

Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

Saturday, July 25, 2020

The global scorecard



For more information contact us: Donald Luskin: 312 273 6766 don@trendmacro.com

Thomas Demas: 704 552 3625 tdemas@trendmacro.com

Copyright 2020 Trend Macrolytics LLC. All rights reserved. This document is not to be forwarded to individuals or organizations not authorized by Trend Macrolytics LLC to receive it. For information purposes only; not to be deemed to be recommendations for buying or selling specific securities or to constitute personalized investment advice. Derived from sources deemed to be reliable, but no warranty is made as to accuracy.

The US scorecard

National and state-by-state data do not line up because of different sources

The ten worst US states															
New cases		New Deaths		New in hospital		Ourne cases		Curre d	Qume deaths		Cume in hospital				
Æ	+ 12,444	TX	+196	Æ	+584	CA	435,334	NY	25,090	NY	89,995				
CA	+9,718	CA	+ 159	GA	+399	NY	410,450	NJ	15,765	R.	23,575				
TX	+8,701	R.	+136	SC	+329	Æ	402,312	MA	8,484	NJ	21,184				
GA	+4,813	GA	+82	KY	+327	TX	369,826	CA	8,186	GA	16,752				
AZ	+3,357	AZ	+79	AZ	+225	NJ	178,345	L	7,577	MD	12,119				
NC	+2,102	SC	+51	AL	+162	IL	169,699	PA	7,101	VA	11,826				
TN	+2,091	DE	+49	VA	+129	GA	161,401	MI	6,400	MA	11,770				
LA	+2,084	AL	+41	CH	+104	AZ	156,301	FL .	5,768	CT	10,712				
SC	+2,001	CH	+41	TN	+104	MA	114,647	TX T	4,717	CH 	10,072				
AL	+1,793	NJ	+35	ŬK.	+91	NC	108,995	CI	4,413	AL	9,157				
	+49,104		+869		+2,454		2,507,310		93,501		217,162				
All states	+75,193	All states	+ 1,178	All states	+3,026	All states	4,092,928	All states	137,655	All states	289,355				
Top ten	65%	Topten	74%	Top ten	81%	Top ten	61%	Topten	68%	Top ten	75%				
Five most improved US states															
Hewer d	ally cases		Hewer r	new deaths	7	Hewer r	new hospitaliz	ations		Most recoveries	S . 0.000				
	-2,322			HL -3	/ ^		AL -2	20 0		IX DC	+8,390				
IX AL	-806			IN -24	4		VA -8	0		LL CC	+7,002				
AL	-000			IVIO -2	1			8		SC TN	+2,310				
	-4/9				3 n		AR -4	4			+1,322				
INV	-290			VVI - I.	3		GA -3	2		UH	+1,121				
90.000 -											- 8.0%				
50,000	Unite	d States									0.070				
80.000 -	126.260 bp of population infected			As of Jul 25 4,112,529 cases cu +78,427 cases t				cumulative		7.00/					
00,000								s today		• 7.0%					
70 000 -	38.1 me	edian population age								A A					
10,000						a geraa					- 6.0%				
∞ 60.000 -					<u> </u>				Sec. 1	- /// \/'					
leath		40.041 E02 toot				$L_{\rm eff}$			and the second second		- 5.0%				
물 50,000 -		49,841,503 lesi	s cume							AV –	Case				
ses 5							7-daj	y moving average cas	es 🔥	λ	- 4.0% at				
ğ ≥ 40,000 -		020.069 toot	ia taday		a wayna				- N	(States	ulity r				
V nev		930,068 test	s today	manner					_ //		ate at				
			1		AA				- N/		- 3.0%				
		Q 10/ positiv	va taday	1	// V	VNV V			1						
20,000 -	8.1% positive today										- 2.0%				
				- Comp	· former		•	540 J J	Fatality	/ rate 3.54% -					
10,000 -				· · · /			145	,546 deaths c	umulative _		- 1.0%				
					/		-	1,304 ueatils	loudy						
Dec 31 Jan 14 Jan 28 Feb 11 Feb 25 Mar 10 Mar 24 Apr 7 Apr 21 May 5 May 19 Jun 2 Jun 16 Jun 30 Jul 14															

Source: States and test data Covid Tracking Project, US data ECDC, TrendMacro calculations

Recommended reading

<u>A Wisconsin City Experiments With a Faster, DIY</u> Covid-19 Test

Gregory Barber *Wired* July 23, 2020

A country level analysis measuring the impact of government actions, country preparedness and socioeconomic factors on COVID-19 mortality and related health outcomes

Rabail Chaudhry et al. *The Lancet* July 21, 2020

Kentucky couple fit with ankle monitors, placed on house arrest, for refusing to sign quarantine

documents: reports

Danielle Wallace *Fox News* July 20, 2020

Early Outpatient Treatment of Symptomatic, High-Risk Covid-19 Patients that Should be Ramped-Up Immediately as Key to the Pandemic Crisis

Harvey A Risch *American Journal of Epidemiology* May 27, 2020

Seroprevalence of Antibodies to SARS-CoV-2 in 10 Sites in the United States, March 23-May 12, 2020

Fiona P. Havers, et al. *Journal of the American Medical Association* July 21, 2020

The Key to Defeating COVID-19 Already Exists. We

Need to Start Using It Harvey Risch Newsweek July 23, 2020

The Importance of Reopening America's Schools this Fall

Centers for Disease Control July 23, 2020

Meme of the day



Source: Our beloved clients, and Power Line blog "The Week in Cartoons"



The coronavirus <u>case</u> accelerometer... tracking the world's infection curves

Source: ECDC, TrendMacro calculations

The coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality*





Our most reliable evidence of slowing exponential growth of Covid-2019

Source: ECDC, TrendMacro calculations

Requirement to <u>Open Up America Again</u>: 14-day "downward trajectory" in new cases *14-day moving average, last 14 days Most recent value displayed* • High • Low Downward trajectory Five best Upward trajectory Five worst



Source: Covid Tracking Project, TrendMacro calculations

Alt requirement to <u>Open Up America Again</u>: 14-day "downward trajectory" in pos tests *14-day moving average, last 14 days Most recent value displayed* • High • Low Downward trajectory Five best Upward trajectory Five worst



Source: Covid Tracking Project, TrendMacro calculations

Reality-checking the models: actuals versus IHME predictions

New daily fatalities

Actual versus first, highest, lowest and latest model mean predictions



Cumulative fatalities

Actual versus first, highest, lowest and latest model mean predictions



Healthcare system stress, peak estimated at each model revision

73,943 27,839 27,226 32,125 32,125 32,518 232,298 224,321 220,643 260,342 260,342 262,092 ICU beds Hospital beds Ventilators 54,083 34,034 40,156 40,156 40,646 19,481 140,823 631 202 က်မှု 884 4,435 61, 33,139 33,305 Apr 12 Apr 28 _ May 26] Apr 12 Apr 28 _ Jun 29 _ Apr 12] Apr 21 _ Apr 28] May 4 May 12] May 26] Jun 8 Jun 15 _ Jun 29] Jul 14 Mar 27 Mar 30 Apr 5 Apr 8 Apr 21] May 4 May 12 Jun 8 Jun 15 Jun 29] Jul 14 Mar 27 Mar 30 Apr 8 Apr 21 May 4 May 12 May 26 Jun 8 Jun 15 Jul 14 Var 27 Mar 30 Apr 5 Apr 8 Apr 1 Apr 1 Apr 5 Apr 1

Source: ECDC, IHME, TrendMacro calculations

For this day, versus all model mean predictions



May 4 133,560 May 10 136,316 May 12 145,677 May 20 141,635 May 26 130,993 Jul 22 145,453 Actual 145,546 Jun 8 140,250 Jun 10 135,486 Jun 15 143,252 Jun 24 139,938 lul 14 145,289 lun 29 142,065 Jul 7 142,168 lun 5 136,821 Mar 31 93,765 Apr 193,765 Apr 2 93,531 Apr 5 81,766 Mar 25 81,114 Mar 29 82,141 Mar 30 83,967 Apr 28 72,860 Apr 29 72,433 Apr 12 68,841 Apr 21 65,976 Apr 22 67,641 Apr 17 60,308 Apr 7 60,415 Apr 8 60,415 Apr 9 61,545

For this day, versus all model mean predictions

As of Jul 25

From Ground Zero to the Rio Grande 14,000 7.0% New York As of Jul 25 12,000 6.0% 210.99 bp of population infected Fatality rate 6.11% 38.2 median population age 10,000 5.0% Daily new cases and deaths Jase 8,000 4.0% 410,450 cases cumulative 6,000 3.0% +753 cases today 4,000 2.0% 25,090 deaths cumulative +9 deaths today 2,000 1.0% 7-day moving average case 0.0% Dec 31 Jan 14 Jan 28 Feb 11 Feb 25 Mar 10 Mar 24 Apr 7 Apr 21 May 5 Jun 16 Jun 30 Jul 14 May 19 Jun 2 90,000 6.0% US ex-New York 80,000 3,702,079 cases cumulative 120.88 bp of population infected 5.0% +77,674 cases today 70,000 38.1 median population age 60,000 4.0% Daily new cases and deaths Fatality rate 3.25% 50,000 3.0% 40,000 30,000 2.0% 20,000 120,456 deaths cumulative 1.0% +1,295 deaths today 10,000 0.0% May 5 May 19 Dec 31 Jan 14 Jan 28 Feb 11 Feb 25 Mar 10 Mar 24 Apr 7 Jun 2 Jun 16 Jun 30 Jul 14 Apr 21 16,000 3.0% 14,000 Texas 369,826 cases cumulative 2.5% +8,701 cases today 127.54 bp of population infected 12,000 33.9 median population age 2.0% Daily new cases and deaths 10,000 Fatality rate 1.28% 8,000 1.5% rate 6,000 1.0% 4,717 deaths cumulative +196 deaths today 4,000 0.5% 2,000 0.0% Dec 31 Jan 14 Jan 28 Feb 11 Feb 25 Mar 10 Mar 24 Apr 7 Apr 21 May 5 May 19 Jun 2 Jun 16 Jun 30 Jul 14

Source: ECDC, TrendMacro calculations



The sun-belt hot-spot states (other than Texas)

Source: ECDC, TrendMacro calculations



Patient zero... and then everyone else

Source: ECDC, TrendMacro calculations

Impact in the largest economies



Source: ECDC, TrendMacro calculations

Impact in The Anglosphere



Source: <u>ECDC</u>, TrendMacro calculations



Source: ECDC, TrendMacro calculations

Impact in other hot-spots





