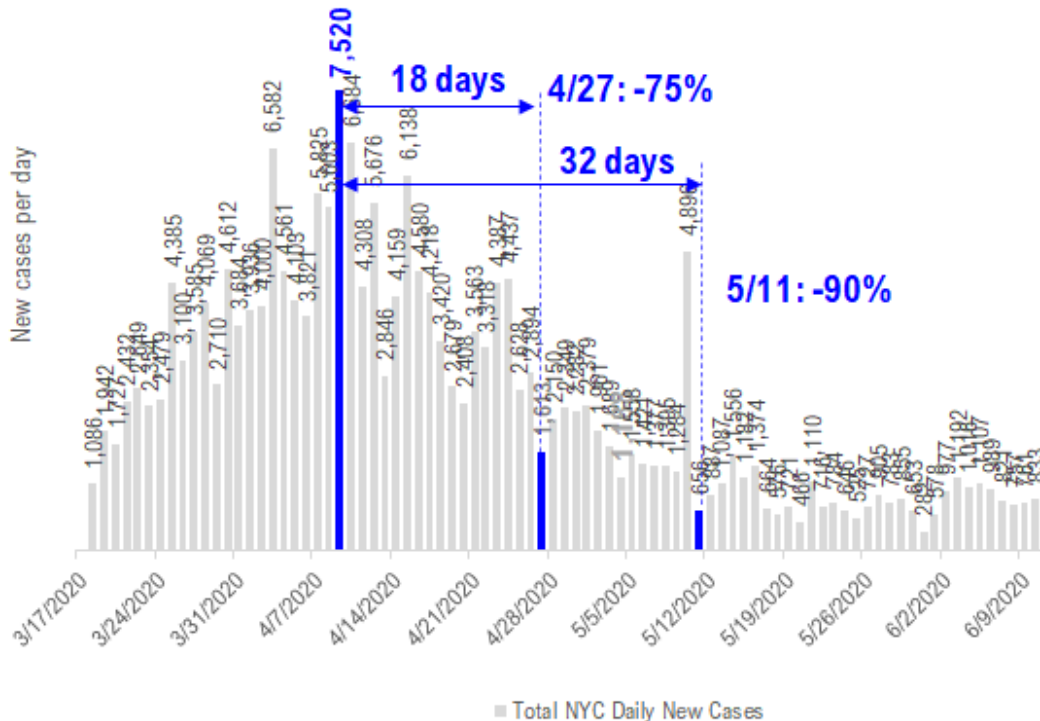
- Houston daily cases peaked 14 days ago and daily cases -70% since.
(NYC, post-peak, saw daily cases -75% after 18 days, +4 from now if Houston follows)
- Houston positivity rate >22% 14 days ago and now 11%, cut in half
- Austin daily cases peaked 7 days ago and -83% since
- San Antonio cases peaked (possibly) 4 days ago and -80% since then

So basically, Houston leads Austin which leads San Antonio which leads Dallas. And Houston looks like it peaked.

Once cases peaked, it took NYC 18 days for cases to fall -75% and 32 days for cases to fall -90%

NYC is our template for thinking about the path of cases, if Houston indeed peaked. The NYC daily confirmed cases chart is below:

- NYC cases peak on 4/9/2020
- NYC cases -75% by 4/27/2020, or 18 days
- NYC cases -90% by 5/11/2020, or 32 days

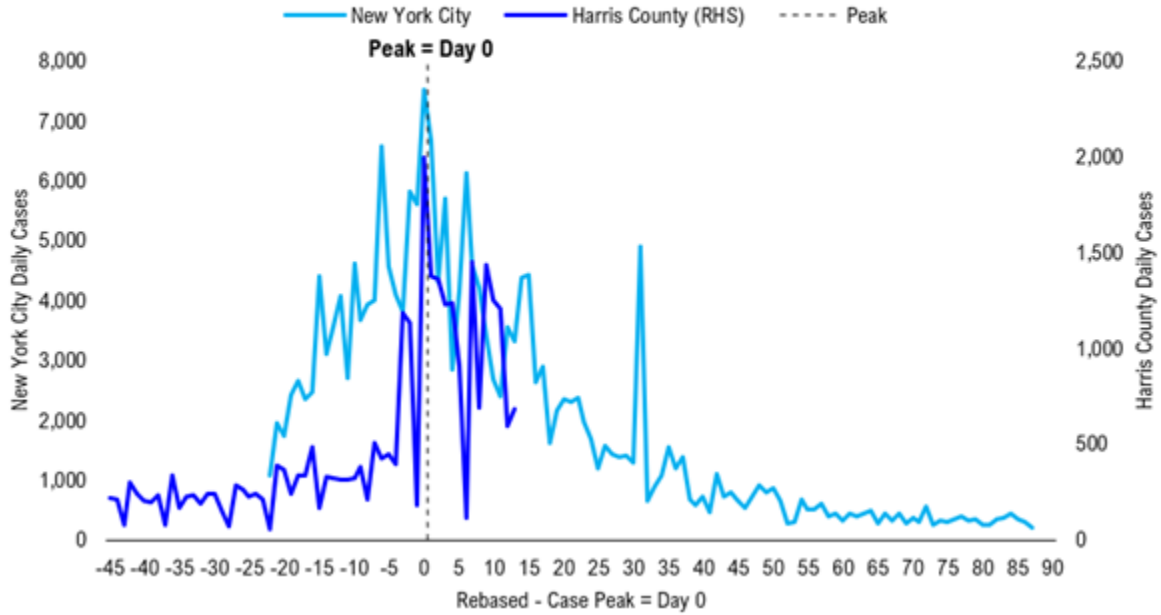


Source: NYC Dept of Health

Houston data so far:

- Daily cases peaked 6/22/2020
- Currently 14 days since pea, daily cases -70%

So Houston is tracking NYC pretty closely.



Source: NYC and Houston health departments.

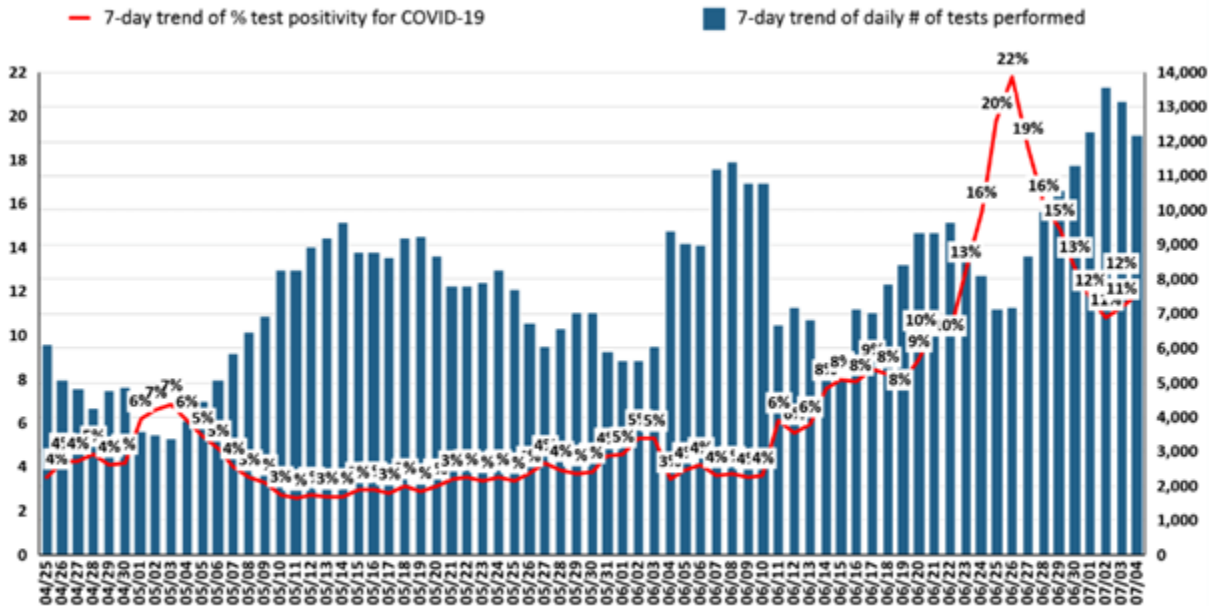
Even Houston's positivity rate has crashed from 22% to 11% in the past two weeks...

Another sign Houston is past its peak is the drop in positivity rate. The positivity rate, when test levels remain high, captures detection rate and if it is high (while testing is high), it is a sign of rapid spread.

- Past 14D, total daily tests in Houston rose from ~7,000 to ~14,000
- Past 14D, positivity rate fell from 22% to 11%

COVID-19 TESTING TRENDS

Greater Houston Area¹



Source: TX Health and Human Services (<https://dshs.texas.gov/coronavirus/AdditionalData.aspx>)
Note: Excludes days with no tests reported
1. Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery and Waller
2. Test data on chart will have a 1-day lag
TMC | TEXAS MEDICAL CENTER
"TMC" refers to the group of systems that make up Texas Medical Center

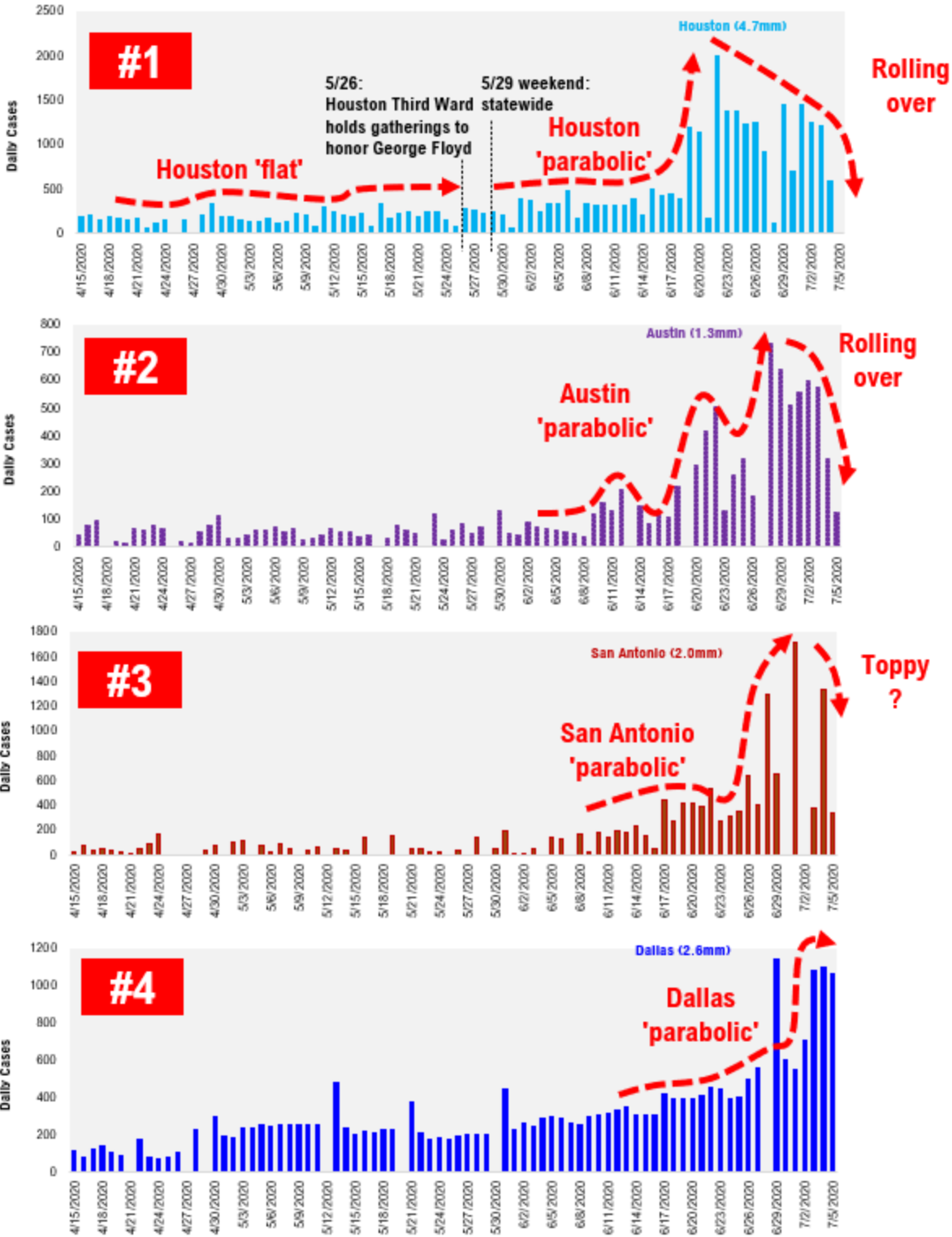
Reflects retroactive changes in testing data made by Texas Department of Health and Human Services on 6/9/2020

Source: TMC

Texas: The 4 major cities already peaking: Houston -> then, Austin -> then, San Antonio -> Dallas (waiting)

Moreover, look at the 4 major cities of Texas. It looks like each of these is seeing their own local peaks:

- Houston 14D ago
- Austin 7D ago
- San Antonio 4D ago
- Dallas, still surging



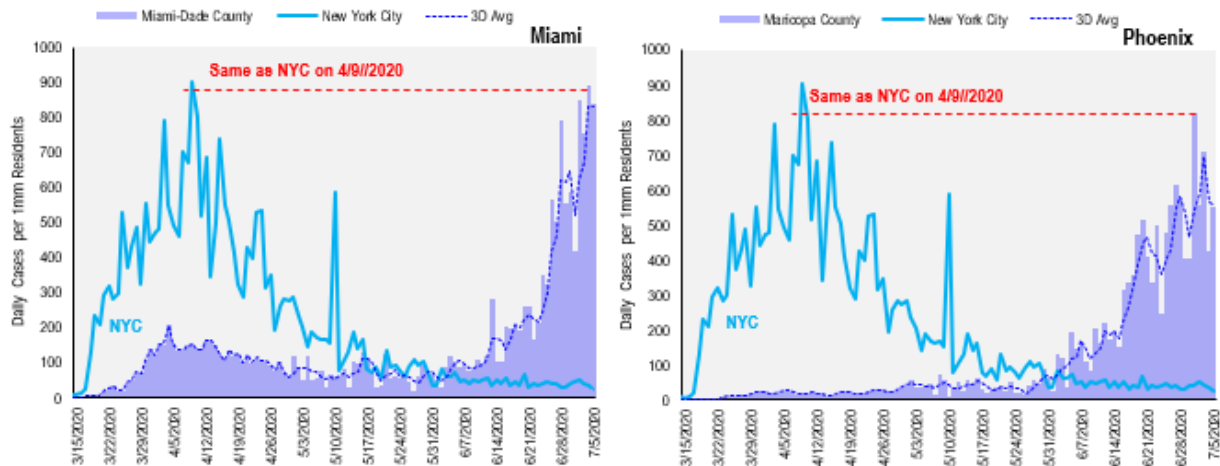
Source: Johns Hopkins

The primary reason we believe Miami and Phoenix likely peaked is their "daily confirmed cases/1mm" matched NYC at its peak...

We think the two charts below bear watching -- it is the daily cases per 1mm residents (to standardize prevalence) comparing Miami and Phoenix compared to NYC.

- On 6/30, Phoenix daily cases matched NYC peak seen on 4/9
- On 7/4, Miami daily cases matched NYC peak seen on 4/9

The NYC daily case peak of ~900/1mm residents proved to be a high water mark for the city and was not really exceeded by other major counties. Hence, this level of case prevalence could also be where the virus reaches its natural break point.



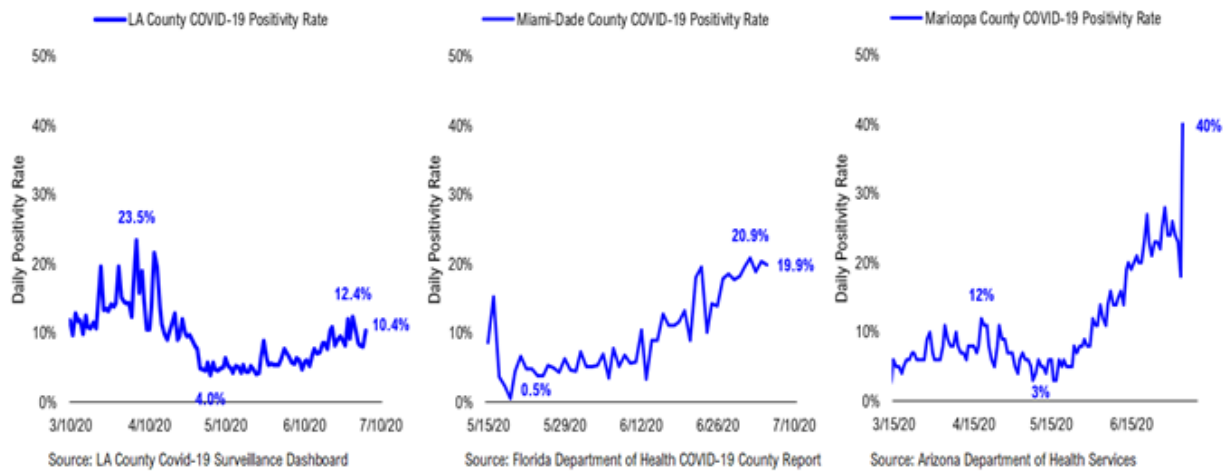
Source: Johns Hopkins

Positivity rates for Phoenix surged on Monday...

The positivity rates for Los Angeles, Miami and Phoenix are shown below.

- Los Angeles positivity rate is surprisingly low at 10%
- Miami rate is still an unacceptably high 20%, so as long as this figure is high, one could argue case detection is not sufficient.
- Phoenix positivity rate is reported at 40%, but something does not seem right there given the sudden surge.

In a way, we wonder if Los Angeles surge in cases, while troubling, is certainly not at the uncontained rate seen for Phoenix and Miami.



POINT #3: "Experts" market expects 168-530 million COVID-19 cases by March 2021...

One of my good friends, Thomas Hu, shared with me some survey results from a group called goodjudgment.io. This entity employs "superforecasters" and these experts make judgements on the future path of macro issues. Below is their forecast for worldwide COVID-19 cases by March 2021.

- Based on experts views, the collective is a 61% probability of between 168-530 million by March 2021
- I think this is based on 61% of the respondents choosing this path

goodjudgment.io		
How many total cases of COVID-19 worldwide will be reported/estimated as of 31 March 2021?	Today's Forecast	1-week Change
Today's Forecast:		
A Fewer than 168 million	24%	-4
B Between 168 million and 530 million, inclusive	61%	+5
C More than 530 million but less than 1.68 billion	12%	-1
D Between 1.68 billion and 5.3 billion, inclusive	2%	0
E More than 5.3 billion	1%	0

Source: goodjudgment.io

In the next 268 days, daily cases need to reach 1.6 million per day, or >11X current levels to reach that 61% probability...

There are about 12 million cases today. So we made a table below to show the increase in cases and the implied daily cases to reach the various forecast break points:

- to reach the central case (61%), daily cases need to rise 1.6mm per day
- current cases are running ~150k per day

		3/31/2021 7/6/2020	\$ 268.00			
How many total cases of COVID-19 worldwide will be reported/estimated as of 31 March 2021?		Current	March 2021	Delta	% Growth	Implied cases per day
Today's Forecast:						
A	Fewer than 168 million	12	168	156	1336%	583,209
B	Between 168 million and 530 million, inclusive	12	433	421	3601%	1,572,015
C	More than 530 million but less than 1.68 billion	12	1,945	1,933	16524%	7,213,806
D	Between 1.68 billion and 5.3 billion, inclusive	12	4,330	4,318	36909%	16,113,060
E	More than 5.3 billion					

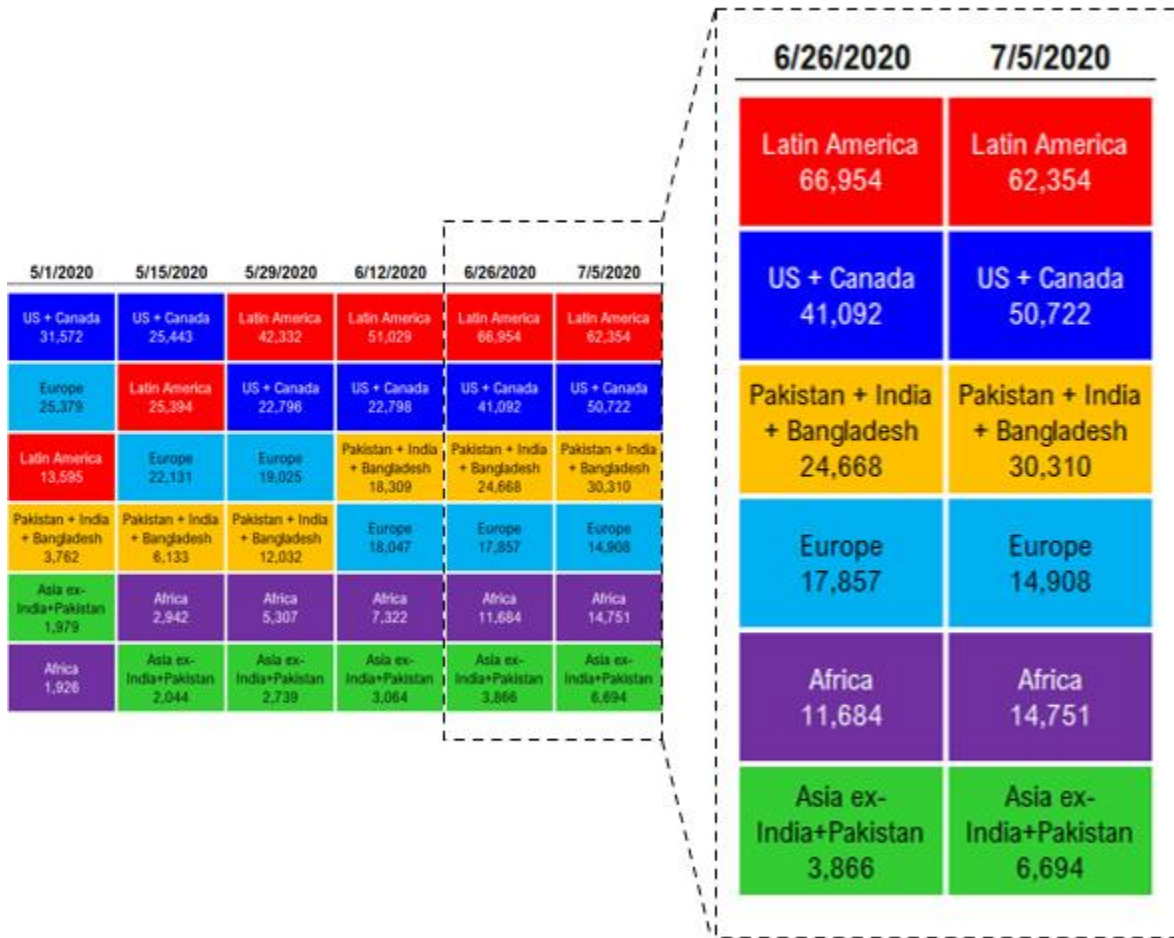
Source: Fundstrat

Is this plausible? Might need Africa and massive second wave in Asia

The US has already seen a massive outbreak. By the way, the central case implies 5% of the total population in the world gets COVID-19.

- the US is probably there already

As this quilt below shows, this means that we should see an explosion in cases where there are few today. This is primarily Asia and Africa, and a continued case proliferation in Latin America.



Source: Fundstrat and Johns Hopkins

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