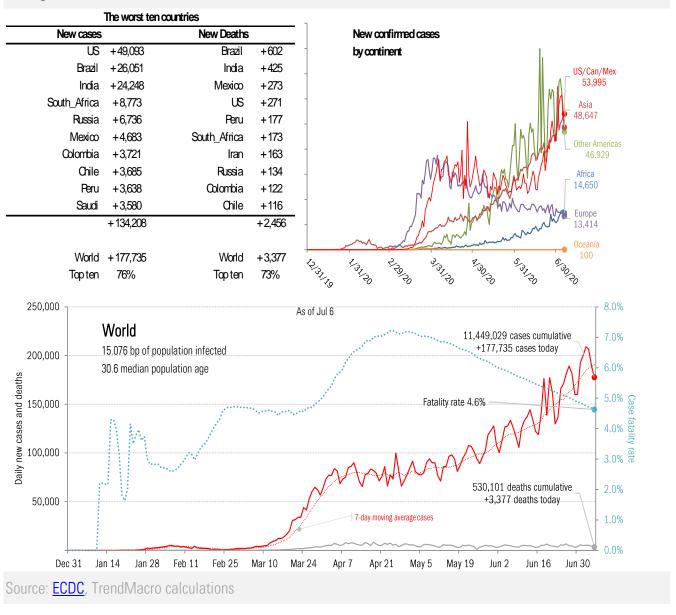


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

#### Data Insights: Covid-2019 Monitor

Monday, July 6, 2020

### The global scorecard



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# The US scorecard

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

New cas	es	New Deaths	ew Deaths New in hospital Qurne cases Qurne deaths		eaths	Cume in hospital							
R.	+ 10,059	R.	+29		RL.	+ 161	NY	397,131	I	NY	24,904	NY	89,995
CA	+5,410	TX	+29		AZ	+93	CA	260,158	5	NJ	15,211	NJ	20,237
AZ	+3,536	NJ	+22		ан	+61	R.	200,111	I	MA	8,183	R.	16,201
ΤХ	+3,449	CA	+18		IN	+38	ТХ	195,239	9	IL	7,230	GA	11,775
GA	+2,197	MA	+11		MD	+37	NJ	173,402	2	PA	6,753	MA	11,463
LA	+ 1,937	LA	+10		GA	+32	IL	148,373	3	CA	6,331	MD	11,071
SC	+1,461	TN	+9		MN	+31	MA	109,974		MI	6,218	СТ	10,411
NC	+1,329	NY	+8		VA	+27	AZ	98,089		CT	4,335	VA	9,576
TN	+1,291	MD	+7		NM	+18	GA	95,516		FL.	3,832	СН	8,172
AL	+ 1,091	SC	+7		υT	+17	PA	89,854		LA	3,288	IN	7,254
	+31,760		+ 150	· <u> </u>	-	+515		1,767,84			86,285	·	196,155
All states	+42,551	All states	+209	All sta	ates	+590	All states	2 881 01	6	All states	122,673	All states	248,745
Topten	75%	Topten	72%	Тор		87%	Topten	61%	•	Topten	70%	Topten	79%
	10/0		12/0	iop							10/0		10/0
Fewer da	aily cases		Fewer	new death		most impr	oved US state Fewer r	es new hospi	talizatio	ns		Most recoverie	s
TX	-4,809			CA	-32			FL	-84			MN	+5,270
MS	-1,678			AZ	-13			MS	-60			TX	+3,413
FL	-1,399			SC	-13			GA	-58			СH	+557
CA	-1,100			MA	-12			MD	-24			AZ	+458
GA	-629			MS	-11			TN	-24			W	+408
04	-025			NO	-11			IIN	-24			VVI	+-100
60,000 <sub>-</sub>													г 9.0%
00,000	Unite	d Ctotoo											5.070
		d States		:		As	of Jul 6					٨	- 8.0%
50,000 -	88.685 bp of population infected				2.88			38,635 cases cumulative					
50,000	38.1 median population age							+49,093 cases today				- 7.0%	
										,	,	► <b>N</b> [/]	- 1.0%
10.000												$\sim M$	0.00/
40,000 -								م		••••••	·····	l ¥ l	- 6.0%
40,000 -	35,514,801 tests cume								<b>F</b> -1-				5.000
						Λ	A M		Fata	ality rate 4.3	31%	$-\frac{1}{2}$	- 5.0%
30,000 -							r tym	hА	A				•
30,000 - 20.000 -		654,291 tes	ts today	Å. A	my	~~~ /	$\langle V \rangle$	11/ 17	AΝ			17	- 4.0%
			_	m			/	IV V			$\Lambda \Lambda$	¥	
20,000 -			t			N//			V.	V V	w V i		- 3.0%
		6.5% positiv	ve today				7 day movin	g average casi	20				
			Mr	whenh	m	1 from	r -udy movin,	g average cas	50				- 2.0%
10,000 -					1	N/				126,1	90 deaths o	cumulative	
					J	7				+	271 deaths	today	- 1.0%
					- ]/		~~~~~~		~ -	-			
					1			v~ 🗸	$\sim$	$\sim$			0.0%

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

## Recommended reading

### Coronavirus pandemic may not have started in China, experts say

Sarah Knapton *Sydney Morning Herald* July 6, 2020

#### Immunity to COVID-19 is probably higher than tests have shown *Karolinska Institutet* June 29, 2020

SARS-CoV-2 T-cell epitopes define heterologous and COVID-19-induced T-cell recognition

Annika Nelde et al. *Research Square* June 17, 2020

#### <u>Robust T cell immunity in convalescent individuals with</u> <u>asymptomatic or mild COVID-19</u>

Takuya Sekine et al. *bioRvx* June 29, 2020

### Covid-Like Virus Was Sent to Wuhan in 2013, Sunday

Times Says Thomas Seal *Bloomberg* July 5, 2020

#### <u>COVID-19 Herd Immunity Is Much Closer Than</u> Antibody Tests Suggest, Say 2 New Studies

Ronald Bailey *Reason* July 1, 2020

#### How You Get Your Berries: Migrant Workers Who Fear Virus, but Toil On

Tracey Tully *New York Times* July 5, 2020

#### Scalia Says Coronavirus Economic Recovery Better Than Projected

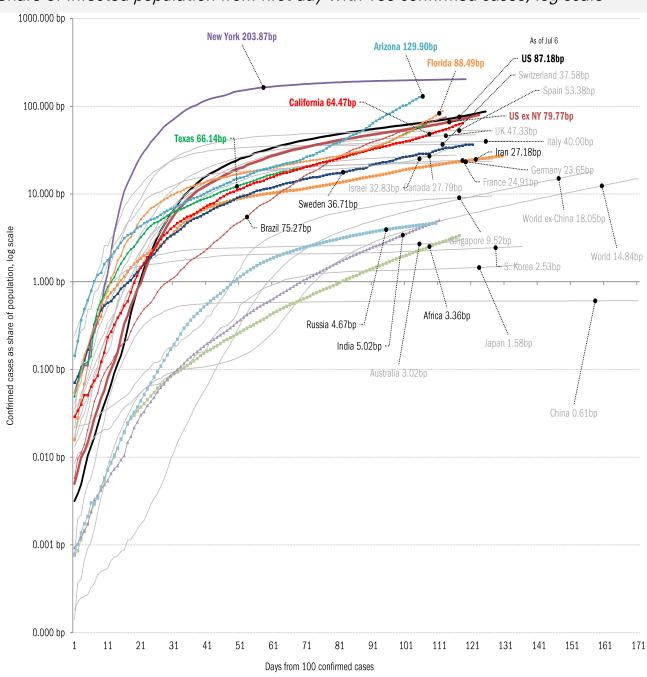
Elizabeth Dexheimer *Bloomberg* July 5, 2020

#### <u>Revealed: Seven year coronavirus trail from mine</u> <u>deaths to a Wuhan lab</u>

George Arbuthnott , Jonathan Calvert and Philip Sherwell *Sunday Times* July 4, 2020



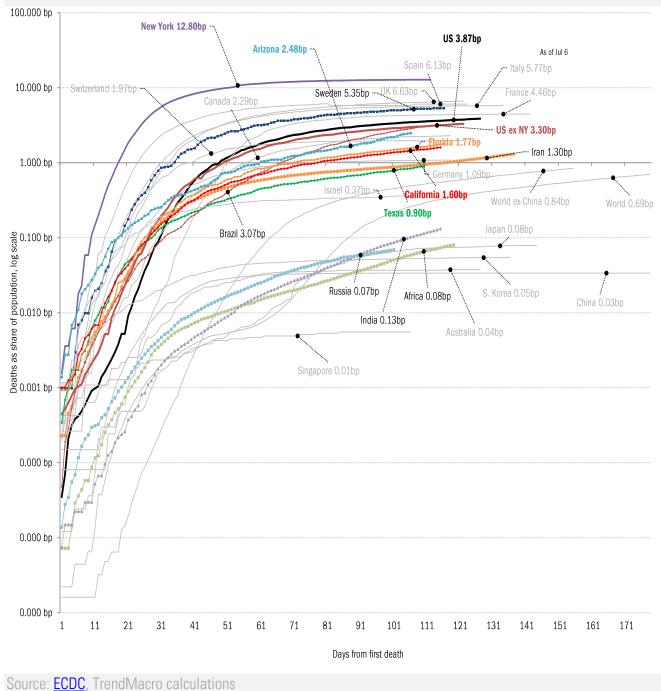
Source: Our beloved clients, and Power Line blog "The Week in Cartoons"



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* 

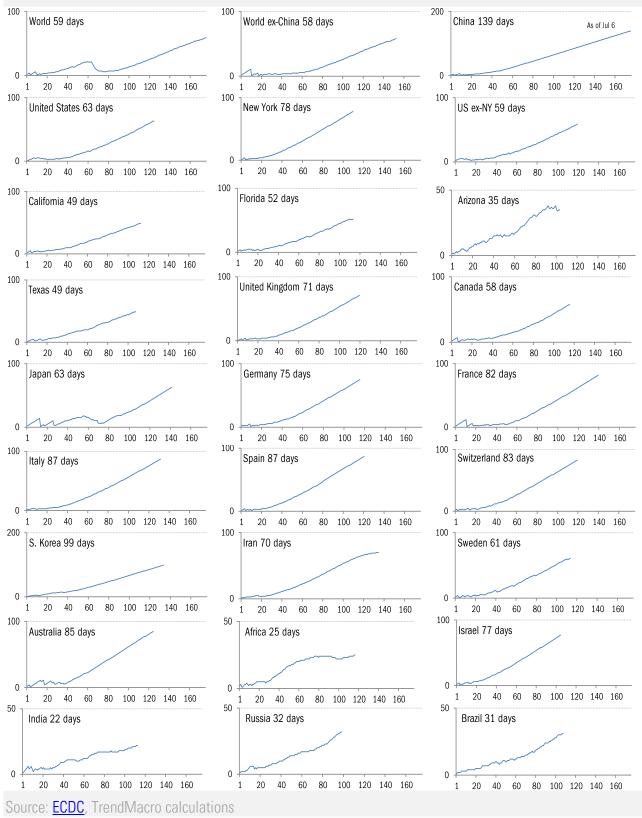
Source: ECDC, TrendMacro calculations

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

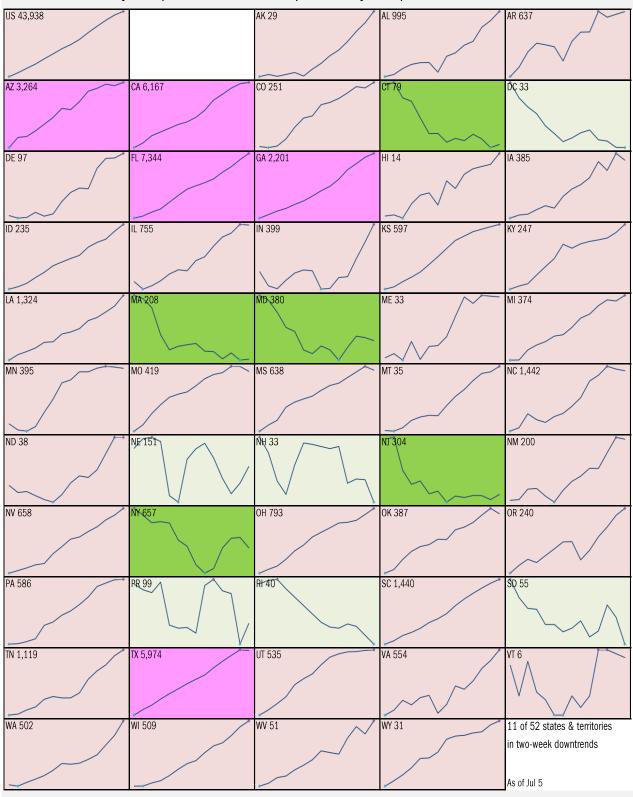


## Our most reliable evidence of slowing exponential growth of Covid-2019

Vertical: number of days it takes to double deaths Horizontal: days from first death

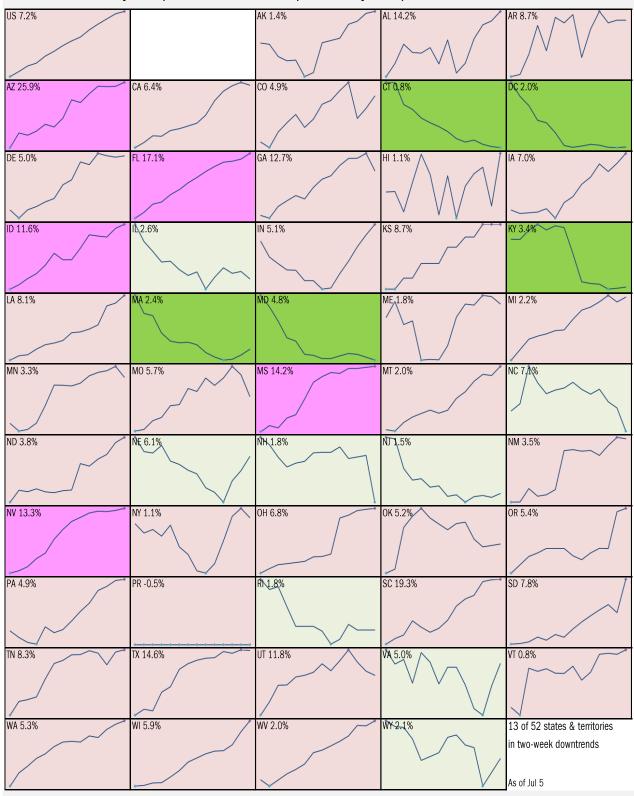


Requirement to <u>Open Up America Again</u>: 14-day "downward trajectory" in new cases *14-day moving average, last 14 days Most recent value displayed* • High • Low Downward trajectory Five best Upward trajectory Five worst



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

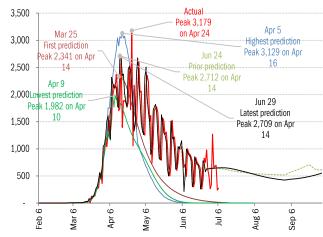


Source: Covid Tracking Project, TrendMacro calculations

### Reality-checking the models: actuals versus IHME predictions

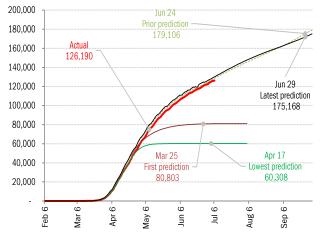
#### New daily fatalities

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

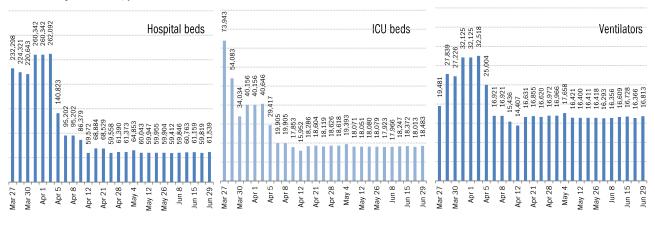


#### **Cumulative fatalities**

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

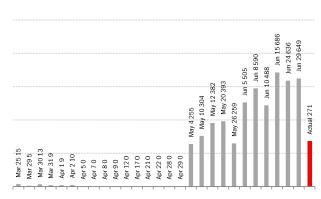


#### Healthcare system stress, peak estimated at each model revision



Source: ECDC, IHME, TrendMacro calculations

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

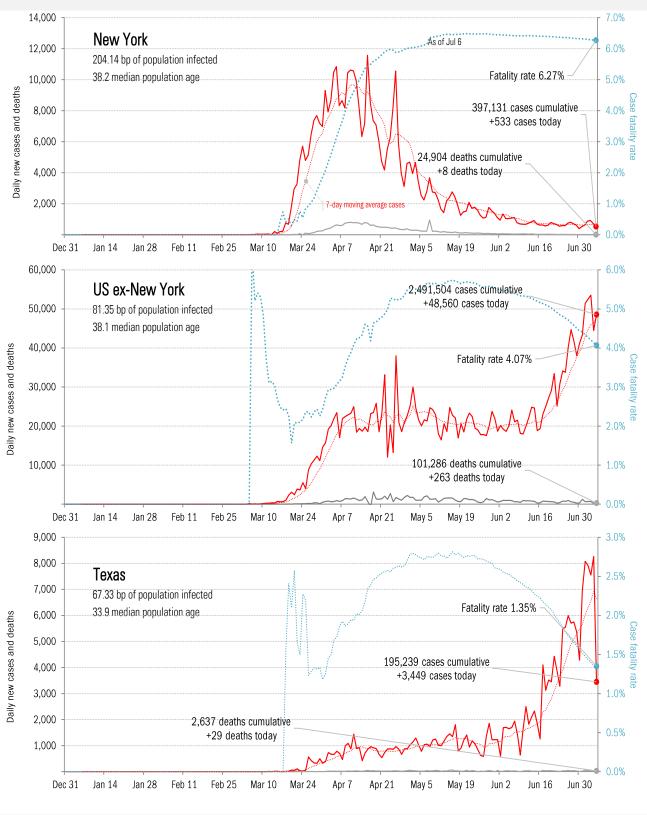


For this day, versus all model mean predictions

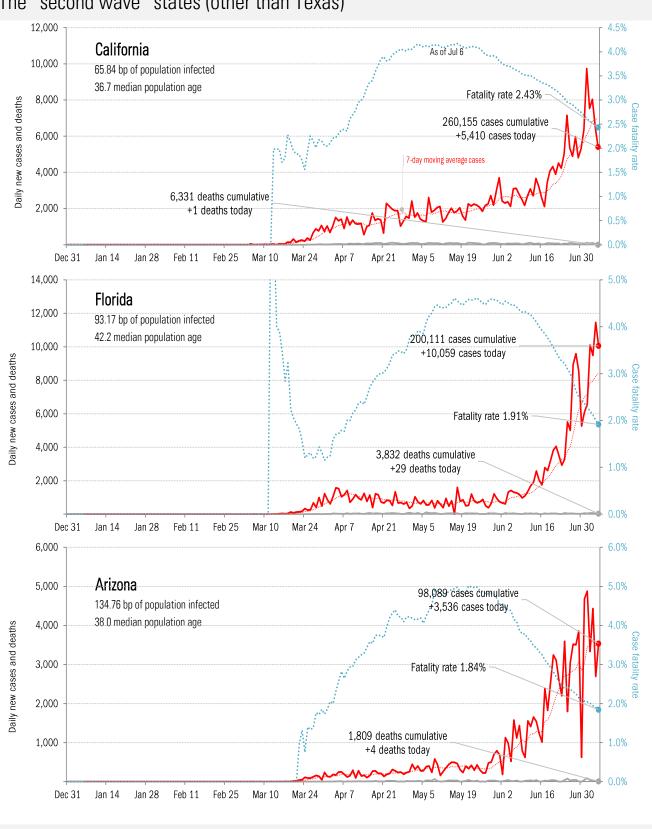
00 88 3,719 0,710			May 4 130,255 May 10132,263 May 10132,263	May 12 140,677 May 20 136,165 May 26 127,663	Jun 5 128,516 Jun 8 129,561 Jun 10 127,294	Jun 15 130,861 Jun 24 128,513 Jun 29 130,062 Actual 126,190
Mar 25 81.030 Mar 29 82.117 Mar 30 83,888 Mar 31 93.71 Apr 1 93.719	Apr 5 81,766 Apr 7 60,415 Apr 8 60,415	Apr 9 61,545 Apr 12 68,841 Apr 17 60,308 Apr 21 65,976 Apr 22 67,640	Apr 28 72,859 Apr 29 72,433			
,,,						┍┻┯┻┯┻

As of Jul 6

## From Ground Zero to the Rio Grande

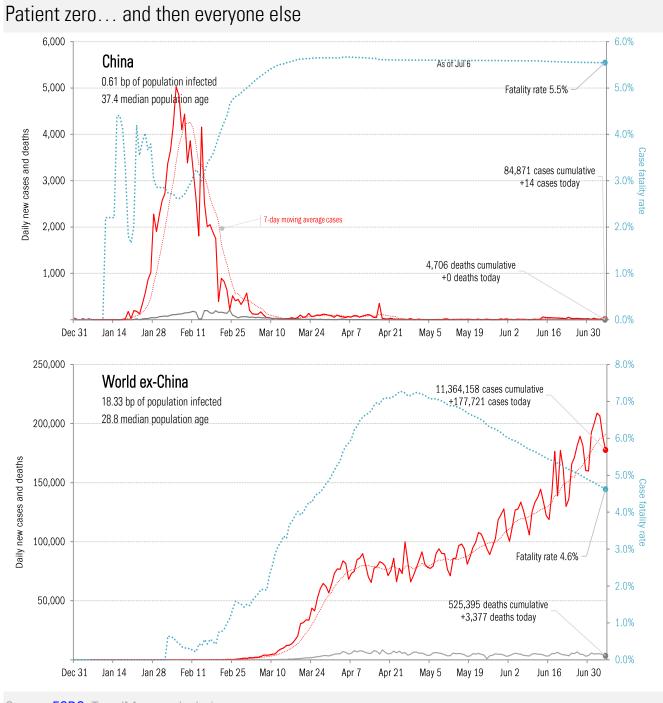


Source: ECDC, TrendMacro calculations

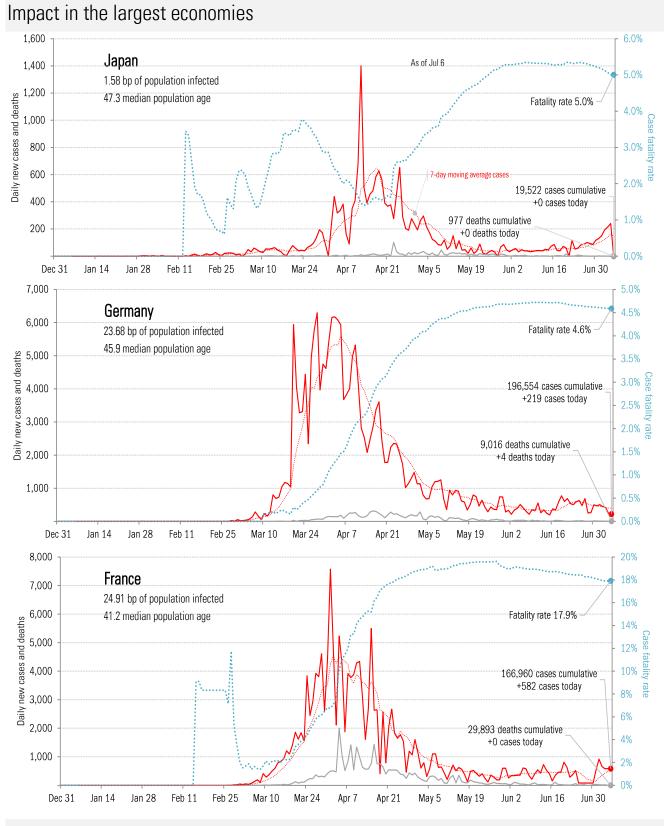


## The "second wave" states (other than Texas)

Source: ECDC, TrendMacro calculations



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

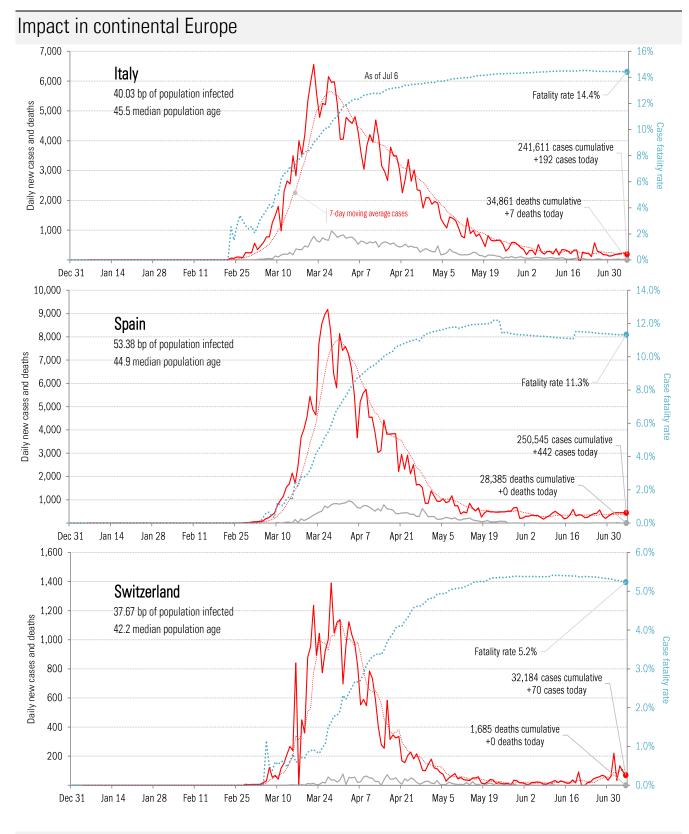


Source: ECDC, TrendMacro calculations

#### 10,000 18% United Kingdom 9,000 16% As of Jul 6 8,000 47.41 bp of population infected 14% 40.5 median population age 7,000 Fatality rate 14.0% 12% Case fatality 6,000 10% 5,000 315,971 cases cumulative 8% 4,000 rate +516 cases today 6% 3,000 44,220 deaths cumulative +22 deaths today 4% 2,000 7-day moving average cas Ŵ 2% 1,000 0% Jan 14 Jan 28 Feb 11 Feb 25 Mar 10 Mar 24 May 19 Jun 30 Dec 31 Apr 7 Apr 21 May 5 Jun 2 Jun 16 3,000 9.0% Canada 8.0% 2,500 27.85 bp of population infected 7.0% Fatality rate 8.2% 40.8 median population age 2,000 6.0% 5.0% 105,524 cases cumulative 1,500 +219 cases today 4.0% 3.0% 1,000 8,684 deaths cumulative 2.0% 500 +10 deaths today 1.0% 0.0% Dec 31 Feb 25 Mar 10 Apr 21 May 19 Jun 2 Jun 30 Jan 14 Jan 28 Feb 11 Mar 24 Apr 7 May 5 Jun 16 700 4.5% Australia 4.0% 600 3.05 bp of population infected 3.5% 37.9 median population age 500 3.0% 400 2.5% Fatality rate 1.2% 2.0% 300 1.5% 8,449 cases cumulative 200 +87 cases today 1.0% 104 deaths cumulative 100 +0 deaths today 0.5% 0.0% Dec 31 Jan 28 Feb 11 Feb 25 Mar 10 Mar 24 Apr 21 May 5 May 19 Jun 2 Jun 16 Jun 30 Jan 14 Apr 7

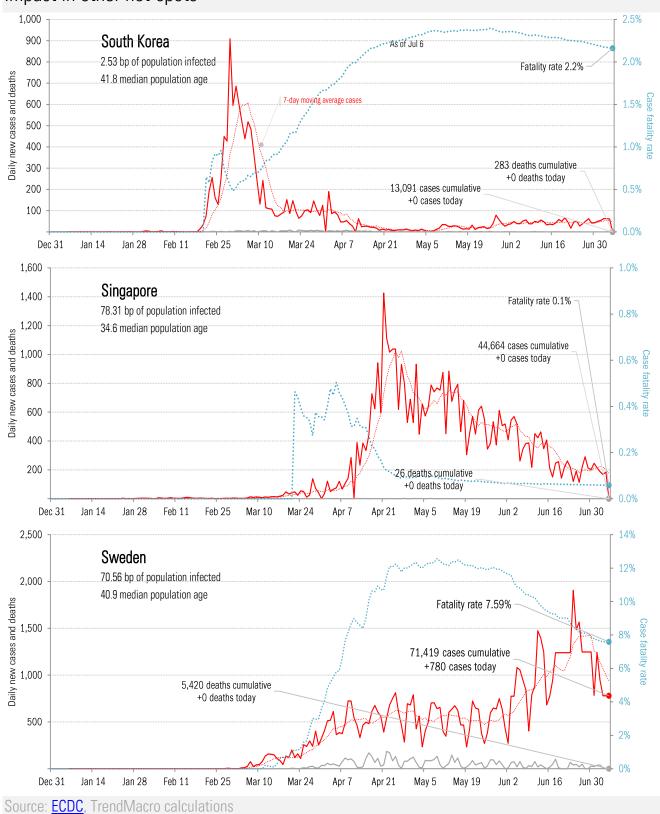
## Impact in The Anglosphere

Source: ECDC, TrendMacro calculations

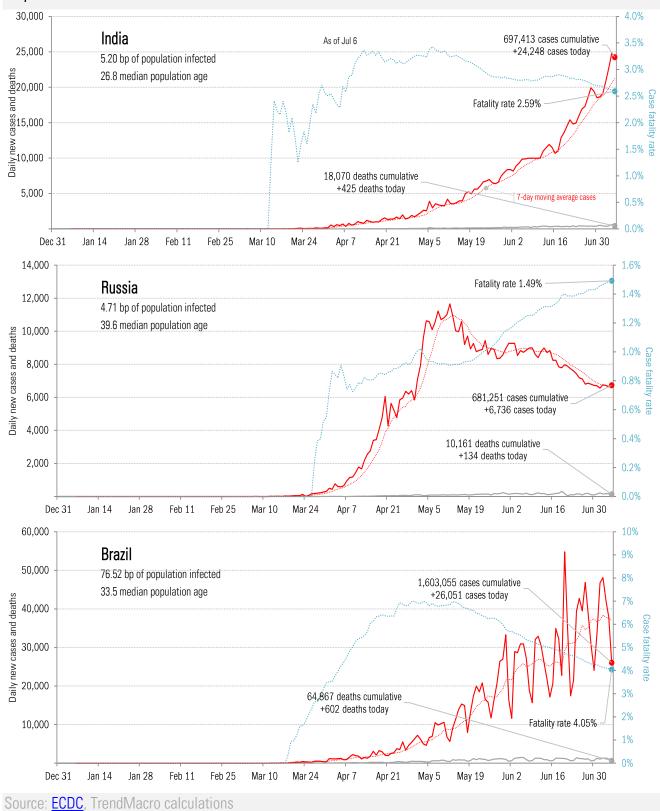


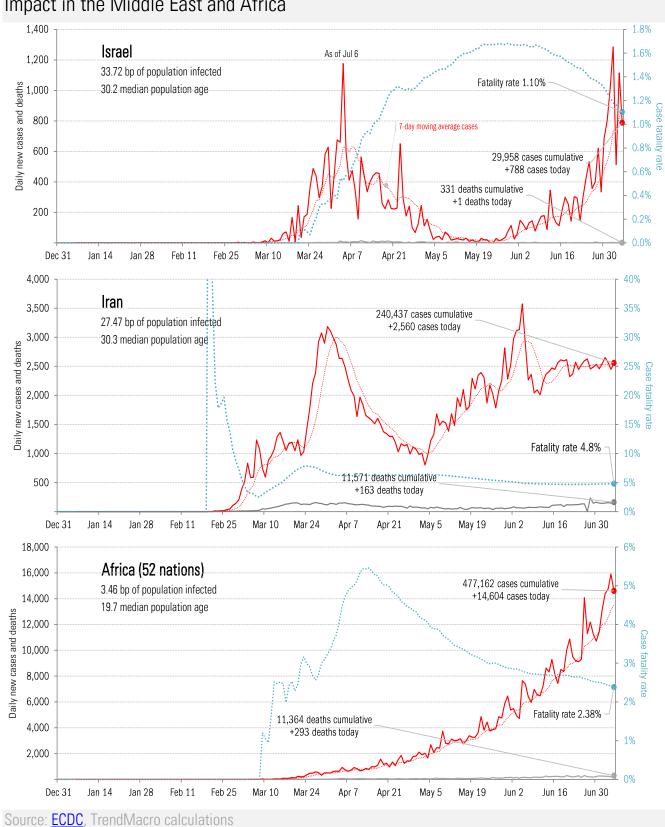
Source: ECDC, TrendMacro calculations

## Impact in other hot-spots



## Impact in the BRICs ex-China





# Impact in the Middle East and Africa