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#### Data Insights: Covid-2019 Monitor

Sunday, May 3, 2020

### The global scorecard



#### Source: ECDC, TrendMacro calculations

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# 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		Cume cases		Cume deaths		Cume in hospital	
NY	+4,663	NY	+299	NY	+710	NY	312,977	NY	18,909	NY	67,890
NJ	+2,527	NJ	+204	MA	+209	NJ	123,717	NJ	7,742	СТ	7,758
IL	+2,450	MI	+ 154	MD	+ 192	MA	66,263	MI	4,020	MA	6,378
MA	+1,952	MA	+ 130	FL	+ 150	IL	58,505	MA	3,846	FL	5,945
CA	+ 1,755	IL	+ 102	AZ	+ 136	CA	52,197	IL	2,559	GA	5,387
PA	+1,334	CA	+98	GA	+ 118	PA	48,305	PA	2,418	MD	4,910
TX	+1,293	R.	+74	VA	+84	MI	43,207	CT	2,339	VA	3,738
GA	+1,036	PA	+64	OH	+78	FL.	35,463	CA	2,171	OH	3,712
MD	+ 1,001	MD	+ 59	MN	+63	TX	30,522	LA	1,950	CO	2,747
MI	+851	IN	+54	NM	+51	LA	29,140	<u> </u>	1,388	WI	1,591
	+ 18,862		+ 1,238		+ 1,791		800,296		47,342		110,056
All states	+ 30,038	All states	+ 1,651	All states	+2,112	All states	1,125,719	All states	60,710	All states	123,860
Top ten	63%	Top ten	75%	Top ten	85%	Top ten	71%	Top ten	78%	Top ten	89%
Five most improved LS states											
Fower daily cases Fower new deaths Fower new benitalizations Meet receivaries											
	1.064	>	ICWC		<b>,</b>	ICWC		anzations			17017
	-1,004				0			0			+7,317
	-700			CI -62	<u> </u>		SC -11	0			+ 1,303
MD	-729			LA -42	<u>,</u>		NY -10	1		IX	+ 769
IL	-687			MA -24	ł		TN -88	3		W	+346
R.	-303			GA -14	ļ		00 -20	6		IA	+257
60 000 ¬											- 9.0%
00,000	Unit	od Stataa						_			0.070
	United States As of May 3 Fatality rate 5.66%										8.0%
E0.000	34.787 bp of population infected									0.070	
50,000 -	38.1 m	edian population a	ge								7.00/
							1,133	3,069 cases c	umulative _		- 7.0%
	_						+2	29,288 cases	today		
≨ <sup>40,000</sup> 1											6.0%
₿ 6,817,925 tests cume									<u>କ</u>		
sanc								Λ	1 -1	$\pi$     $\nabla$	- 5.0% &
8 30,000 -					1. 4	$\sim N_{\rm eff}$		/ \_'	XI	1       /	
6M C		264 476 test	rs todav	1~	M			/ V.	/V	V	- 4.0% 🚡
r ≻li		201,110 (00)	a toury	m						' IN V	te
ے 20,000 -				1				$\wedge$		1	- 3.0%
		11 10(		. NAM	Mr.	h	/	1		I	
		11.4% positiv	e today	$\mathcal{M}$	M.	X	~	64,086 de	eaths cum	ulative	- 2.0%
10.000 -			0	Y			No-AF	+1,317	deaths to	day	
10,000							V/V				- 1.0%
											1.070
										$\sim$	
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 Apr 28											

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

### Recommended reading

#### <u>Chinese virologist at centre of 'coronavirus came from</u> <u>a laboratory' claim denies defecting</u>

Sarah Zheng *South China Morning Post* May 2, 2020

# The end of exponential growth: The decline in the spread of coronavirus

Isaac Ben-Israel *Times of Israel* April 19, 2020

#### Front Line COVID-19 Critical Care Consortium urges immediate adoption of early intervention protocol to prevent mortality and reduce the need for ventilators from COVID-19 disease.

Umberto Meduri MD et al. *Front Line COVID-19 Critical Care Consortium* April 6, 2020

#### Coronavirus: Switzerland says young children can hug grandparents BBC April 29, 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.



Source: ECDC, TrendMacro calculations

Requirement to Open Up America Again: 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 <u>Open Up America Again</u>: 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: actuals versus IHME predictions

#### New daily fatalities

Actual versus first, highest and latest model mean predictions



#### For this day, versus all model mean predictions

For this day, versus all model mean predictions

Apr 2 71,022 Apr 5 73,81

Apr 7 54,070 Apr 8 54,070

Apr 9 50,861

Apr 1 71,308

Mar 31 71,30

Mar 25 63,371 Mar 29 62,242 Mar 30 62,124



#### **Cumulative fatalities**

Actual versus first, highest and latest model mean predictions



#### Healthcare system stress, peak estimated at each model revision



Source: ECDC, TrendMacro calculations

As of May 3

Apr 29 63,863 Actual 64,086

Apr 28 63,425

Apr 21 60,651 Apr 22 61,325

Apr 12 53,537 Apr 17 56,729

### From Ground Zero to the Rio Grande



Source: ECDC, TrendMacro calculations

### Patient zero... and then everyone else



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 Apr 28



Source: ECDC, TrendMacro calculations

### Impact in the largest economies



Source: ECDC, TrendMacro calculations

### Impact in The Anglosphere



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 Apr 28 Apr 28 Apr 28 Apr 28 Apr 29 Apr 29 Apr 29 Apr 29 Apr 29 Apr 29 Apr 20 Apr 20



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 Apr 28



Source: ECDC, TrendMacro calculations

### Impact in continental Europe





### Impact in other hot-spots



Source: ECDC, TrendMacro calculations

# Impact in the fragile emerging world



Source: ECDC, TrendMacro calculations