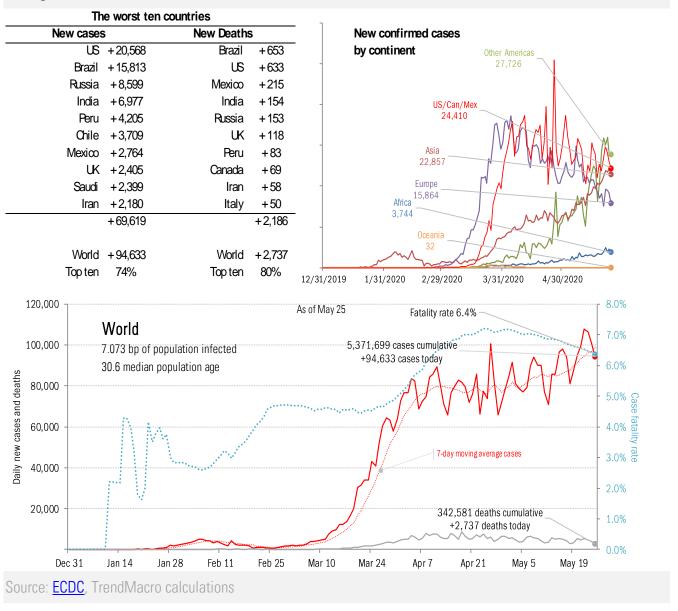


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

Monday, May 25, 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 c	ases	New Deat	hs		n hospital	t US states Cume	cases	() ime	deaths	() ime	in hospita
	+ 2,508	New Deal NY	+ 109	NY	+ 261	NY	361,515	NY	23,391	NY	77,295
CA	+2,000	MA	+ 109	MD	+ 201	NJ	301,313 154,154	NJ	11,133	CT	12,538
NY	+2,079 +1,589	CA	+00 +66	R.	+ 114 +71	IL	110,304	MA	6,372	R.	9,638
NJ	+ 1,050	L	+66	KY	+55	CA	92,710	MI	5,228	MA	9,308
MA	+ 1,013	NJ	+52	MN	+54	MA	92,675	PA	5,124	MD	7,939
TX	+ 839	MD	+34	MA	+48	PA	67,713	L	4,856	GA	7,439
MD	+818	IN	+33	Ю	+ 39	TX	55,348	CA	3,774	VA	6,453
R.	+740	PA	+28	GA	+28	M	54,679	CT	3,693	СН	5,476
PA	+730	LA	+22	MS	+27	Æ	50,867	LA	2,690	IN	5,285
MN	+728	CT	+ 18	WA	+26	MD	46,313	R.	2,316	00	4,105
	+ 12,094		+ 496		+723		1,086,278		68,577		145,476
l states	+20,806	All states	+654	All states	+537	All states	1,635,760	All states	91,941	All states	172,574
Top ten	58%	Top ten	76%	Top ten	135%	Top ten	66%	Top ten	75%	Top ten	84%
				_							
Fewer	daily case	s	Fewe	Five Five r new death	mostimpro s		tes new hospit	alizations		Most recove	ries
NC	-610			PA -8			UT -38			PA	+1,108
VA	-304			0H -7			FL -12			TX	+ 1,108
MD	-253			MI -6			MD -7			NY	+788
NV TX	-221 -221			NJ -4 FL -4			GA -70 MA -50			MN WI	+630 +311
60,000	Unite	ed States			۵s of I	May 25					F 9.0%
50,000 -	UNITED STATES As of May 25 50.450 bp of population infected 38.1 median population age								Fatality ra	ate 5.81%	- 8.0%
10,000 -											- 7.0%
	14,167,554 tests cume								٨		- 5.0%
80,000 - 80,000 -	378,684 tests today								W		- 4.0%
20,000 -									238 cases c 1,568 cases		3.0%
.0,000 -					1	VA	7-day movi	ng average cases Q		aths cumulative eaths today	
						1.1					
Dec	31 Jan	14 Jan 28	Feb 11	Feb 25	Mar 10	Mar 24	Apr 7	Apr 21	May 5	May 19	0.0%

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

Recommended reading

Focus on the Covid-19 Death Rate

Gregory van Kipnis *American Institute for Economic Research* May 24, 2020

<u>UK COVID-19 vaccine trial may fail due to low</u> <u>transmission in population</u>

Donna Rachel Edmunds *Jerusalem Post* May 24, 2020

Meme of the day

'How Could the CDC Make That Mistake?'

Alexis C. Madrigal and Robinson Meyer *The Atlantic* May 21, 2020

<u>COVID-19 no longer infectious after 11 days, new</u> <u>study claims</u>

Aaron Reich and Idan Zonshine Jerusalem Post May 24, 2020

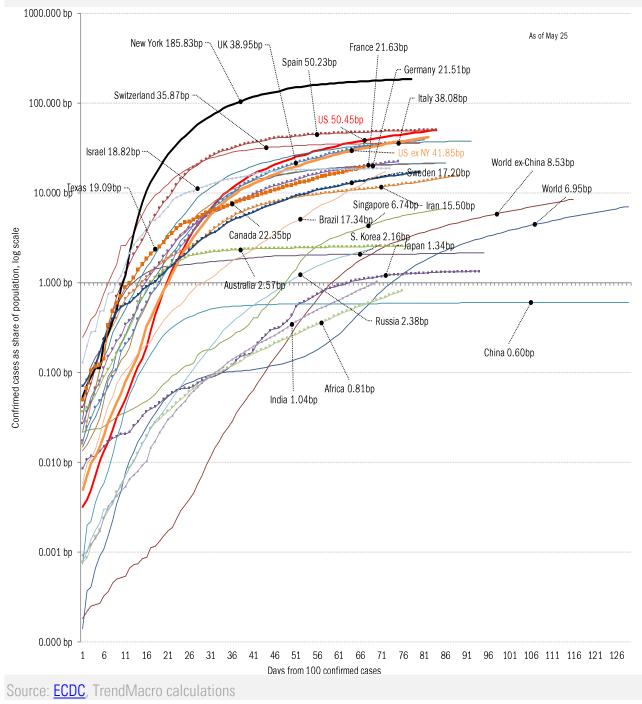
Horowitz: The CDC confirms remarkably low coronavirus death rate. Where is the media?

Danial Horowitz *Conservative Review* May 22, 2020

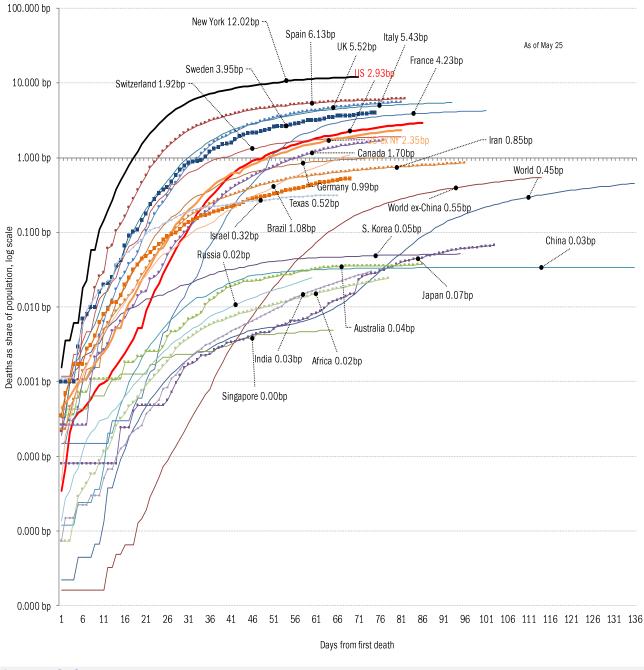


Source: Our beloved clients, and Power Line blog "The Week in Cartoons"

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*



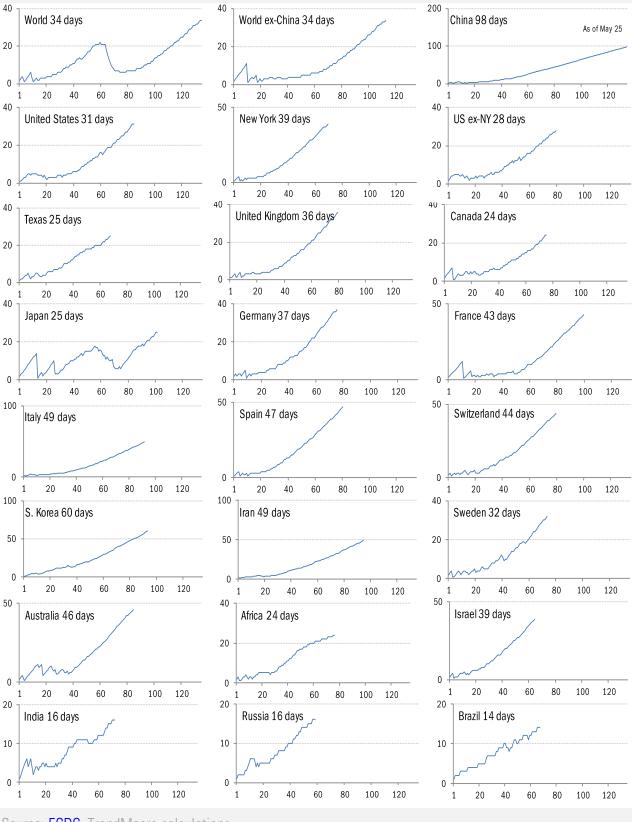
The coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality*





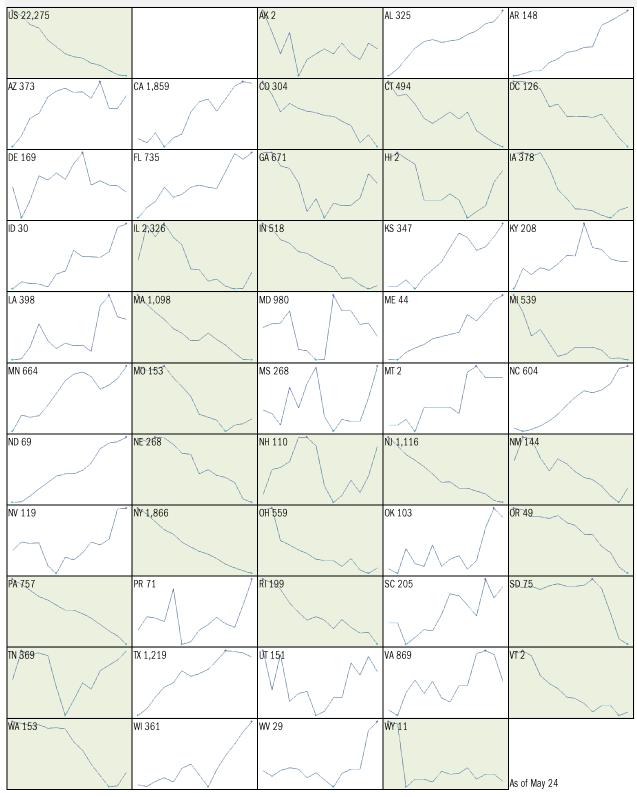
Our most reliable evidence of slowing exponential growth of Covid-2019

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



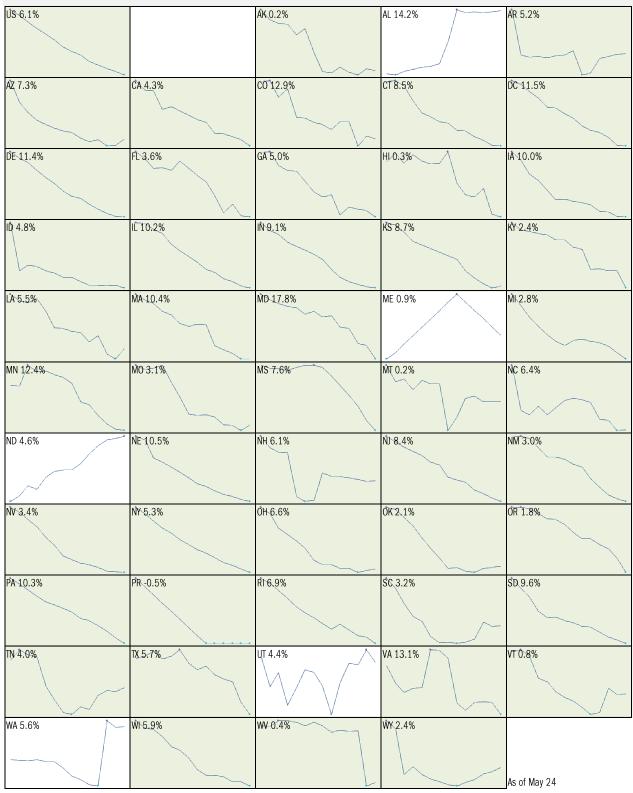
Source: ECDC, TrendMacro calculations

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



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

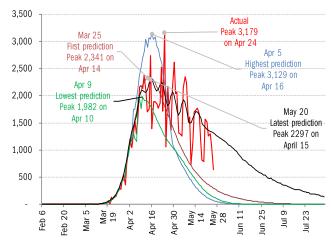


Source: Covid Tracking Project, TrendMacro calculations

Reality-checking the models: actuals versus IHME predictions

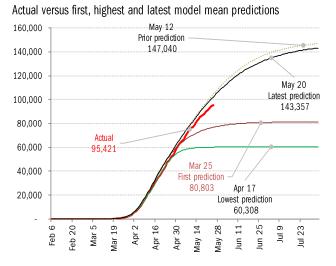
New daily fatalities

Actual versus first, highest and latest model mean predictions

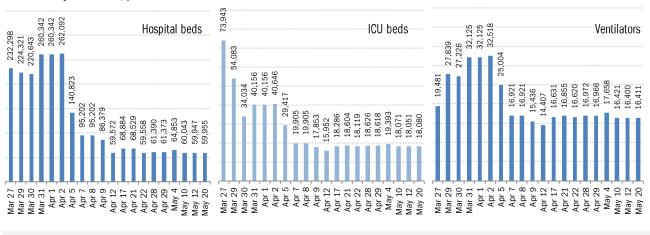


May 12 1,489 May 101,188 May 41,074 ii. Actual 633 Mar 31 376 Mar 30 365 Mar 29 342 Apr 1 376 Apr 2 384 Mar 25 298 Apr 12 242 Apr 28 113 Apr 9 133 Apr 29 98 Apr 21 43 Apr 22 58 Apr 5 69 Apr 17 20 Apr 7 51 Apr 8 51

Cumulative fatalities



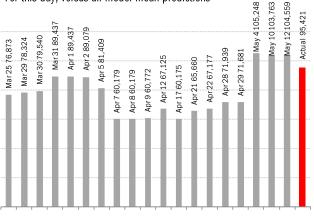
Healthcare system stress, peak estimated at each model revision



Source: ECDC, IHME, TrendMacro calculations

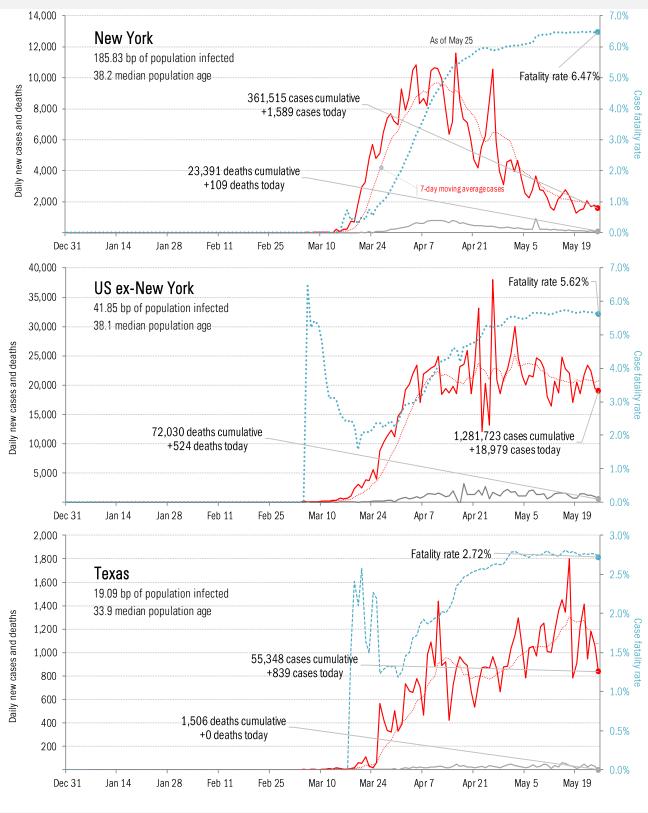
For this day, versus all model mean predictions

For this day, versus all model mean predictions

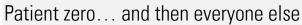


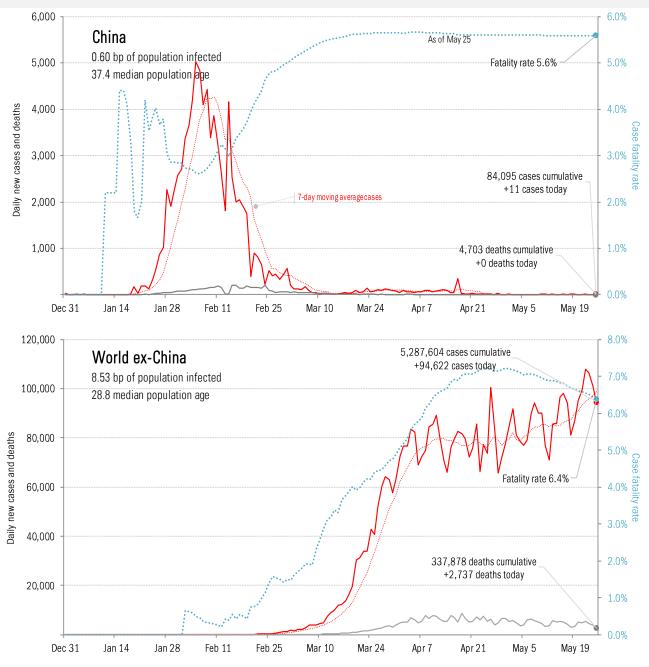
As of May 25

From Ground Zero to the Rio Grande



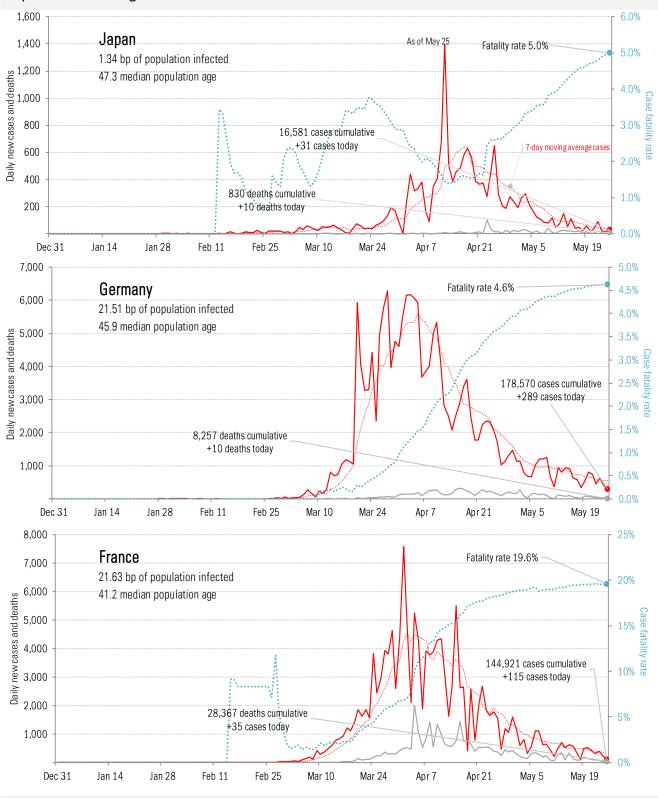
Source: ECDC, TrendMacro calculations





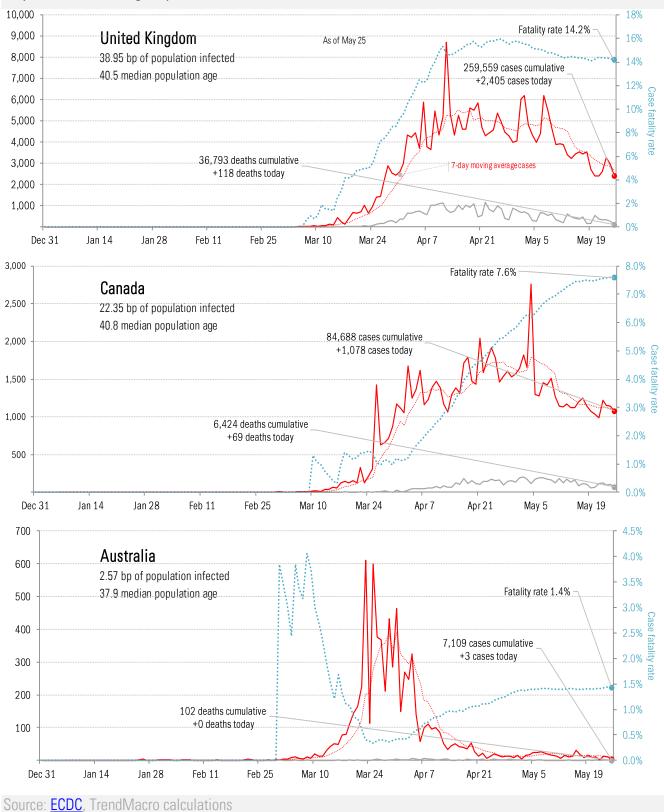
Source: ECDC, TrendMacro calculations

Impact in the largest economies

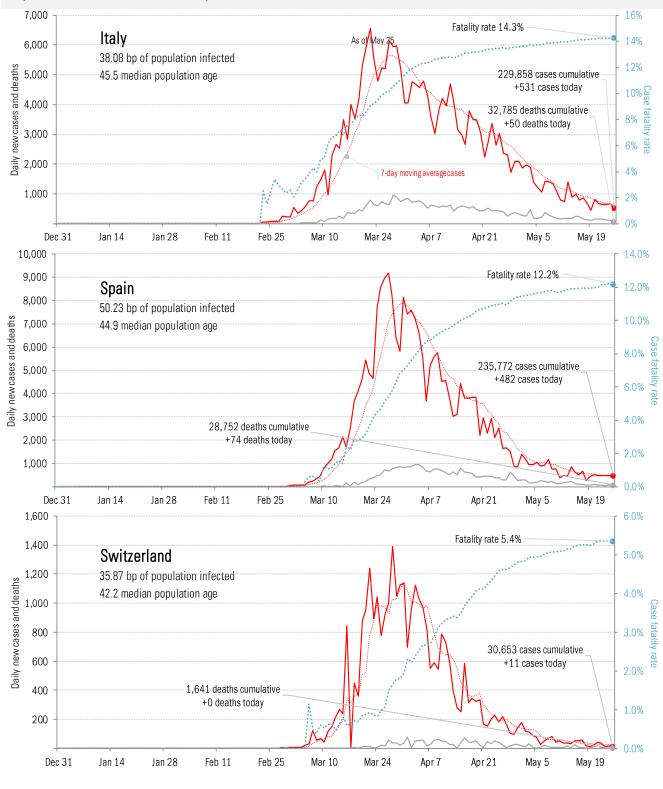


Source: ECDC, TrendMacro calculations

Impact in The Anglosphere

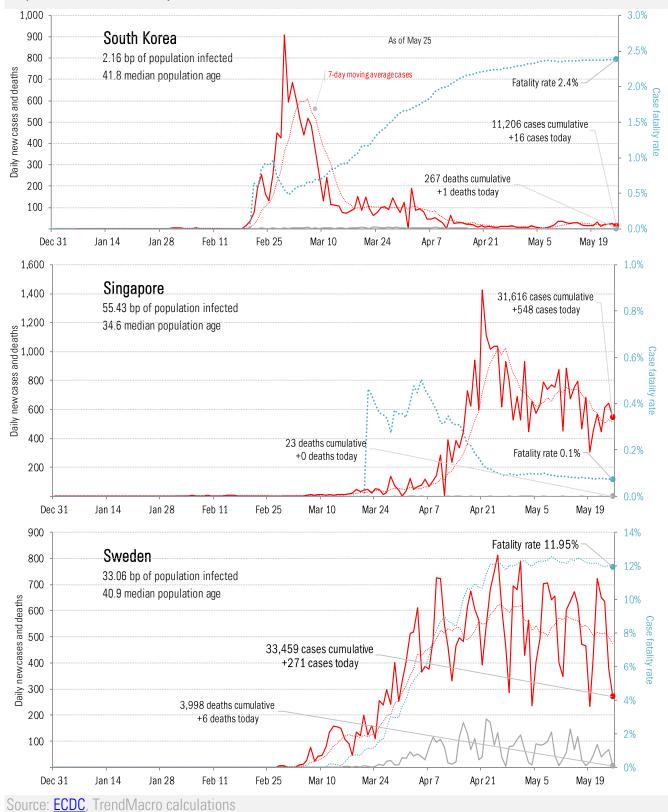


Impact in continental Europe

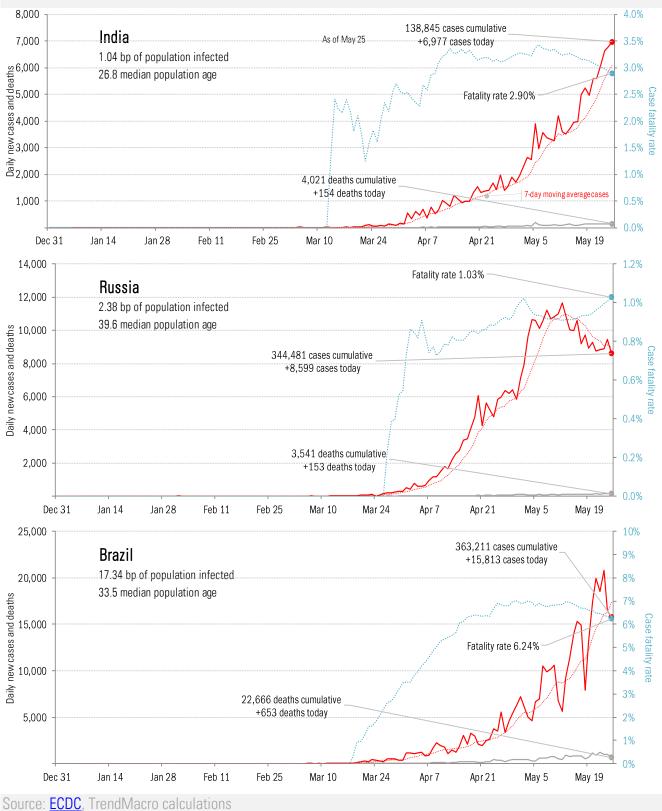


Source: <u>ECDC</u>, TrendMacro calculations

Impact in other hot-spots



Impact in the BRICs ex-China



1,400 1.8% Fatality rate 1.67% Israel 1.6% As of May 25 1,200 18.82 bp of population infected 1.4% Daily new cases and deaths 800 600 400 30.2 median population age 1.2% 280 deaths cumulative 1.0% 7-day moving average cases +1 deaths today 0.8% 0.6% 0.4% 16,720 cases cumulative 200 +30 cases today 0.2% 0.0% Dec 31 Jan 14 Jan 28 Feb 25 Mar 24 Apr 21 May 5 May 19 Feb 11 Mar 10 Apr 7 3,500 40% Iran 35% 3,000 135,700 cases cumulative 15.50 bp of population infected +2,180 cases today 30% 30.3 median population age Daily new cases and deaths 2,500 25% Case 2,000 tatality 20% 1,500 15% Fatality rate 5.5% 1,000 10% 7,417 deaths cumulative 500 +58 deaths today 5% 0% Jan 28 Dec 31 Jan 14 Feb 11 Feb 25 Mar 10 Mar 24 Apr 7 Apr 21 May 5 May 19 6,000 6% 111,914 cases cumulative Africa (52 nations) +3,735 cases today 5,000 5% 0.81 bp of population infected 19.7 median population age Daily new cases and deaths 4,000 Fatality rate 2.98% Case fatality rate 3,000 2,000 2% 3,338 deaths cumulative +82 deaths today 1,000 1% 0% Dec 31 Jan 14 Jan 28 Feb 11 Feb 25 Mar 10 May 19 Mar 24 Apr 7 Apr 21 May 5

Impact in the Middle East and Africa

