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5/13/2020

COVID-19 UPDATE: USA cases steady at 20,874 (vs 1D ago). OH to open up 90% of state by EOW (biggest yet). The 'sobering' of market expectations continues w/Fed's Powell and David Tepper

COVID-19 remains a global crisis and we realize that many people need to keep up with COVID-19 developments, particularly since we are moving into the more critical stage ("restart economy"), so feel free to share our commentary to anyone who has interest.

We found NY state's essential worker serology study (>6,000 essential workers) very telling. Essential workers are transit employees (NYC), NYC healthcare, NYPD, FDNY/EMT, DOCCS, and State Police (these 6 categories broken out). These workers are front-line, exposed constantly without the PPE precautions afforded hospital employees. And surprisingly, the prevalence of COVID-19 antibodies for these 6, 6 of 6, is lower than the general population:

- NYC transit 14.2% vs 19.9% (NYC overall)
- NYPD 10.5% vs 19.9%
- NYC Healthcare 12.2% vs 19.9%
- FDNY/EMT 17.1% vs 19.9% (yup, even EMTs)

One thing this argues, in our view, is that the return to the workplace may be safer than most appreciate. Think about it. The fact that the prevalence is lower, despite higher constant exposure (in public entire workweek) and in high risk areas, speaks to less risk of exposure at these locations (which is pretty much everywhere in NYC), particularly for transit workers.

But the stock market has wobbled and is now down 5% for the week in 3 sloppy days. There has been a lot of sobering discussion this week, from famed investors like Stan Druckenmiller, David Tepper, etc. and even Fed Chair Powell. Add in the controversy from CA (Tesla, and LA opening) and we can understand why markets feel the need to 'take profits' and reset sentiment. Moreover, as we discuss below, the battle is taking place between two key Fibonacci levels, the 50% and 62% retrace, 2,793 and 2,934.

The stock market is 'expensive' if we look at 2020 P/E. The 'E' this year is probably going to be $50 (vs $175-ish consensus at start of year) but at the bottom of the cycle, there is no 'E.' To give the right perspective on this, we highlight market commentary from GFC, highlighting the periods between June 2009 (3M after low) to May 2010 (past 1-yr after low). There was no visibility back then (see Point #3) and there is arguably better economic visibility today (because the cycle is in the hands of policy makers, not balance sheets, then).

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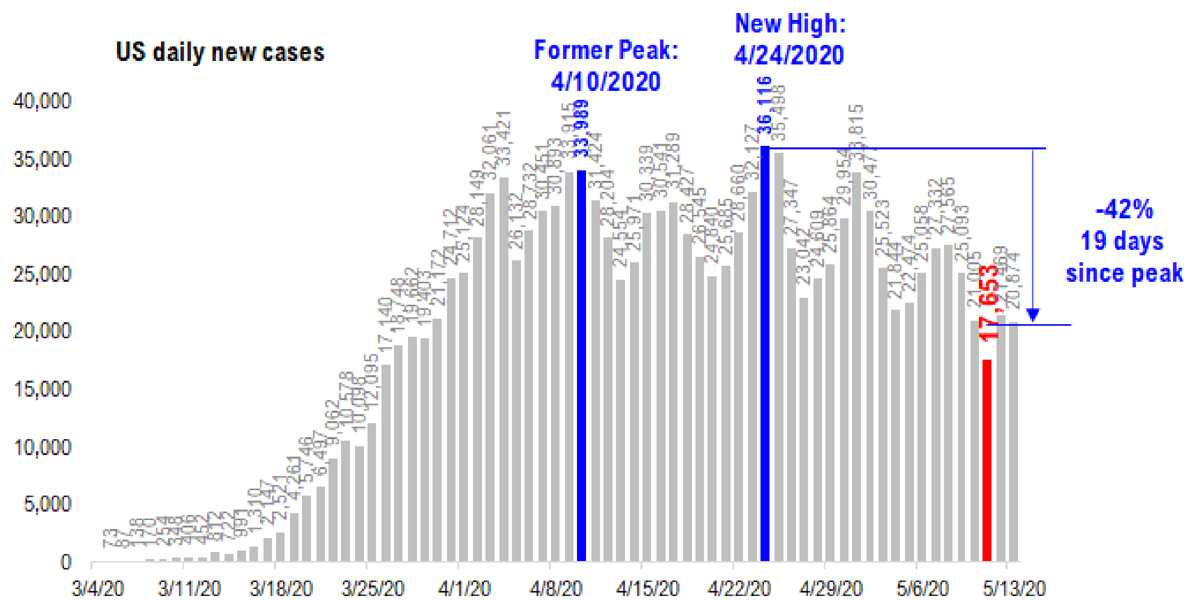
POINT #1: USA essentially flat at 20,874 (vs 21,469 1D ago), expected given mid-week. UP: NY+LA+CA+KS+MA. DOWN: IL+FL+TN+MN

USA total COVID-19 new cases was flat yesterday at 20,874, down slightly from 21,469 1D ago and higher than the 17,653 seen Monday. The figure is still well off the 36,116 high reported on 4/24/2020, so that remains the high watermark and was 19 days ago. The R0 for the US (reproductive rate) is 0.71, so each new case is only resulting in 0.71 new cases. That is good.



+ NY	2,176 vs 1,430 (1D)		+746	
+ LA	612 vs	235	+377	
+ KS	352 vs	0	+352	<--Kansas only reports M/W/F now
+ CA	1,759 vs 1,443		+316	
+ MA	1,165 vs	870	+295	
Total 5 UP			+2,086	

- IL	1,677 vs	4,014 (1D)	-2,337
- FL	479 vs	941	-462
- TN	259 vs	567	-308
- MN	423 vs	695	-272
Total 4 DOWN			-3,379

So there is a lot 'churn' in the state numbers. This is what happens mid-week. But the good news is that the surges in IL and FL yesterday were retraced today (lower). And none of these states is really showing a new breakout, yet. Massachusetts, for instance, reported 1,050 new cases on 5/9/2020, so the most recent figure is essentially flat and is down from the 1,500-ish levels seen a few weeks ago.

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Daily Case Increases (by State) (05/13)

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

Sorted
Last 3-day trend growth rates

		5/11/20	5/12/20	5/13/20	
	United States	17,653	21,469	20,874	
	States:				
1	New York	1,660	1,430	2,176	<--higher
2	California	1,259	1,443	1,759	<--higher
3	Illinois	1,266	4,014	1,677	
4	Texas	1,000	1,179	1,355	
5	Massachusetts	669	870	1,165	<--higher
6	Virginia	989	730	946	
7	New Jersey	1,413	798	817	
8	Maryland	786	688	751	
9	Pennsylvania	543	837	707	
10	Georgia	561	633	697	
11	Louisiana	215	235	612	<--higher
12	Connecticut	211	568	522	
13	Florida	386	941	479	
14	Ohio	696	473	471	
15	North Carolina	281	301	470	<--higher
16	Arizona	261	356	440	<--higher
17	Minnesota	528	695	423	
18	Nebraska	257	120	383	
19	Iowa	414	539	377	
20	Michigan	414	469	370	
21	Kansas	132	0	352	
22	Indiana	501	500	346	
23	Colorado	176	278	318	
24	Alabama	232	301	307	
25	Wisconsin	199	193	291	<--higher
26	Tennessee	559	567	259	
27	Kentucky	246	176	227	
28	Rhode Island	176	164	221	<--higher
29	Delaware	118	176	211	
30	Washington	187	261	208	
31	Utah	111	70	188	<--higher
32	Mississippi	173	234	182	
33	New Mexico	206	143	152	
34	Missouri	74	88	136	<--higher
35	Oklahoma	24	119	120	
36	South Carolina	139	135	103	
37	District of Columbia	117	96	99	
38	Nevada	54	159	83	
39	North Dakota	27	53	76	
40	Arkansas	31	121	72	
41	South Dakota	97	49	69	
42	New Hampshire	89	79	60	
43	Oregon	58	72	58	
44	Maine	26	15	38	
45	Idaho	14	33	31	
46	Puerto Rico	58	43	30	
47	West Virginia	6	12	20	
48	Wyoming	7	6	14	
49	Hawaii	2	1	3	
50	Vermont	-1	1	2	
51	Montana	1	2	1	
52	U.S. Virgin Islands	0	0	0	
53	Northern Mariana Islands	3	0	0	
54	Guam	0	1	0	
55	American Samoa	0	0	0	
56	Alaska	2	2	0	

source: COVID-19 tracking project

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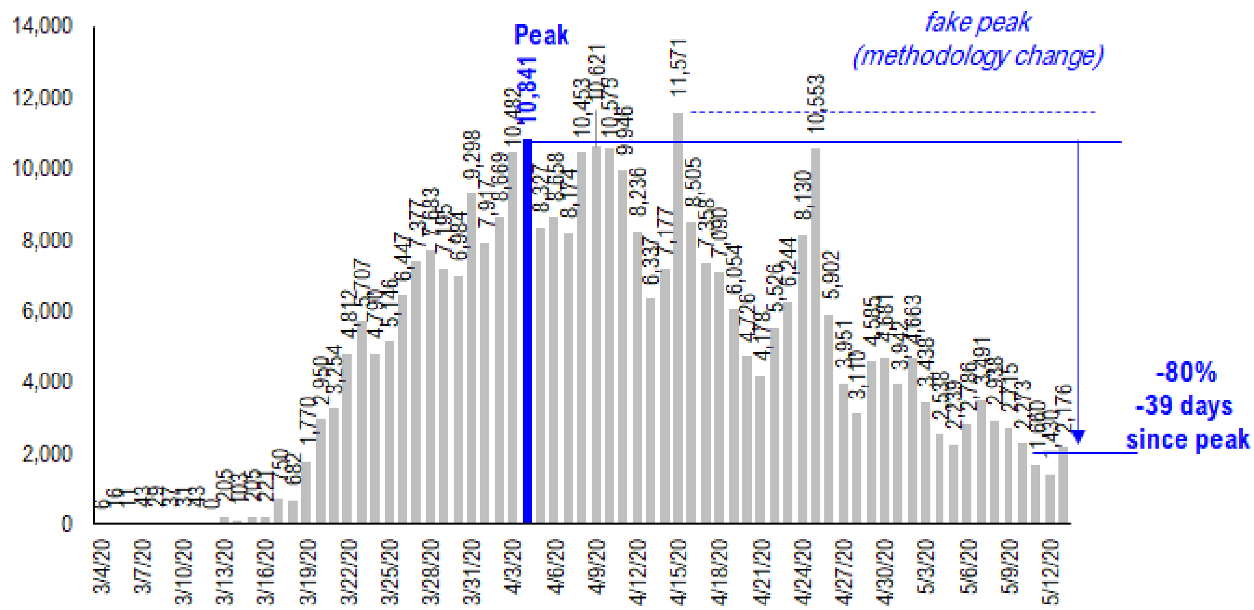
NY state, even with today's rise, is 80% off highs and 39 days since peak...
NY state, despite the 1D rise today to 2,176, is still well off the highs (80%) and the trend, as evidenced below, is still declining. The trend is in the right direction. But NYC remains still not meeting the 7 criteria to re-open and NYC remains the most important district/area within NY state.



source: COVID-19 tracking project

NY State completes 4th serology study ~6,000 essential workers and shows lower prevalence vs population, and very LOW for State Police, somewhat elevated for transit workers (but below state levels).
NY state completed its 4th serology test and this was conducted on essential workers- police, transit, correctional officers, first responders. The results are summarized below and shows that the prevalence of COVID-19 antibodies is actually below that of the general population. This is interesting:

- essential workers are out facing the public every day, yet, their COVID-19 exposure is LOWER than the general population.
- even transit workers showed 14% prevalence v 20% for NYC overall

Think about that. This has implications for the safety of returning to work and the workforce. It seems like COVID-19 is not necessarily widely transmitted at these essential workplaces. After all, if transit workers have less prevalence than the city overall, then it may not be the reason for the COVID-19 spread.

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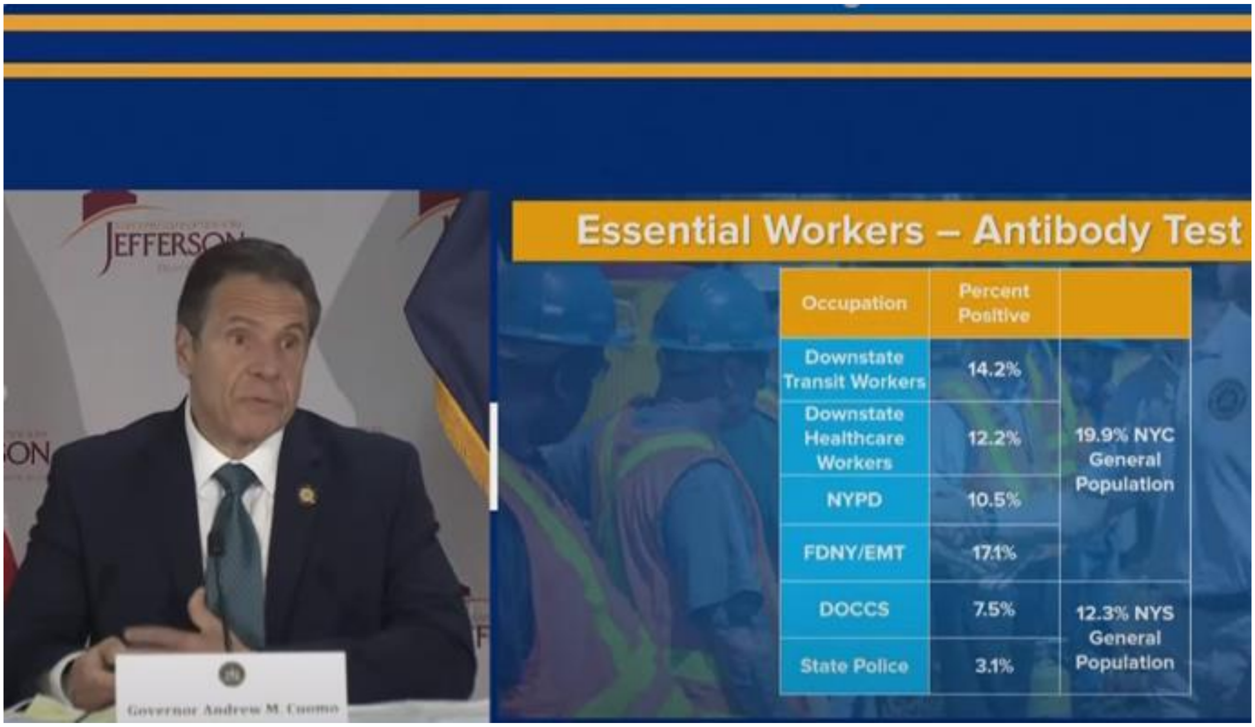

Source: NY governor's office

10 serology studies continue to show prevalence of COVID-19 is 10X --> 50X --> 85X confirmed...

Our data scientist, tireless Ken, updated this table to show now, 10 serology studies conducted on a wide scale in the US. And it paints the same picture. COVID-19 prevalence, as measured by antibodies (serology) is 10X to 50X to 85X greater than the confirmed cases. And the implication remains that this points to drastically lower mortality risks. We will discuss on our note for Thursday.

Date	Authors	Region	# tested	% positive	Implied cases per 1mm Low	Implied cases per 1mm High	"Official" cases per 1mm	Ratio "study" vs "official" Low	Ratio "study" vs "official" High
5/13/2020	**New York State**	*New York City*		19.9%	199,000	199,000	22,051	**9X**	**9X**
		New York State		12.3%	123,000	123,000	17,512	**7X**	**7X**
		Downstate Transit Workers		14.2%	142,000	142,000			
		Downstate Healthcare Workers		12.2%	122,000	122,000			
		NYPD		10.5%	105,000	105,000			
		FDNY/EMT		17.1%	171,000	171,000			
		NY State Police	~2,750	3.1%	31,000	31,000			
		State Dept. of Corrections	~3,000	7.5%	75,000	75,000			
5/8/2020	**Crush The Curve Idal**	*Idaho Falls, ID*	2,319	1.08%	10,781	10,781	252	**43X**	**43X**
		Pocatello, ID	1,981	0.76%	7,572	7,572	148	**51X**	**51X**
5/7/2020	**New York State**	*Downstate healthcare worker*	~27,000						
		New York City		12.2%	122,000	122,000			
		Westchester		6.8%	68,000	68,000			
		Long island		11.1%	111,000	111,000			
5/2/2020	**U of Washington**	*Boise, ID*	4,856	1.8%	17,916	17,916	1,464	**12X**	**12X**
4/27/2020	**New York State**	*Statewide*	7,500	14.9%	149,000	149,000	15,170	**10X**	**10X**
		New York City	3,225	24.7%	247,000	247,000	19,472	**13X**	**13X**
		Long Island	1,080	14.4%	144,000	144,000	23,931	**6X**	**6X**
		Westchester/Rockland	495	15.1%	151,000	151,000	30,695	**5X**	**5X**
		Rest of State	2,693	3.2%	32,000	32,000	3,614	**9X**	**9X**
4/23/2020	**New York State**	*Statewide*	3,000	13.9%	139,000	139,000	13,534	**10X**	**10X**
		New York City	1,290	21.2%	212,000	212,000	16,778	**13X**	**13X**
		Long Island	432	16.7%	167,000	167,000	21,319	**8X**	**8X**
		Westchester/Rockland	294	11.7%	117,000	117,000	27,043	**4X**	**4X**
		Rest of State	984	3.6%	36,000	36,000	2,949	**12X**	**12X**
4/20/2020	**USC & LA Cty Dept. of Public Health**	*Los Angeles, CA*	1,000	4.10%	22,014	44,028	1,638	**13X**	**27X**
4/18/2020	**Mass General Hospital**	*Chelsea, MA*	200	33%	330,000	330,000	7,811	**42X**	**42X**
4/11/2020	**Stanford University**	*Santa Clara, CA*	>3,300	2.81%	24,900	41,600	498	**50X**	**84X**
4/10/2020	**University of Bonn**	*Gangelt, Germany*	1,000	14%	140,000	150,000	1,733	**81X**	**87X**

Source: various studies.

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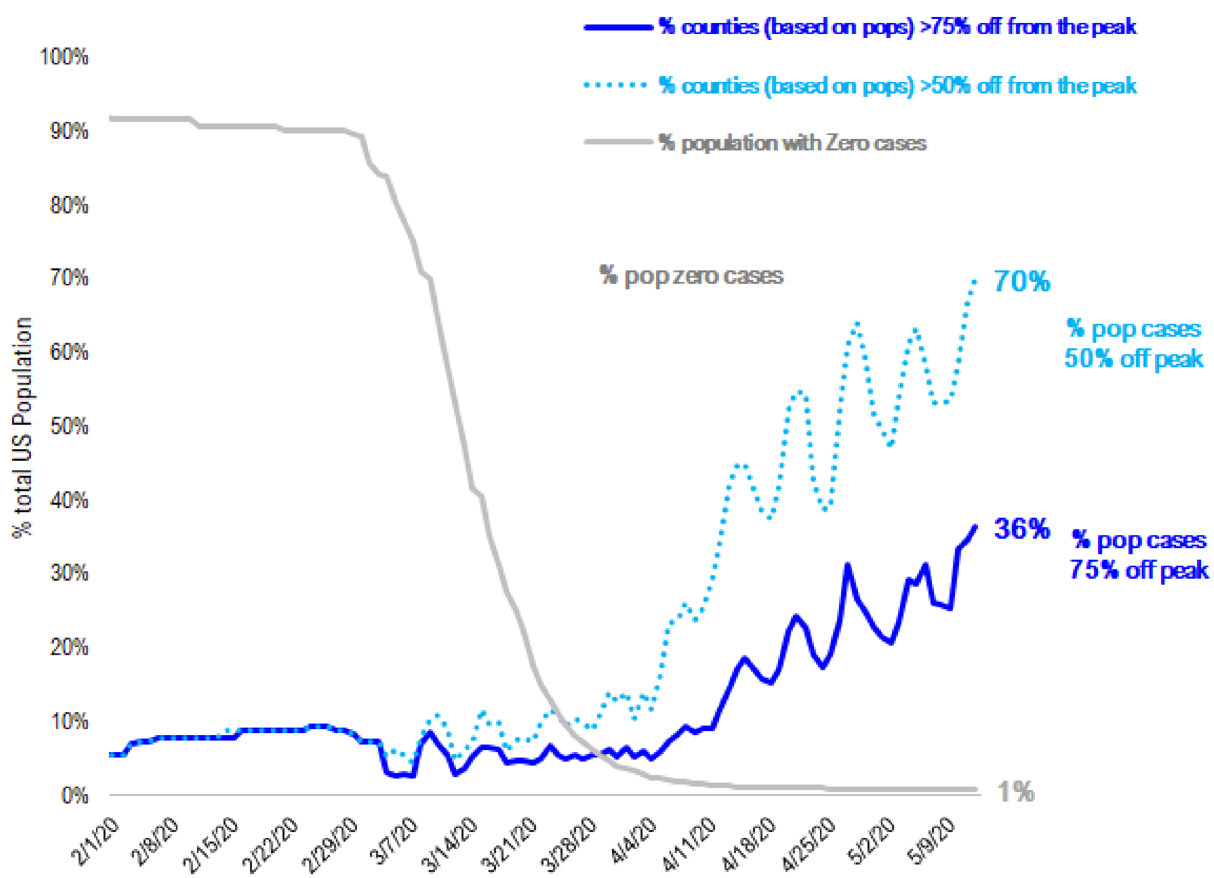
New highs (good thing) in both '% counties 75% off peak' and '50% off peak' -- now 36% and 70%, respectively...

We wanted to revisit the diffusion (dispersion) data, which measures what % counties are 50% and 75% off their peak case numbers (based on county-level population). We like this diffusion measure because it reflects a more targeted geographical view of case progression. And naturally, the higher the number, the better the progress. Generally, this data is quite lumpy, similar to the lumpiness we see in the state level results. And this is likely due to the same reasons -- lags in reporting bring about big jumps and drops.

- but looking at the two series below, we can see that both are making progressive and steady new highs.
- this is a good thing.



source: COVID-19 tracking project and Johns Hopkins

POINT #2: Ohio is opening "retail" this week and 90% of its state economy will be open by the end of the week...

3 states are opening "retail" this week: Ohio (5/12, Tuesday) and New Hampshire and Wisconsin (5/11, Monday).

Every state is taking a different phased approach to opening their economy and the 7 categories, we created, are shown below. Not surprisingly, more states have moved to open elective surgeries and manufacturing. And closely followed are "retail" and much further down

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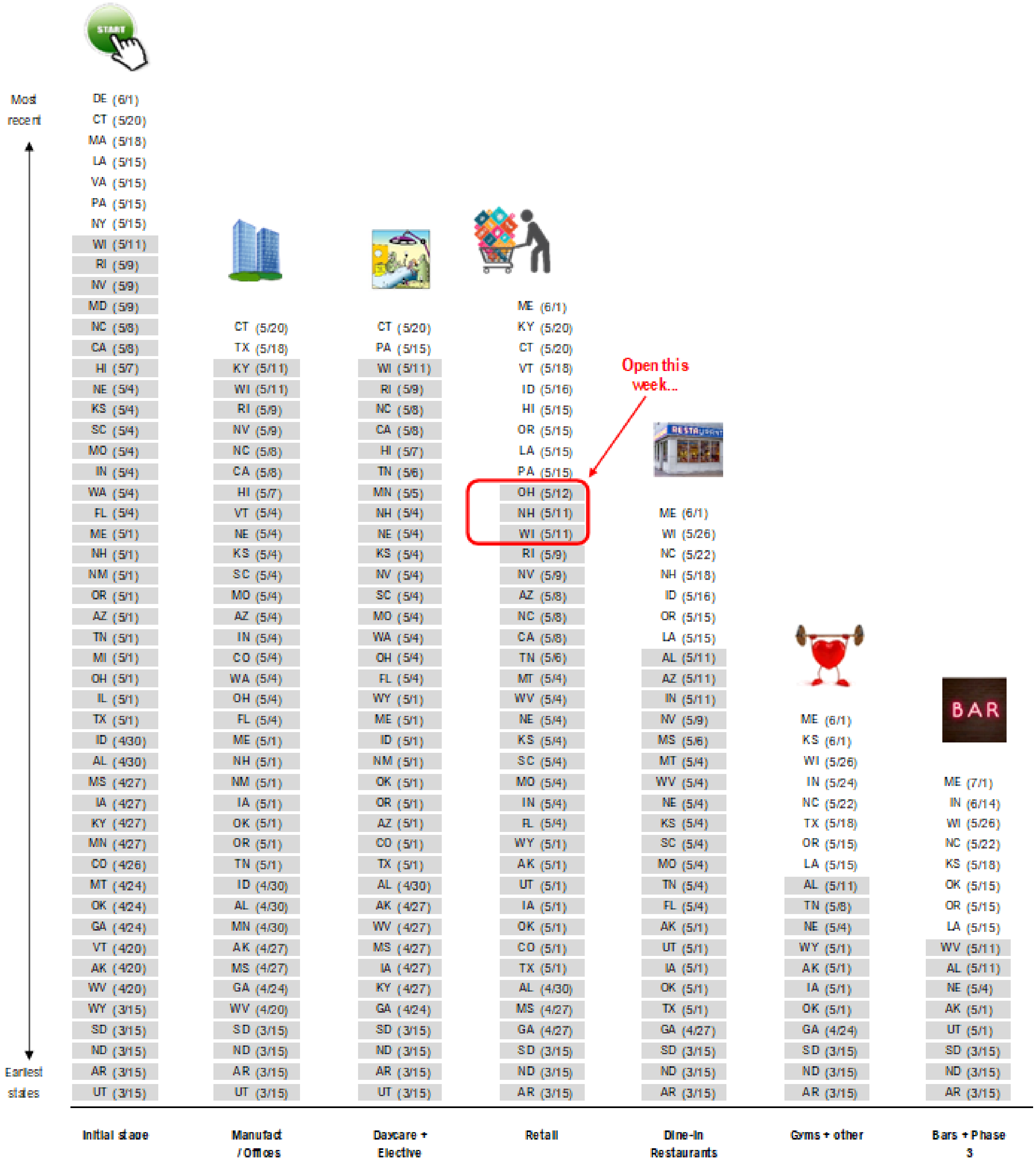
the list is dine-in restaurants and bars and gyms.

- Ohio is the 7th largest state economy (GDP terms), so its opening is quite important.
- And as of today, close to 90% of the state's GDP is open for business, so it is one of the "most open" as claimed by their governor Mike DeWine.



Source: Fundstrat and various state govt websites

Ohio approach to opening is more aggressive than other states, but then again, it was not hit as "hard" as many...

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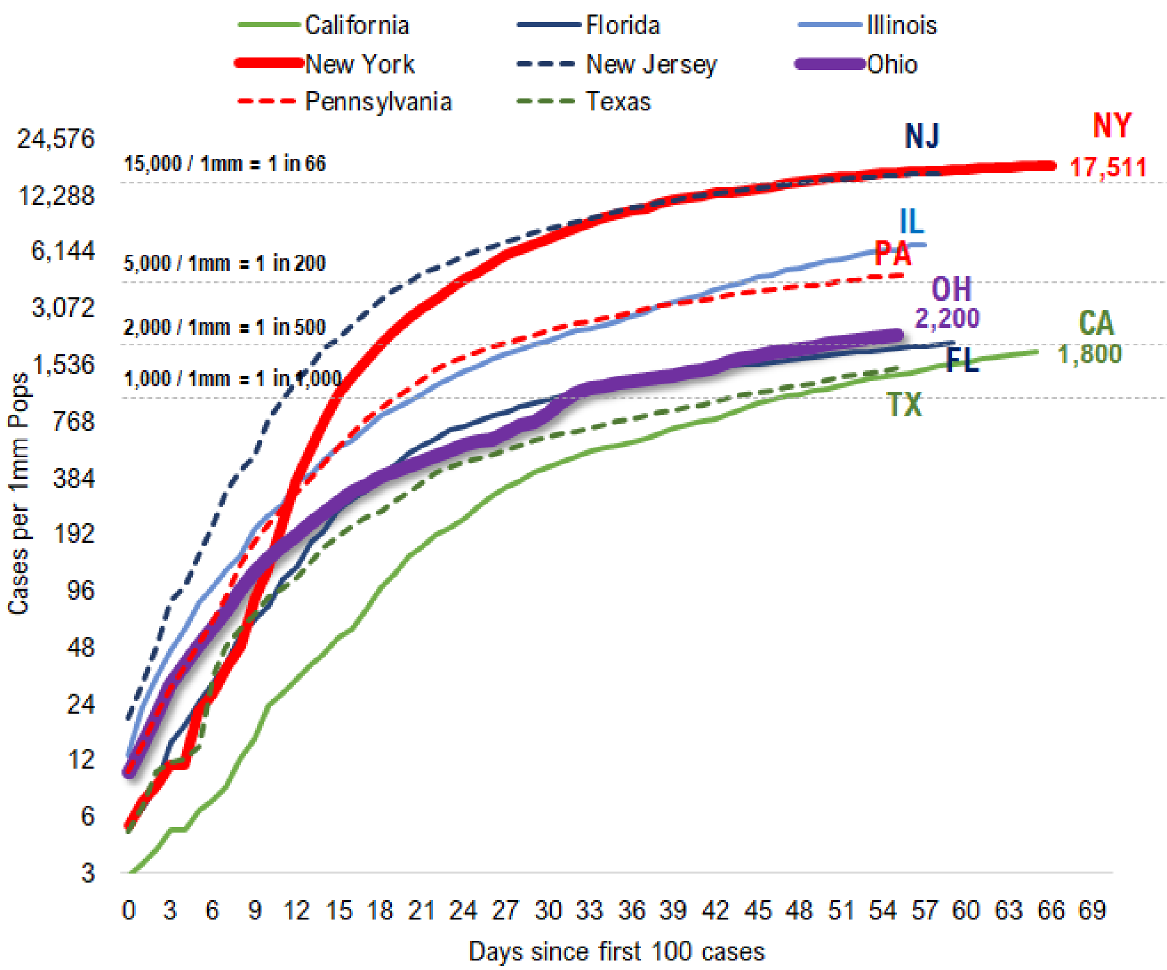
We have listed the COVID-19 cases per 1 million residents for the top 8 states (% share of GDP). And marked OH compared to NY and CA. Ohio was simply not hit as hard other states. In fact, its experience seems to be close to that of CA:

- OH as about 2,200 cases/1 million residents vs 1,800 for CA
- NY stands currently at 17,511/1 million, or 8X higher case prevalence than OH.



Source: COVID-19 tracking project

But OH daily net cases at 473 (most recent day) are down 67% from their peak, less than the >85% shown by NY state and other states. And OH is about 11 days since its recent peak. And even the White House guidelines used 14D as the "bogey" for opening.

- So in this sense, OH is aggressive in its opening.

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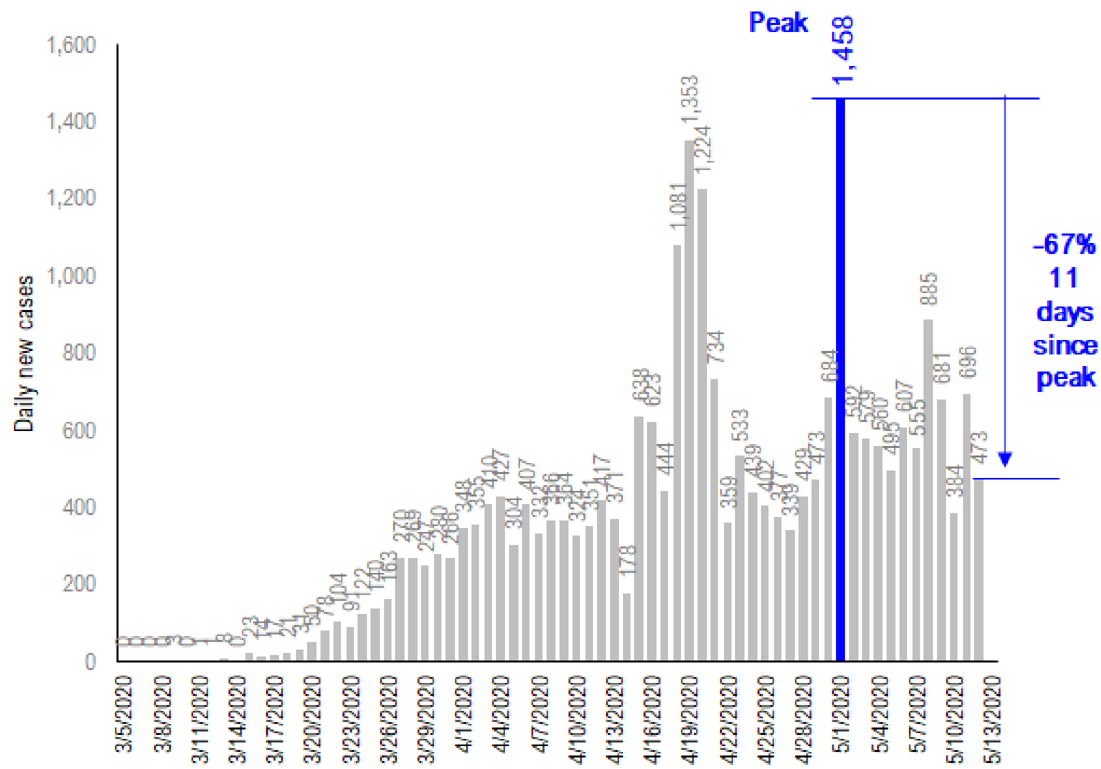

Source: COVID-19 tracking project

Based on States 'cases % off peak' OH ranks #20... pretty far down the list...
Looking at comparative metrics, OH COVID-19 status is not nearly as improved as many other states:
- Case % off peak is -68%, rank #20 of 50
- Days since peak is 11 vs 18 US composite (50 states)
- R0 is 0.87 vs 0.71 for US composite

The other states and comparative statistics are shown below.

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Cumulative COVID-19 stats...

DIFFUSION...
% state pop

Rank	State	State Status	Open Date	Pops	State GDP % share (of US)	Cases/ per 1mm	Date cases peaked	Recent daily cases	% off of peak	# days	Basic Reproduction Rate	75% of high	Zero cases 7D	Zero cases 14D
	United States			328,239,523	100.0%	4,208	4/24/2020	20,874	-42%	19	0.71	37%	4%	2%
1	Alaska	OPEN	4/27	731,545	0.3%	524	4/7/2020	0	-100%	36	0.81	91%	38%	38%
2	Montana	OPEN	5/4	1,068,778	0.2%	432	3/27/2020	1	-97%	47	0.00	87%	79%	62%
3	Vermont	OPEN	5/4	623,989	0.2%	1,489	4/4/2020	2	-97%	39	0.73	94%	28%	5%
4	Hawaii	OPEN	5/7	1,415,872	0.5%	451	4/2/2020	3	-94%	41	0.81	100%	5%	5%
5	Wyoming	OPEN	5/1	578,759	0.2%	1,190	4/28/2020	14	-90%	15	0.40	92%	51%	40%
6	Idaho	OPEN	4/30	1,787,065	0.4%	1,300	4/2/2020	31	-86%	41	0.90	79%	20%	15%
7	New Jersey			8,882,190	3.0%	15,938	4/3/2020	817	-81%	40	0.52	55%	0%	0%
8	New York			19,453,561	8.2%	17,511	4/4/2020	2,176	-80%	39	0.39	83%	0%	0%
9	Tennessee	OPEN	5/1	6,829,174	1.8%	2,397	5/1/2020	259	-78%	12	1.22	37%	6%	2%
10	Louisiana		5/15	4,648,794	1.3%	7,026	4/2/2020	612	-78%	41	0.77	92%	1%	1%
11	Massachusetts			6,892,503	2.8%	11,679	4/24/2020	1,165	-76%	19	0.44	32%	0%	0%
12	Arkansas	OPEN	3/15	3,017,804	0.6%	1,404	4/21/2020	72	-76%	22	1.02	51%	16%	8%
13	Connecticut		5/20	3,565,287	1.3%	9,776	4/22/2020	522	-75%	21	0.77	48%	0%	0%
14	West Virginia	OPEN	4/20	1,792,147	0.4%	780	4/18/2020	20	-73%	25	0.87	69%	18%	9%
15	Michigan			9,986,857	2.6%	4,845	4/14/2020	370	-73%	29	0.69	77%	4%	2%
16	South Carolina	OPEN	5/4	5,148,714	1.1%	1,560	4/7/2020	103	-72%	36	0.93	44%	1%	0%
17	District of Columbia			705,749	0.7%	9,329	5/1/2020	99	-70%	12	0.90	0%	0%	0%
18	Florida	OPEN	5/4	21,477,737	5.1%	1,974	4/3/2020	479	-70%	40	1.05	36%	1%	0%
19	Nevada	OPEN	5/4	3,080,156	0.8%	2,076	3/30/2020	83	-69%	44	0.98	2%	1%	1%
20	Colorado	OPEN	5/1	5,758,736	1.8%	3,555	4/24/2020	318	-68%	19	0.69	26%	2%	1%
21	Ohio	OPEN	5/4	11,689,100	3.3%	2,200	5/1/2020	471	-68%	12	0.87	22%	2%	1%
22	Washington	OPEN	5/4	7,614,893	2.8%	2,301	3/27/2020	208	-67%	47	1.14	64%	3%	1%
23	Pennsylvania		5/15	12,801,989	3.8%	4,585	4/9/2020	707	-64%	34	0.77	38%	2%	2%
24	Indiana	OPEN	5/4	6,732,219	1.8%	3,784	4/27/2020	346	-64%	16	0.80	33%	1%	1%
25	New Hampshire	OPEN	5/1	1,359,711	0.4%	2,426	5/1/2020	60	-63%	12	1.03	21%	2%	2%
26	Oregon	OPEN	5/1	4,217,737	1.2%	810	4/12/2020	58	-63%	31	1.05	38%	6%	3%
27	Missouri	OPEN	5/4	6,137,428	1.6%	1,652	4/6/2020	136	-62%	37	0.73	70%	15%	9%
28	South Dakota	OPEN	3/15	884,659	0.3%	4,219	4/15/2020	69	-62%	28	1.07	42%	23%	17%
29	Maryland			6,045,680	2.0%	5,758	5/1/2020	751	-57%	12	0.80	4%	0%	0%
30	Georgia	OPEN	4/24	10,617,423	2.9%	3,328	4/17/2020	697	-54%	26	0.93	30%	1%	0%
31	Mississippi	OPEN	4/27	2,976,149	0.6%	3,390	5/1/2020	182	-54%	12	0.86	53%	1%	0%
32	Delaware			973,764	0.4%	7,139	4/26/2020	211	-54%	17	0.96	0%	0%	0%
33	New Mexico	OPEN	5/1	2,096,829	0.5%	2,558	4/24/2020	152	-51%	19	1.05	38%	5%	3%
34	Iowa	OPEN	4/27	3,155,070	0.9%	4,212	5/2/2020	377	-50%	11	0.98	47%	5%	3%
35	Rhode Island	OPEN	5/9	1,059,361	0.3%	11,172	4/24/2020	221	-50%	19	0.80	0%	0%	0%
36	Illinois			12,671,821	4.2%	6,684	5/1/2020	1,677	-47%	12	1.08	13%	2%	1%
37	Maine	OPEN	5/1	1,344,212	0.3%	1,127	4/13/2020	38	-42%	30	0.93	70%	19%	11%
38	Wisconsin	OPEN	5/11	5,822,434	1.6%	1,872	5/1/2020	291	-37%	12	0.86	45%	6%	4%
39	Kentucky	OPEN	4/27	4,467,673	1.0%	1,585	4/10/2020	227	-35%	33	0.97	45%	11%	7%
40	Oklahoma	OPEN	5/1	3,956,971	1.0%	1,226	4/4/2020	120	-30%	39	0.96	71%	13%	8%
41	Kansas	OPEN	5/4	2,913,314	0.8%	2,563	4/30/2020	352	-30%	13	0.68	60%	20%	10%
42	Nebraska	OPEN	5/4	1,934,408	0.6%	4,691	5/2/2020	383	-29%	11	0.64	32%	9%	5%
43	Minnesota	OPEN	4/30	5,639,632	1.8%	2,290	5/1/2020	423	-29%	12	1.07	17%	3%	3%
44	California	OPEN	5/8	39,512,223	14.6%	1,800	4/30/2020	1,759	-27%	13	0.81	18%	2%	1%
45	Alabama	OPEN	4/30	4,903,185	1.1%	2,165	4/9/2020	307	-23%	34	1.01	27%	1%	0%
46	North Carolina	OPEN	5/8	10,488,084	2.8%	1,508	5/2/2020	470	-20%	11	0.85	29%	3%	1%
47	North Dakota	OPEN	3/15	762,062	0.3%	2,161	4/18/2020	76	-15%	25	1.02	62%	12%	10%
48	Virginia			8,535,519	2.6%	3,133	5/1/2020	946	-10%	12	1.09	23%	4%	2%
49	Texas	OPEN	5/1	28,995,881	8.8%	1,462	4/10/2020	1,355	-6%	33	1.04	19%	3%	2%
50	Utah	OPEN	3/15	3,205,958	0.9%	2,065	5/3/2020	188	-3%	10	0.89	40%	28%	28%
51	Arizona	OPEN	5/1	7,278,717	1.7%	1,673	4/30/2020	440	-1%	13	0.94	5%	0%	0%

Source: COVID-19 tracking project

Ohio malls are opening! We will be looking for incoming 'data points' in coming days...

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Ohio is opening retail stores and malls. So this is quite interesting to track. 1D is not enough data to gain insights, so we will have better information in coming days.

Malls, retailers reopen in Ohio today; here's what to expect

Columbus, OH | NBC4 Columbus | 1d

COLUMBUS, Ohio (WJW/WCMH)– For the first time in weeks, malls and retail stores can open to the public Tuesday in Ohio. After closing due to the coronavirus pandemic, about 90 percent of the state's economy will be back open, according to Gov. Mike DeWine. That means some of the more than one million unemployed residents in Ohio can go back to work.

source: https://www.newsbreak.com/ohio/columbus/news/0P1psdPM/malls-retailers-reopen-in-ohio-today-heres-what-to-expect

The rules for operating retail are comprehensive, but essentially the same rules used by "essential services" such as grocery stores. So customers are likely to already be well adapted...

The detailed guidelines for operating a retail store are detailed in a comprehensive website titled "Responsible Restart Ohio" (see below) and the actual guidelines for retail stores, both employees and customer interaction, are quite detailed.

The website of OH news provider, WLWT, provides a decent summary and we have a snip below. Basically, workers and customers wear PPE (masks), employees health is checked and sanitation is done frequently.

The governor said every business needs to follow a five-step guideline to ensure health and safety of workers and customers.

- Encouraging face coverings for employees and clients/customers at all times.
- Conduct daily health assessments by employers and employees (self-evaluation) to determine if "fit for duty."
- Maintain good hygiene at all times — hand-washing and social distancing.
- Clean and sanitize workplaces throughout workday and at close of business or between shifts.
- Limit capacity to meet social distancing guidelines by establishing maximum capacity at 50% of fire code and use appointment setting where possible to limit congestion.

source: https://www.wlwt.com/article/ohio-retail-stores-opening-back-up-tuesday-heres-what-to-expect/32444223

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MIKE DEWINE
GOVERNOR OF OHIO

Ohio Department of Health

#INTHIS TOGETHER Ohio

Responsible RestartOhio

Consumer, Retail & Services

	Mandatory	Recommended Best Practices

Employees	• **Ensure minimum of 6 feet between employees, if not possible, install barriers**
	• Businesses must allow all customers, patrons, visitors, contractors, vendors and similar individuals to use facial coverings, except for specifically documented legal, life, health or safety considerations and limited documented security considerations.
	• Businesses must require all employees to wear facial coverings, except for one of the following reasons:
	  ▪ Facial coverings in the work setting are prohibited by law or regulation
	  ▪ Facial coverings are in violation of documented industry standards
	  ▪ Facial coverings are not advisable for health reasons
	  ▪ Facial coverings are in violation of the business's documented safety policies
	  ▪ Facial coverings are not required when the employee works alone in an assigned work area
	  ▪ There is a functional (practical) reason for an employee not to wear a facial covering in the workplace.
	(Businesses must provide written justification, upon re quest, explaining why an employee is not required to wear a facial covering in the workplace. At minimum, facial coverings (masks) should be cloth/fabric and cover an individual's nose, mouth, and chin.)
	• Employees must perform daily symptom assessment*
	• Require employees to stay home if symptomatic
	• Require regular handwashing by employees
	• Place hand sanitizers in high-contact locations
	• Clean high-touch items after each use (e.g. carts, baskets)
		• Group employees by shift to reduce exposure

Customers & Guests	• **Ensure minimum 6 feet between customers** • Specify hours for at-risk populations (e.g. elderly) • Place hand sanitizers in high-contact locations • Ask customers and guests not to enter if symptomatic • Stagger entry of customers and guests	• Consider having customers wear face coverings at all times. • Health questionnaire for symptoms at entry point • Provide face coverings upon entry • Where possible, accept customers by appointment only • Increase availability for curb-side pickup • Consider suspending return policies
Physical Spaces	• **Ensure minimum of 6 feet between people, if not possible, install barriers** • Post social distancing signage and disinfect high-contact surfaces hourly • Clean merchandise before stocking if possible • Establish maximum capacity • Discontinue self-service food stations, product samples • Food courts remain closed	• Close once a week for deep cleaning • Maximize available checkout space to promote social distancing (e.g., space customer lines with floor markers, use alternate registers) • Use contact-less payments where possible • Increase capacity for delivery and curb-side pickup
Confirmed Cases	• Immediately isolate and seek medical care for any individual who develops symptoms while at work • Contact the local health district about suspected cases or exposures • Shutdown shop/floor for deep sanitation if possible	• Work with local health department to identify potentially infected or exposed individuals to help facilitate effective contact tracing/ notifications • Once testing is readily available, test all suspected infections or exposures • Following testing, contact local health department to initiate appropriate care and tracing

**Daily symptom assessments should include taking your temperature with a thermometer and monitoring for fever. Also watch for coughing or trouble breathing.* *Revised 5/1*

source: https://coronavirus.ohio.gov/static/responsible/Consumer-Retail-Services.pdf

OH stands in contrast to both CA and NY

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The opening of Ohio is a contrast to the uncertain openings for both CA and NY (both coasts). CA has announced phased openings, but as we discussed yesterday, the Stage 2 requirements are so strict, it will be sometime before any county meets that criteria. In fact, there remains ongoing battles between Tesla and Alameda county, which has not allowed production to resume.

California's experience with COVID-19, in terms of case prevalence, is a lot like OH. But the state (CA) is taking it very slow.

And NY is understandably taking it slow. NY is the epicenter of the crisis and along with nursing homes, account for nearly 66% of the deaths of COVID-19.

POINT #3: REVISITING HISTORY: Back in 2008-2009 GFC, Warren Buffett 'seismic' purchase of Burlington Northern was in Nov 2009 -- after S&P 500 already retraced 50% of losses (and 6M after the 'low low').

The stock market is expensive, if one's measurement tool is next 12M EPS... but that is not what determines future value
Quite a few investors recently noted that equities have gone "too far, too fast" and that stocks risk/reward is not attractive. Those cautious statements by investors are reasonable.

S&P 500 2020 EPS is likely to be $50 or lower, compared to $160-$170 at the start of this year. There is simply no way for companies to produce earnings when much of the economy is simply shuttered. But this does not mean we think the S&P 500 should be valued at 20X x $50, or 1,000.

We are highlighting the challenge of using valuation techniques on equities at turning points -- at market tops, stocks P/E should be low (because future earnings will fail to deliver) and at market bottoms, P/E should be high (even ridiculously high) as future earnings should surprise. And we have written several pieces on why EPS should be stronger than GDP -- namely, companies will be cutting costs during this contraction, and as such, will need a lot less revenues to achieve the same EBIT/EPS.

Thus, future earnings growth should surprise to the upside.

REVISITING GFC JUNE 24, 2009: NO GREEN SHOOTS... stocks already +43% from March 9, 2009 lows...
To get some perspective on today, I want to take us back to June 24, 2009. On CNBC, a well-known investor (revealed in next few paragraphs) was interviewed about the state of economy. This person is, by many, to be considered one of the most experienced and least biased investor.

And on June 24, 2009, this person was answering questions about the economy. I highlighted

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key observations in red:

- "Everything that I see about the economy is that we've had no bounce."
- "I said the economy would be in a shambles this year and probably well beyond"
- " I thought maybe now I'll be able to see green shoots. We're not seeing them. Whether it's retailing, manufacturing, wherever. "

[redacted]: Well, it's been pretty flat. I get figures on 70-odd businesses, a lot of them daily. Everything that I see about the economy is that we've had no bounce. The financial system was really where the crisis was last September and October, and that's been surmounted and that's enormously important. But in terms of the economy coming back, it takes a while. There were a lot of excesses to be wrung out and that process is still underway and it looks to me like it will be underway for quite a while. In the [redacted] annual report, I said the economy would be in a shambles this year and probably well beyond. I'm afraid that's true.

BECKY: We hear people on our air all the time who talk about the 'green shoots' that they're seeing. Are you seeing any of those green shoots?

[redacted]: (Laughs.) I looked. I wasn't seeing anything. I had a cataract operation on my left eye about a month ago and I thought maybe now I'll be able to see green shoots. We're not seeing them. Whether it's retailing, manufacturing, wherever. We have a big utility operation. Industrial demand is down like we've never seen it for a simple thing like electricity. So it hasn't happened yet. It will happen. I want to emphasize that. But it hasn't happened yet.

source: full transcript --> https://www.cnbc.com/2009/06/24/transcript-warren-buffetts-live-lunch-interview-on-cnbc.html

Warren Buffett, the Oracle of Omaha, did not put big $$$ to work until November 2009, 3 months after those CNBC comments and 6 months after the low...

The comments were made by Warren Buffet. The S&P 500 had rallied a stunning +43% from the March 9, 2009 lows of 667. The economic visibility was NON-EXISTENT. But stocks were rising. As you can see below, the S&P 500 had a V-bounce at that time.

Today, people look back and say "Warren Buffett was buying stocks in 2009" and point to his purchase of Burlington Northern for $34 billion, the largest ever deal for Berkshire Hathaway.

That Burlington Northern deal was announced on November 3, 2009. 6 months after the March

2009 low (Haines bottom, per CNBC) and 3 months after his CNBC interview with Becky Quick, where he "saw no green shoots."

U.S. business on NBCNEWS.com

Buffett buying Burlington Northern railroad

Billionaire investor makes $34 billion bet on the U.S. economy's future

Latest market data
DJIA- Symbol or name

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Associated Press
updated 11/3/2009 3:16:24 PM ET

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NEW YORK — Warren Buffett has made bets on railroads before, but now he's all in. The billionaire investor's Berkshire Hathaway Inc. on Tuesday agreed to buy Burlington Northern Santa Fe Corp., making a $34 billion bet on the future of the U.S. economy.

http://www.nbcnews.com/id/33599744/ns/business-us_business/t/buffett-buying-burlington-northern-railroad/#.XrwY-2hKiHs

By November 3, 2009, the S&P 500 made the 50% retrace of the entire bear market -- ala, 2,794 today...

As shown below, the S&P 500 had already re-traced 50% of the decline (big red line). This is exactly where we are today.

- in other words, by the time the Burlington Northern deal was announced, the S&P 500 was already 6M past the bottom and retraced half of the bear market losses.

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- Buffett was recently interviewed (two weeks ago), and said he had not put any money to work in 2020. But now would be the equivalent time to Nov 2009.

The point we are making is that in 2009, even 3 months past the bottom, there was zero economic visibility. Even November 2009 was early and the move by Buffett (back then) was considered bold and even "much on faith" because the economy was simply still in shambles.

In our view, one of the least appreciated aspects of market declines and recoveries is the symmetry. Something, we have highlighted in past reports. The faster the decline, the faster the recovery. And in 2020, the market's high-speed decline suggests a symmetric high-speed recovery.

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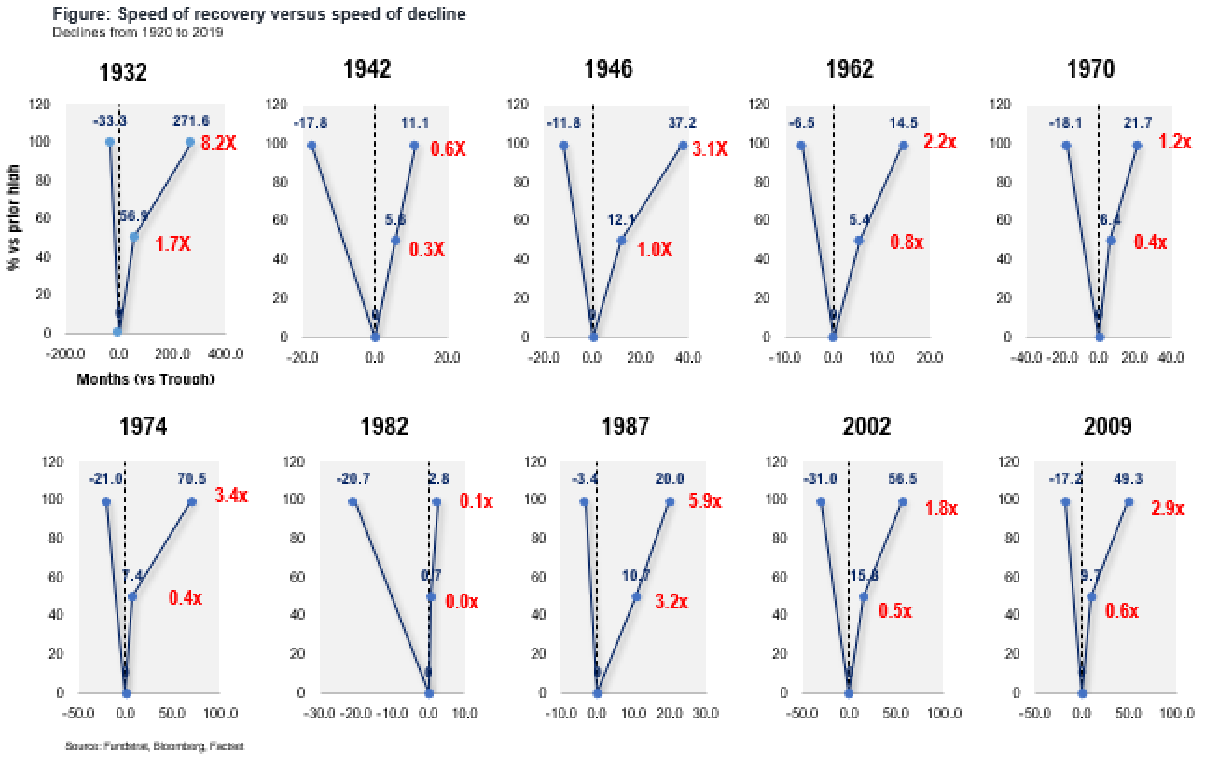
"V" BOTTOMS = RULE: True of basically every major decline >35% since 1920

This is also true of the 10 declines >36% since 1920. In other words, markets tend to recover as quickly as they fall.



How does this apply today? Well, there is evidence the economy has bottomed. And stocks historically bottom before jobless claim peak and before GDP troughs. This is an unusual business cycle, because as Fed's Powell noted today, it was not caused by an excess of inflationary pressures, leading to a tightening cycle. This is a pandemic led collapse in demand.

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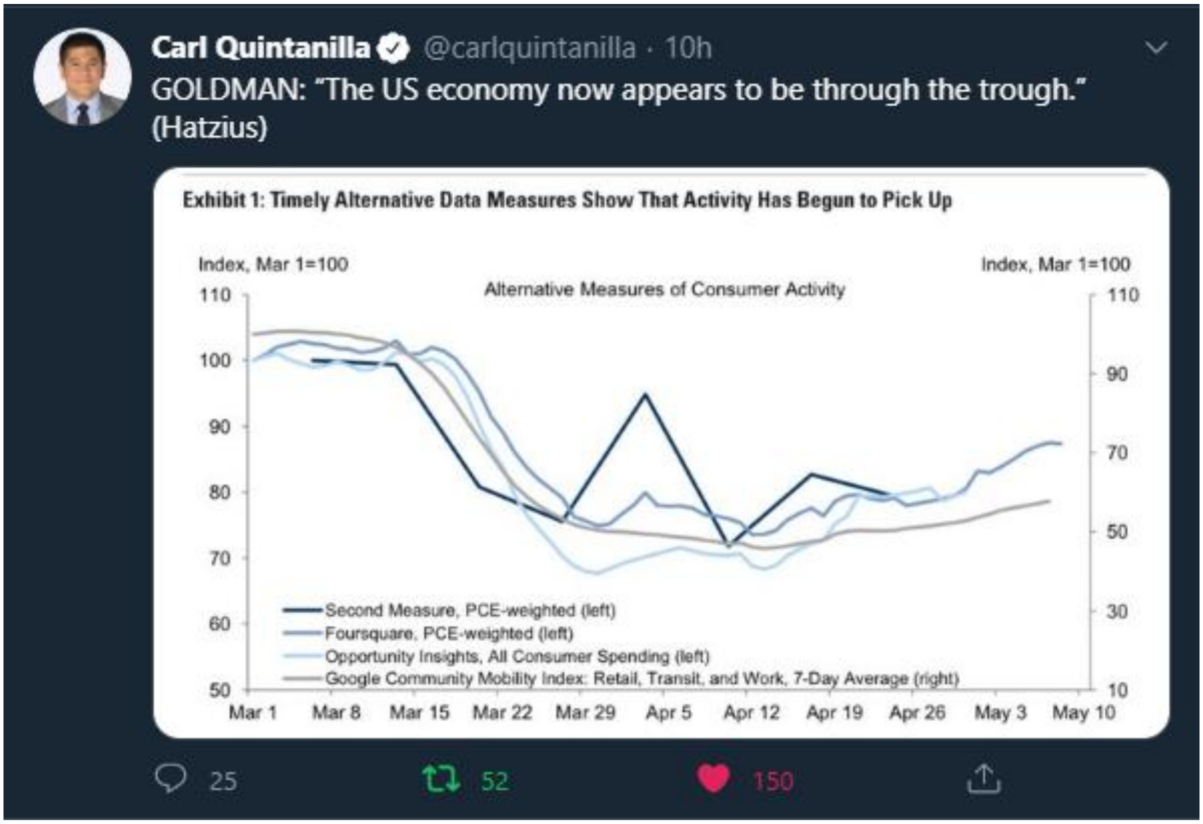
But as highlighted below (per @carlquintanilla on twitter), Goldman Sach's Chief Economist, Jan Hatzius, believes the "US economy now appears to be through the trough"

- if the economy is past the trough, then the S&P 500 2,192 level is the low (that is Fundstrat's view).



source: twitter.com

Even by 2010, ~12-months past the March 2009 equity bottom, there was more "doom" than boom...

Even by March 2010, one-year past the low, the economy was still quite fragile and many economists and investors remained skeptical, or perhaps more appropriately, seeing the world "half-empty"

For instance, see the comments below from Nouriel Roubini, who said stocks by 2010 would be set to tumble another 20% and cash was the safest place. By the way, this is AFTER the May 6, 2010 flash crash.

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Stocks to Tumble Another 20%, Cash the Safest Place: Roubini

Jeff Cox | @JeffCoxCNBCcom

Published 3:42 PM ET Thu, 20 May 2010 | Updated 7:32 AM ET Fri, 21 May 2010

CNBC

Stocks are likely to continue their aggressive decline and shed another 20 percent in value as the world economy weakens, noted economist Nouriel Roubini told CNBC.

Photo: Oliver Quillia for CNBC

Nouriel Roubini

As the market slides into correction territory, Roubini said weakness in euro zone countries and a slowdown in the US and other developed countries will make things even more difficult for investors in the months ahead.

"There are some parts of the global economy that are now at the risk of a double-dip recession," said Roubini, head of Roubini Global Economics. "From here on I see things getting worse."

source: https://www.cnbc.com/id/37259541

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Even Bill Gates made a curiously odd comment in February 2010. He said he was "bummed" the economy is getting better.

- Of course, what he meant, was he was hoping the GFC crisis would bring about reform and change.
- Thus, an extended crisis would bring about the social changes and hopefully address the inequalities.

But we need to think about this today. Policymakers and many philanthropists want to use this crisis to reshape the social policies and world economy. This is what one should expect. And today, this is contributing to the resistance to easing restrictions.

BUSINESS INSIDER

CNBC: Bill Gates Is Bummed That The Economy Is Getting Better

Business Insider Feb 1, 2010, 5:05 PM

CNBC with an interesting on-screen synopsis of Bill's current view of the world:

https://www.businessinsider.com/cnbc-bill-gates-bummed-about-global-economic-recovery-2010-2

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And for good measure, don't forget, many economists thought "capitalism was dead" in 2009. One of many to make this comment is highlighted below. So every crisis, brings about the same doomsayers, and those who think the world is broken.

MARKETS BUSINESS INVESTING TECH POLITICS CNBC TV

US Does Not Have Capitalism Now: Stiglitz

CNBC.com

Published 8:39 AM ET Tue, 19 Jan 2010 | Updated 10:21 PM ET Wed, 17 March 2010

CNBC

Source: Wikipedia

Joseph E. Stiglitz

Layers of money managers that don't bear the brunt of losses but walk away with big payouts when things go well have turned the US economy to a type of "ersatz capitalism," Joseph Stiglitz, Columbia University professor and Nobel laureate, told CNBC Tuesday.

https://www.cnbc.com/id/34921639

We certainly do not have a crystal ball. And the future is very uncertain. We are just highlighting this was also the case in 2009.

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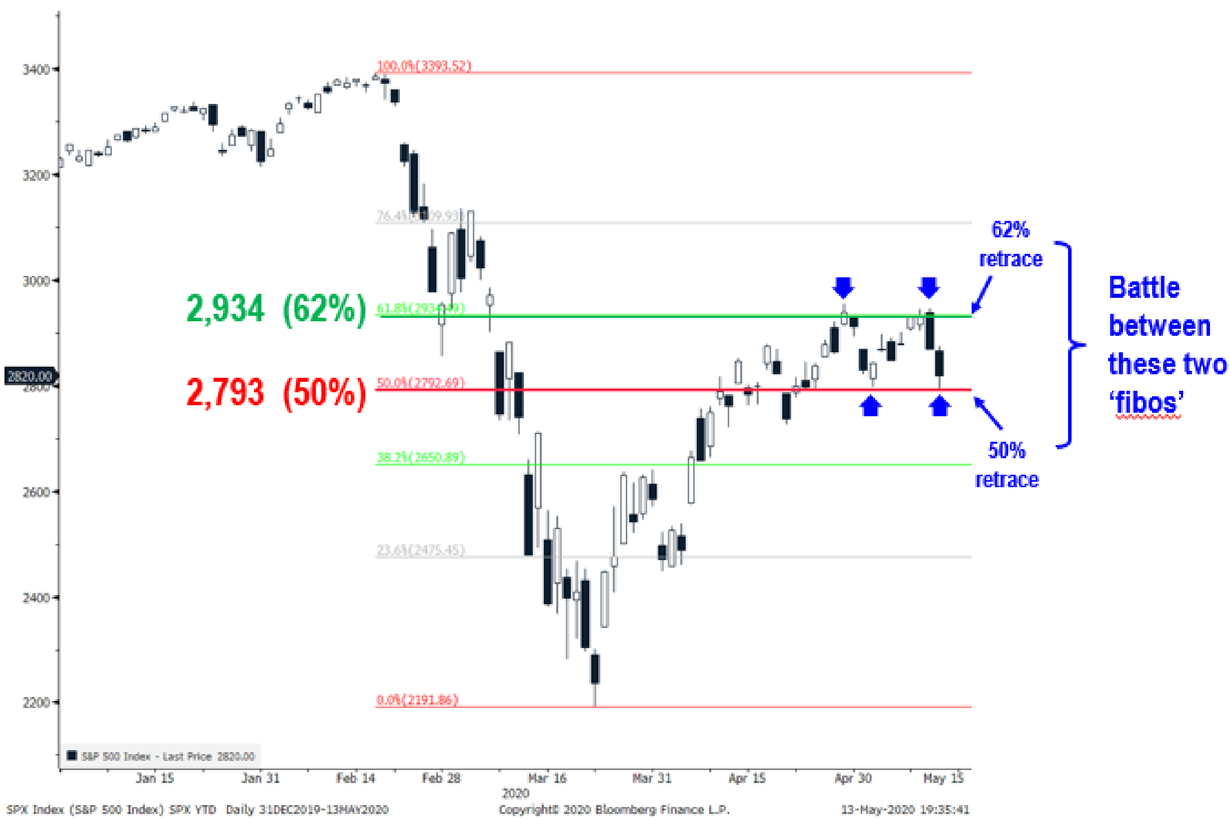
STRATEGY: 3 days of 'sobering' expectations, leading to a battle between two Fibonacci's 50% and 62%...

The list of those with 'sobering' expectations has expanded in the past few days and today we add Fed's Powell (speaking at Peterson Institute for International Economics, https://www.federalreserve.gov/newsevents/speech/powell20200513a.htm) and David Tepper, famed founder of Appaloosa Management, a well-known hedge who said this is "second most over-valued stock market" he has seen. And the S&P 500 finished 2% lower yesterday, bringing its 3D decline to 5%.

The battle for stocks seems to be taking place between 2 'Fibonacci' levels -- the 50% and 62% retrace levels, or 2,793 and 2,934. The chart below highlights those levels. And as we can see, we have tested the upper level 2X and the lower level 2X. Pulling from my rudimentary technical knowledge (apologies to our head of TA, Rob Sluymer), there is no such thing as a "triple" top or bottom. So stocks will soon tell us where the short-term resolution will be.



Given the fact that:
--> a >30% rally in 6 weeks
--> a parade of sobering valuation and adverse risk/reward comments from a spectrum of well-known investors

We would agree it is perfectly logical for stocks to break to the downside. And Rob Sluymer

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believes such a scenario is possible with S&P 500 correcting to perhaps 2,725 and to as low as 2,640, which is 3.3% to 6.3% downside.

Do we recommend making tactical changes because of a possible 3.3% to 6.3% downside move?

The pullback, if there is one, is a combo of: sentiment reset + profit taking, and does not really warrant tactical changes...
Not really. If the economy trough is behind us (as Goldman Sachs noted) and is evidenced by the upturn in the alternative/big-data info from multiple sources (DeepMacro cellphone pings, Google anonymous data, Apple Mobility, OpenTable, TSA travel, etc.), then this pullback is simply a profit-taking and sentiment reset. And as we noted yesterday, everybody is uncertain.

So there is not a ton of reset that needs to take place.

We still remain in the camp that the market has shifted into the hands of buyers (half-full) as the sellers sold everything they could see in Feb and March.

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