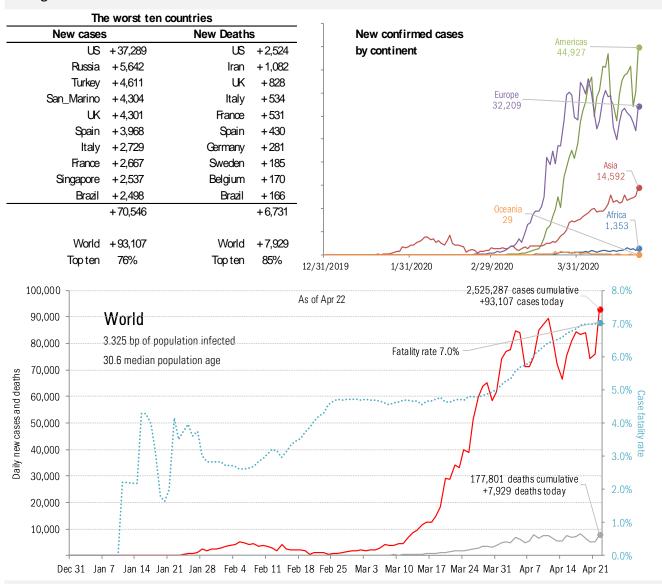


Data Insights: Covid-2019 Monitor

Wednesday, April 22, 2020

The global scorecard



Source: ECDC, TrendMacro calculations

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.

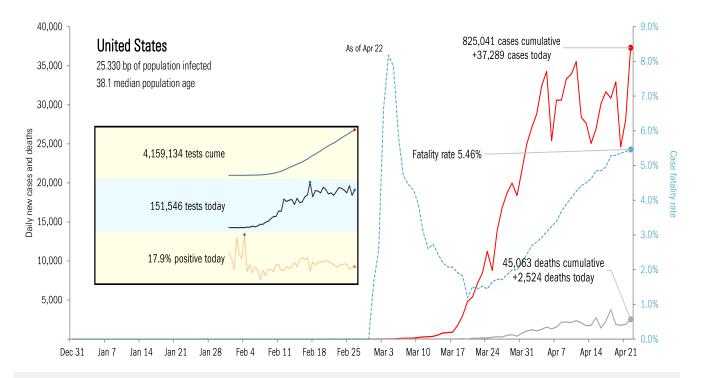
TI I	10			- 1
The !	HS.	SCO	reca	r٢

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

The ten worst US states											
New cas	es	New Deaths	3	New in I	hospital	Cume ca	39es	Cume de	aths	Cume in	hospital
NY	+4,178	NY	+481	RI	+245	NY	251,690	NY	14,828	NY	57,103
NJ	+3,581	NJ	+376	GA	+229	NJ	92,387	NJ	4,753	FL	4,235
MA	+3,122	PA	+360	FL	+225	MA	41,199	MI	2,700	GA	3,779
CA	+2,283	MA	+255	MD	+144	PA	34,528	MA	1,961	MD	3,158
IL	+1,551	MI	+232	OH	+126	CA	33,261	PA	1,564	ОН	2,779
PA	+1,296	IL	+119	VA	+81	IL	33,059	IL	1,468	CO	1,880
MI	+967	CT	+92	CO	+67	MI	32,967	CT	1,423	VA	1,581
GA	+934	LA	+77	AL	+58	FL.	27,495	LA	1,405	WI	1,252
Æ	+835	MD	+68	WI	+41	LA	24,854	CA	1,268	KY	1,059
TX	+738	GA	+66	MS	+39	CT	20,360	FL.	856	MS	858
	+19,485		+2,126		+1,255		591,800		32,226		77,684
VI states	+27,193	All states	+2,674	All states	+1,413	All states	799,717	All states	39,995	All states	84,292
Top ten	72%	Top ten	80%	Top ten	89%	Topten	74%	Top ten	81%	Top ten	92%

Five most improved US states

				•			
Fewer da	aily cases	Fewer new deat	hs	Fewer new hos	pitalizations	Most recoveries	S
CT	-1,720	CT	-153	NY	-1,380	VT	+1,695
NY	-548	W	-4	CR	-3	TX	+780
СH	-490	AL	-3	KS	-1	TN	+253
MD	-345	ND	-3	ME	-1	SD	+115
LA	-264	DC	-2	MN	-1	UT	+112



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

Recommended reading

What Won't Cure Corona: Lawsuits

Evan G. Greenberg

Wall Street Journal

April 21, 2020

<u>Coronavirus Death in California Came Weeks Before</u> First Known U.S. Death

Thomas Fuller and Mike Baker New York Times April 22, 2020

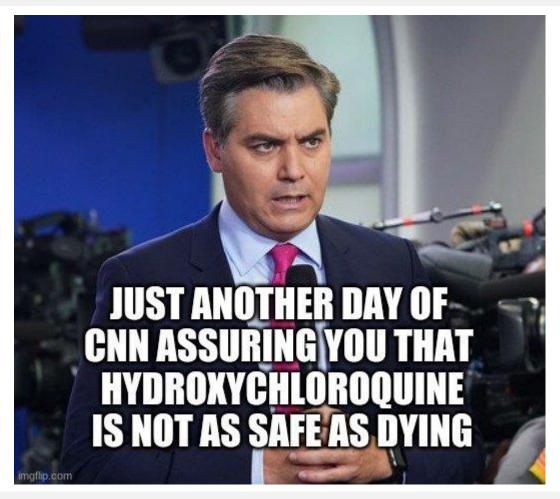
Crisis May Add \$6 Trillion to Federal Debt

Chris Edwards Cato At Liberty April 21, 2020

Missouri files suit against China for 'enormous' consequences of coronavirus 'deceit'

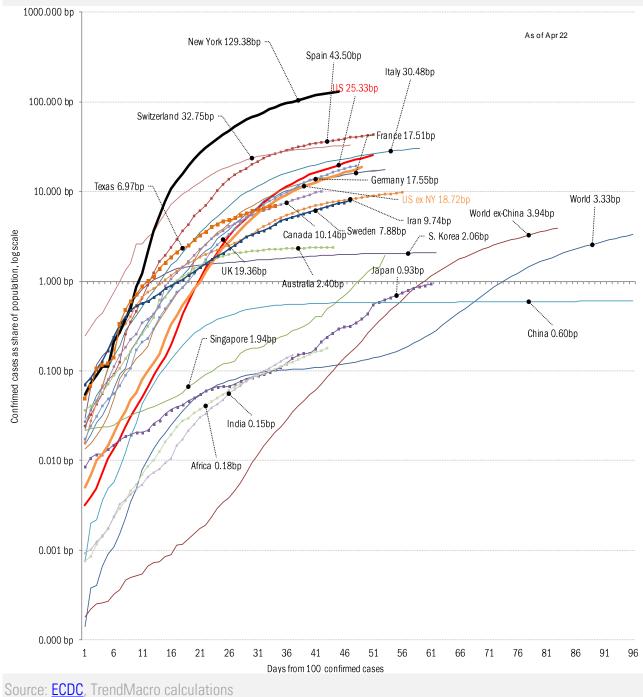
Tyler Olson Fox News April 21, 2020

Meme of the day

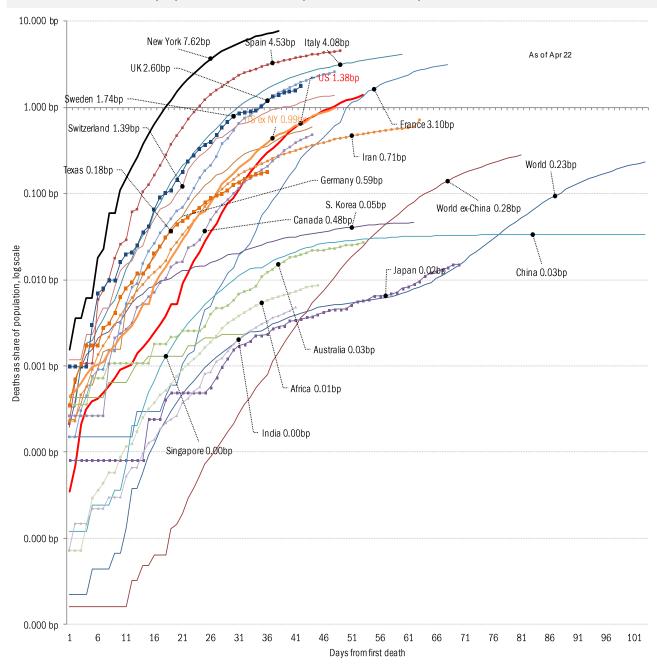


Source: Our beloved clients, and Power Line blog "The Week in Cartoons"

The coronavirus <u>case</u> accelerometer... tracking the world's infection curves Share of infected population from first day with 100 confirmed cases, log scale

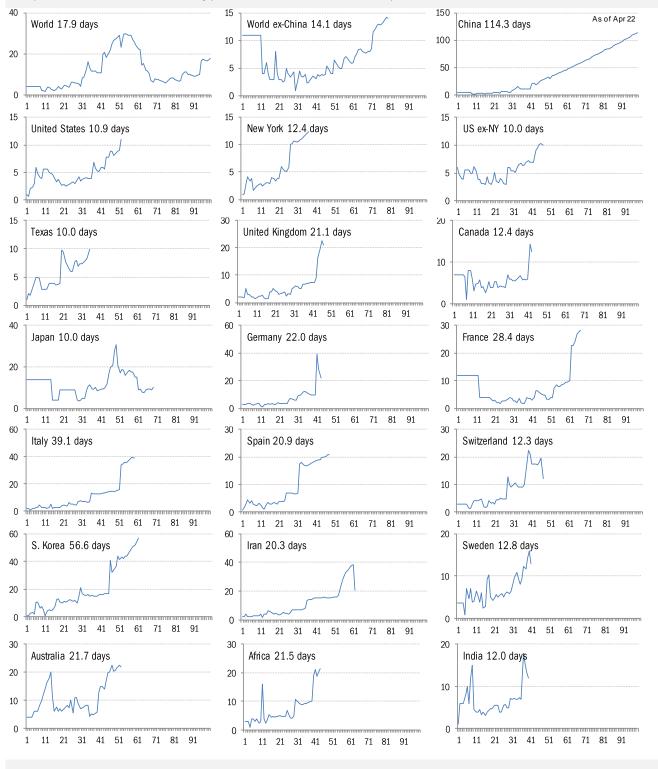


The coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves Share of deceased population from day of first fatality

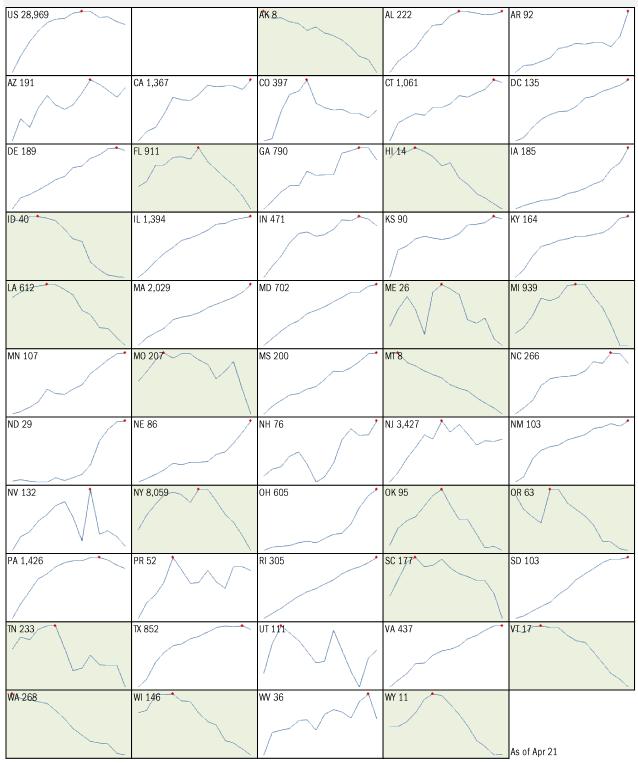


Our most reliable evidence of slowing the Moore's law of Covid-2019 Vertical: number of days it takes to double deaths Horizontal: days from first death Progress means seeing the line move up and to the right...

Extrapolated between actual doubling points. The most anomalous extrapolations are smoothed.

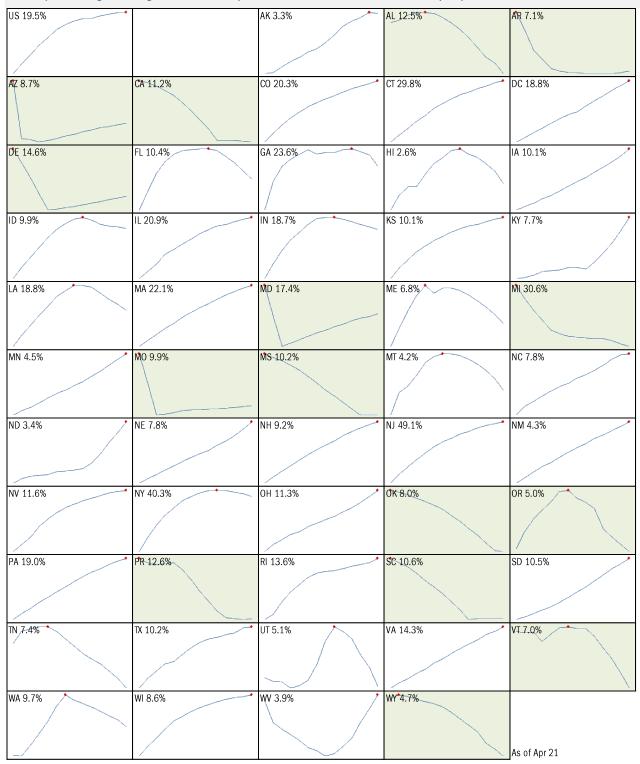


Requirement to <u>Open Up America Again</u>: ■ 14-day "downward trajectory" in new cases *14-day moving average, last 14 days Most recent value displayed*



Source: Covid Tracking Project, TrendMacro calculations

Alt requirement to Open Up America Again: 14-day "downward trajectory" in pos tests 14-day moving average, last 14 days Most recent value displayed



Source: Covid Tracking Project, TrendMacro calculations

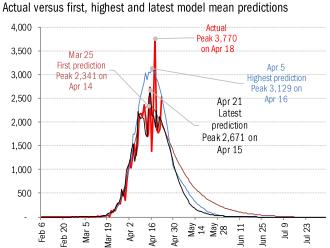
Reality-checking the models: actual fatalities versus **IHME** predictions

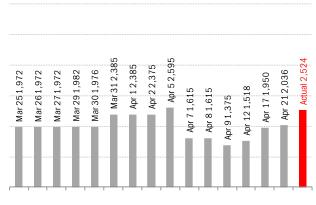
New daily fatalities

As of Apr 22

Actual versus first, highest and latest model mean predictions

For this day, versus all model mean predictions

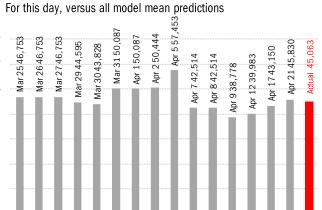




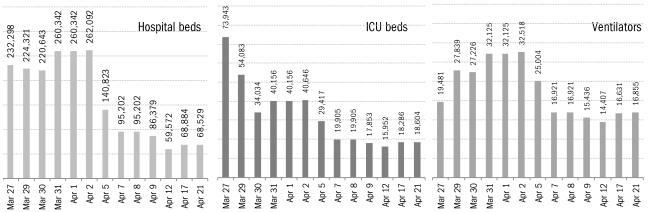
Cumulative fatalities

Actual versus first, highest and latest model mean predictions

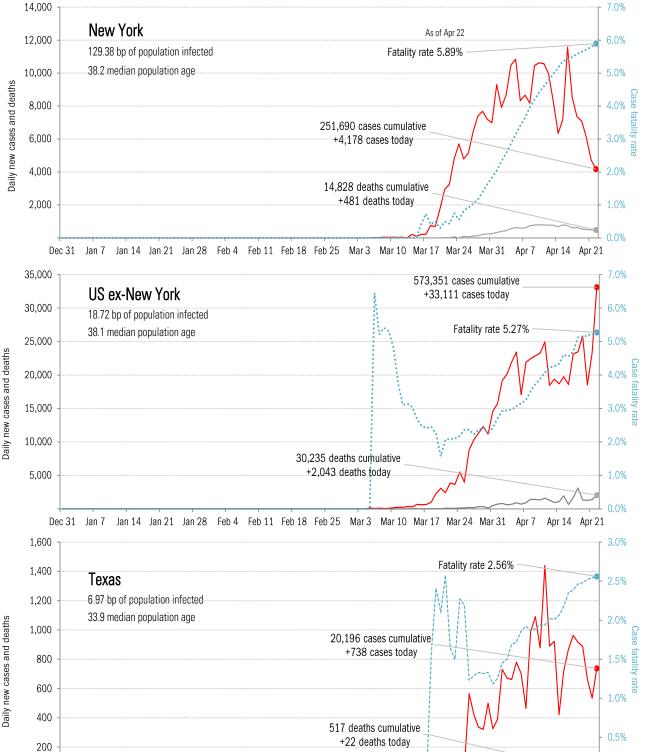
100,000 Highest prediction 90,000 93,734 80,000 70,000 60,000 Mar 25 First prediction 50,000 81,067 Actual 40,000 45,063 30,000 Apr 21 Latest prediction 20,000 65,976 10,000 Mar 5 -. 6 In(Jul 23 25 Мау 트 드



Healthcare system stress, peak estimated at each model revision







Source: ECDC, TrendMacro calculations

Dec 31 Jan 7 Jan 14 Jan 21 Jan 28 Feb 4 Feb 11 Feb 18 Feb 25 Mar 3 Mar 10 Mar 17 Mar 24 Mar 31 Apr 7 Apr 14 Apr 21

Patient zero... and then everyone else

