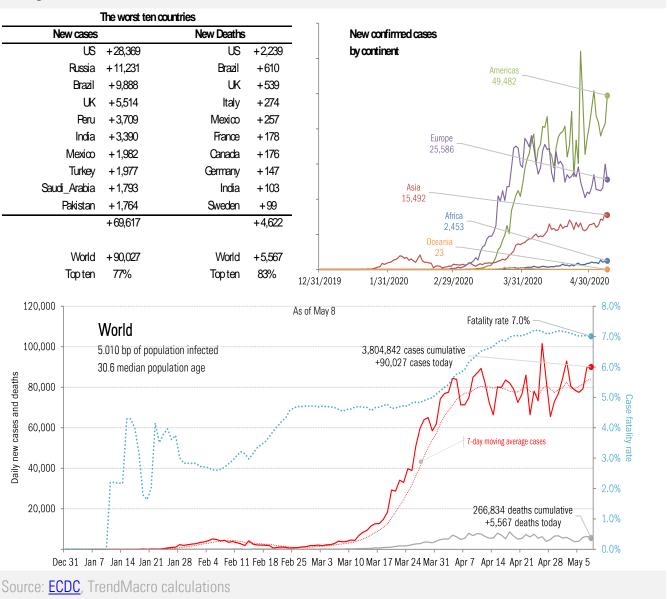


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

Friday, May 8, 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	æs	New Deaths	;	New in	hospital	Qume o	ases	Currie d	eaths	Curre in	hospital
NY	+3,671	NY	+951	СТ	+1,631	NY	327,649	NY	20,828	NY	71,152
IL	+2,641	PA	+310	NY	+613	NJ	133,635	NJ	8,801	СТ	9,389
CA	+1,799	NJ	+252	VA	+325	MA	73,721	MA	4,552	MA	7,237
NJ	+1,745	IL	+137	FL	+214	IL	70,873	MI	4,343	FL	6,990
MA	+1,696	MA	+132	MD	+166	CA	60,614	PA	3,416	GA	5,835
VA	+1,314	LA	+93	MA	+ 157	PA	52,915	IL	3,111	MD	5,663
MD	+1,211	MI	+93	OH	+88	MI	45,646	CT	2,797	VA	4,438
PA	+1,070	CA	+92	GA	+70	R.	38,828	CA	2,504	OH	4,140
TX	+968	СТ	+79	CO	+67	TX	35,390	LA	2,208	CO	2,986
FL.	+826	MD	+66	MN	+54	CT	31,784	R_	1,667	WI	1,732
	+ 16,941		+2,205		+3,385		871,055		54,227		119,562
All states	+27,580	All states	+2,746	All states	+3,699	All states	1,248,137	All states	70,002	All states	135,176
Top ten	61%	Top ten	80%	Top ten	92%	Top ten	70%	Top ten	77%	Top ten	88%
				Fiv	e most impr	oved US state	s				
Fewer daily cases		Fewer new deaths				new hospitaliz	ations	s Most recoveries			
CA	-804			MA -70			MA -9			CT	+1,067
KY	-465			NJ -54	3		GA -6	51		NY	+950
DE	-246			CH -4	4		KY -6			TX	+818
GA	-242			00 -3			NY -5			IA	+463
IN	-204			SC -2	2		SC -4	12		MN	+303
60,000 ₋											г 9.0%
	Unito	d States			10.0	of May 8					
			actod		ASU	n way o					- 8.0%
50,000 -		8.460 bp of population infected 8.1 median population age				Fatality rate 5.86%					
	JU. 1 110	ulan population age	i								- 7.0%
40,000 -					_			731 cases cum			- 6.0%
40,000 -		8,108,684 tests cume					+24	,128 cases tod	ay	X	
		-,,						A A	ONT	Λ .	- 5.0%
30,000 - 20,000 -					In W	\mathcal{N}		1171	×~4	A	
		319,149 tes	ts today	. M	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	\rightarrow		/ N / `	\vee VI	M M >	4.0%
								[k]			•
20,000 -			٨	, Mm	la la		\sim				- 3.0%
		8.7% positiv	ve today / 🔥					// T-da	ay moving average	e cases	
			VV	N	1 m	Jen's	1 John	, 			- 2.0%
10,000 -							V~JN/	73 37	'1 deaths ci	umulative	
							I =		239 deaths		- 1.0%
									\sim	$\sim\sim$	
Dec	31 an 7	an 14 Jan 21 Jan	28 Feb 4 Feb	11 Feb 18 F	h 25 Mar 3	Mar 10 Mar 1	7 Mar 24 Ma	r.31 Anr.7 A	nr14 Anr?	1 Apr28 May F	⊥ 0.0%
Dec	31 Jan 7 J	an 14 Jan 21 Jan	28 Feb 4 Feb	11 Feb 18 Fe	eb 25 Mar 3	Mar10 Mar1	7 Mar 24 Ma	r31 Apr7 A	pr14 Apr2	1 Apr 28 May 5	

2

Recommended reading

<u>Travel From New York City Seeded Wave of U.S.</u> <u>Outbreaks</u>

Benedict Carey and James Glanz *New York Times* May 7, 2020

A Place in the U.S. With No Covid-19? Look to American Samoa.

Simon Romero *New York Times* May 6, 2020

Wisconsin Sup. Ct. Justice: Isn't state's lockdown order "the very definition of tyranny?" Legal Insurrection

May 5, 2020

Meme of the day

An SIR model with behavior

John Cochrane *The Grumpy Economist* May 4, 2020

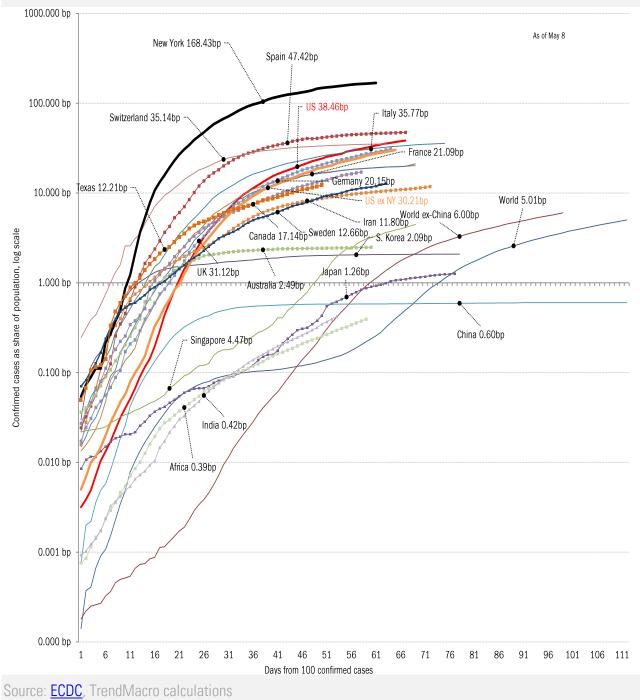
<u>China gets top score as citizens rank their</u> <u>governments' response to the coronavirus outbreak</u> Karen Gilchrist *CNBC* May 6, 2020

April: "At least it can't get any worse" May:

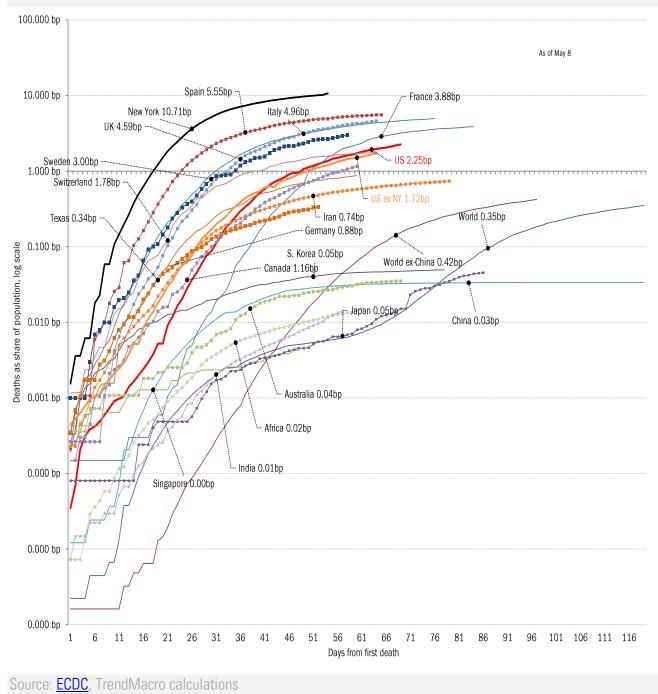


Source: Our beloved clients, and Power Line blog "The Week in Cartoons"

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*

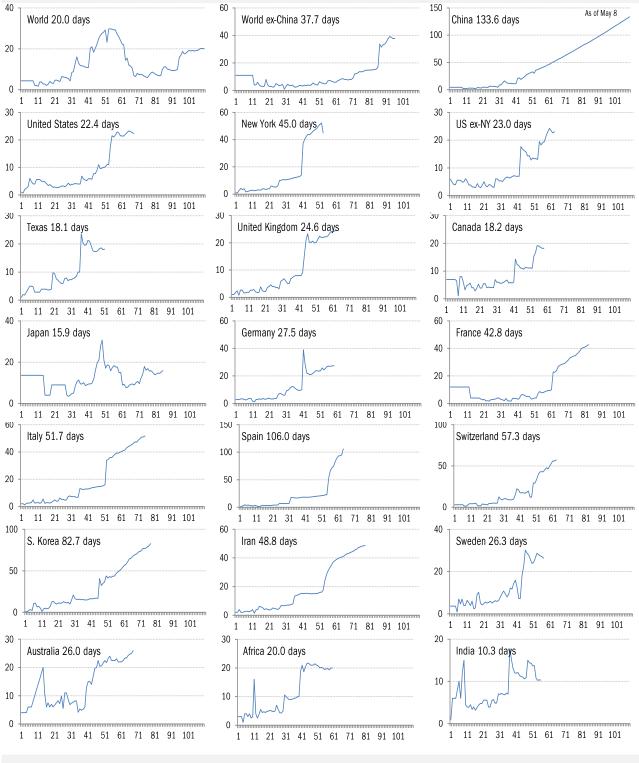


The coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality*



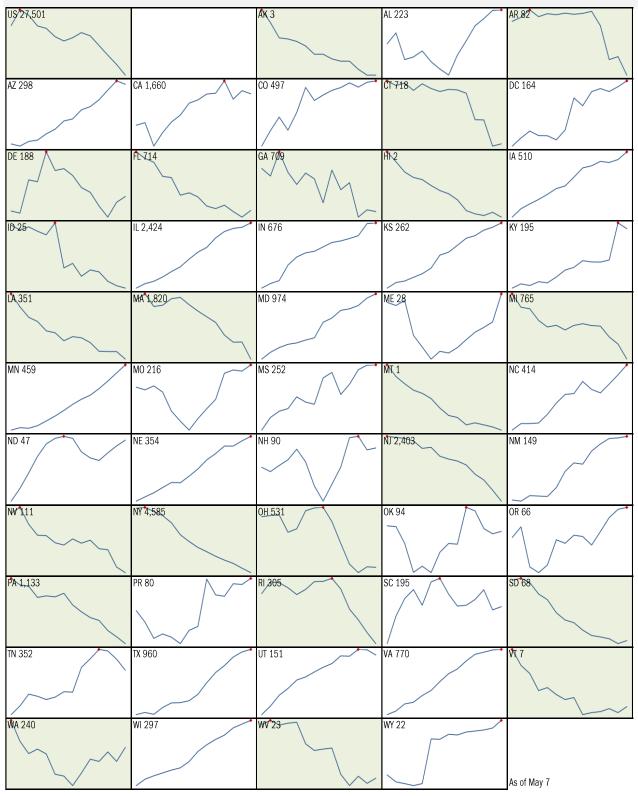
Our most reliable evidence of slowing the Moore's law of Covid-2019 *Vertical: number of days it takes to double deaths Horizontal: days from first death* Progress means seeing the line move up and to the right...

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



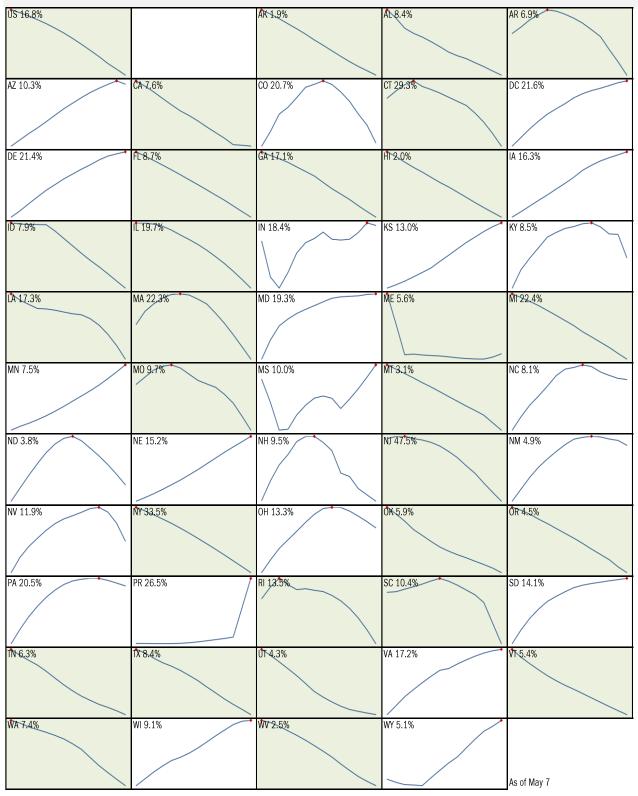
Source: <u>ECDC</u>, TrendMacro calculations

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*

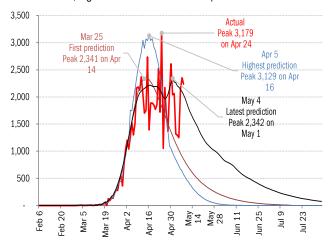


Source: Covid Tracking Project, TrendMacro calculations

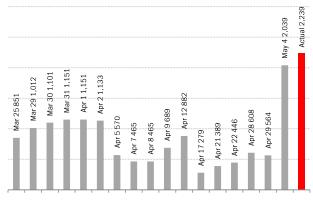
Reality-checking the models: actuals versus IHME predictions

New daily fatalities

Actual versus first, highest and latest model mean predictions



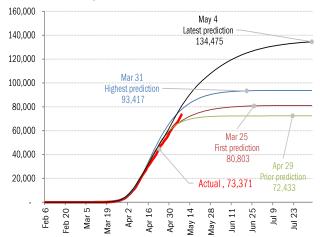
For this day, versus all model mean predictions



As of May 8

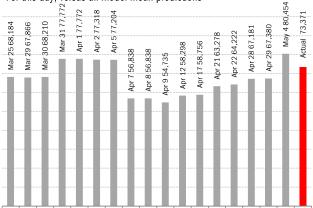
Cumulative fatalities

Actual versus first, highest and latest model mean predictions

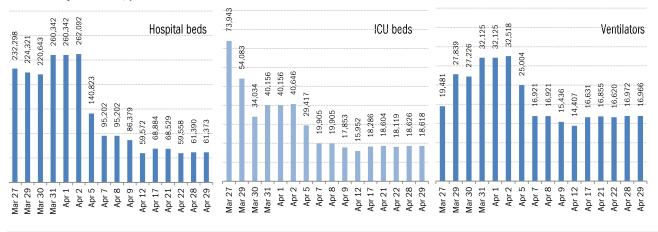


Mar 31 77,772 Apr 1 77,772 Apr 2 77,318 Apr 5 77,204

For this day, versus all model mean predictions

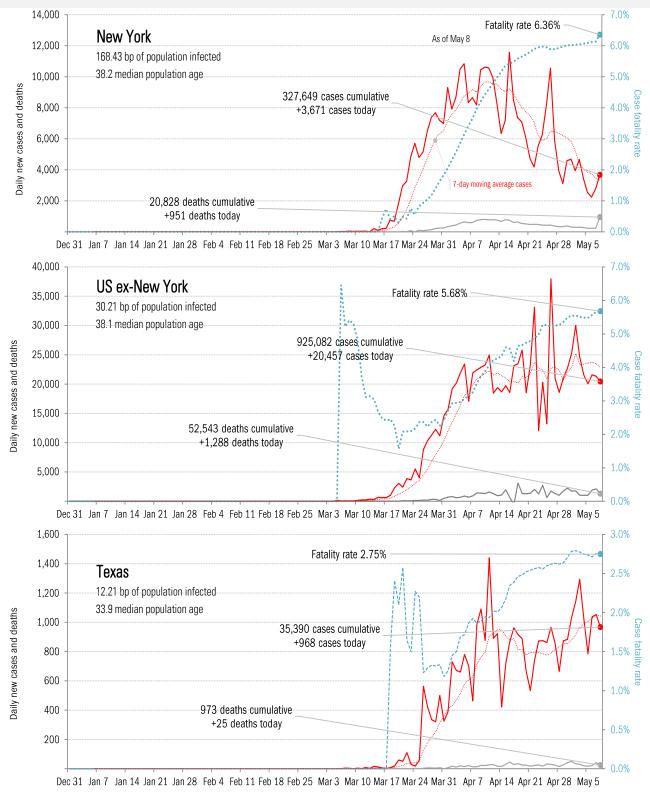


Healthcare system stress, peak estimated at each model revision



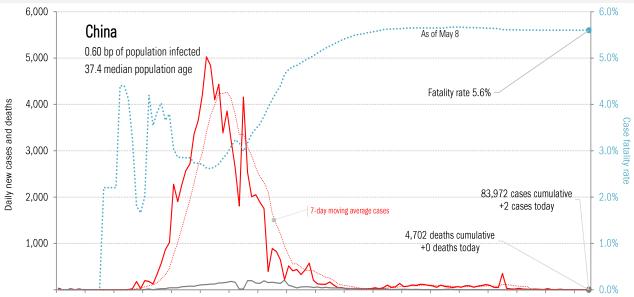
Source: ECDC, TrendMacro calculations

From Ground Zero to the Rio Grande

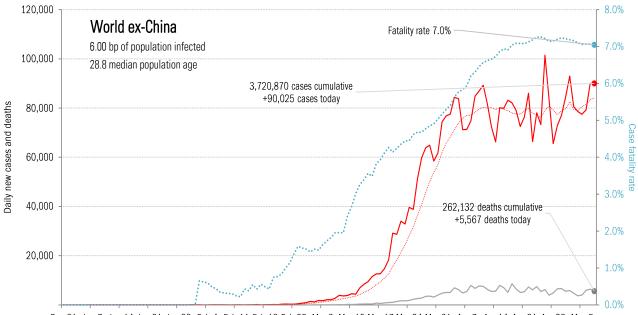


Source: ECDC, TrendMacro calculations

Patient zero... and then everyone else



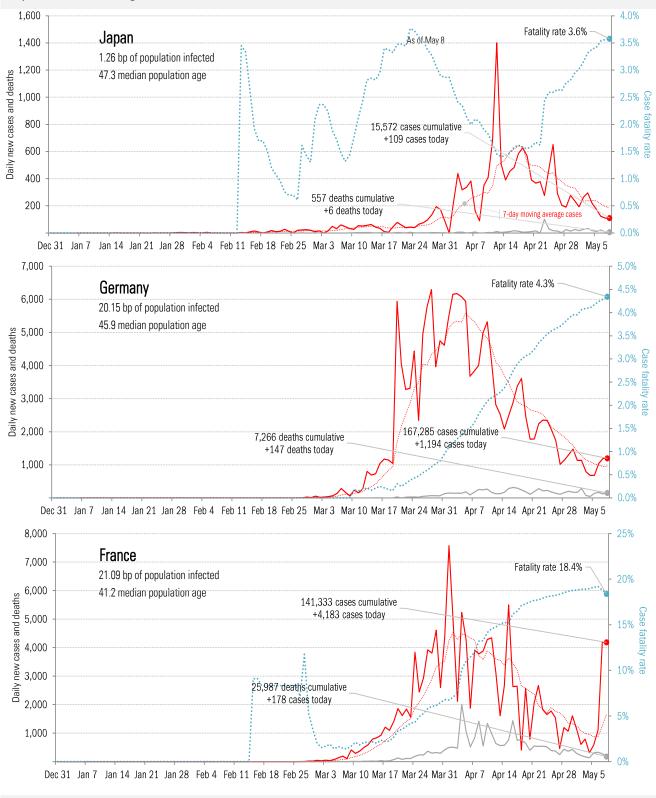






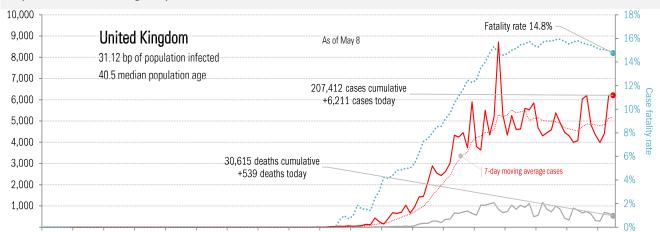
Source: ECDC, TrendMacro calculations

Impact in the largest economies

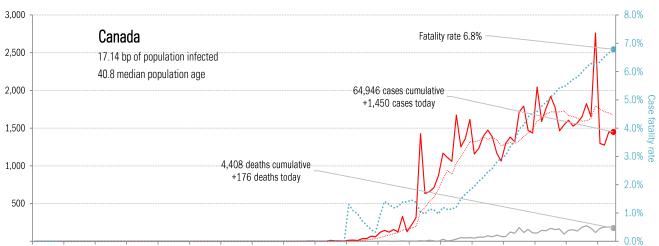


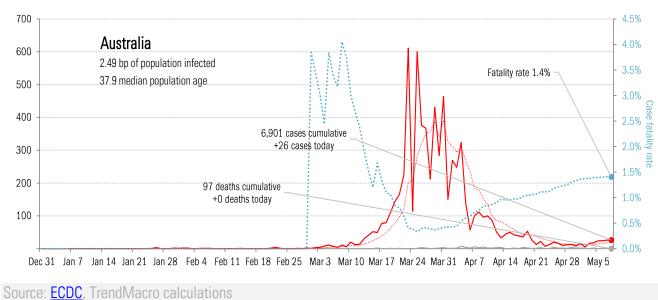
Source: ECDC, TrendMacro calculations

Impact in The Anglosphere



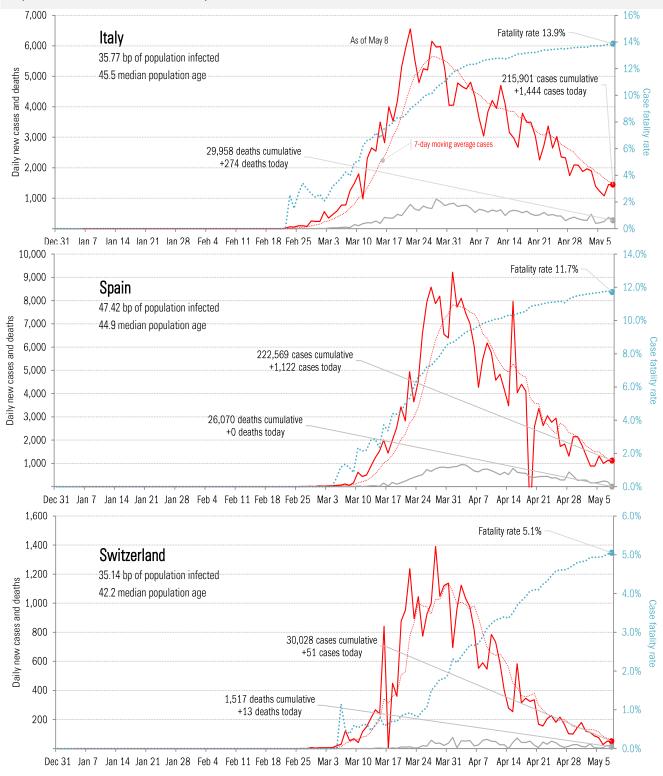
Dec 31 Jan 7 Jan 14 Jan 21 Jan 28 Feb 4 Feb 11 Feb 18 Feb 25 Mar 3 Mar 10 Mar 17 Mar 24 Mar 31 Apr 7 Apr 14 Apr 21 Apr 28 May 5





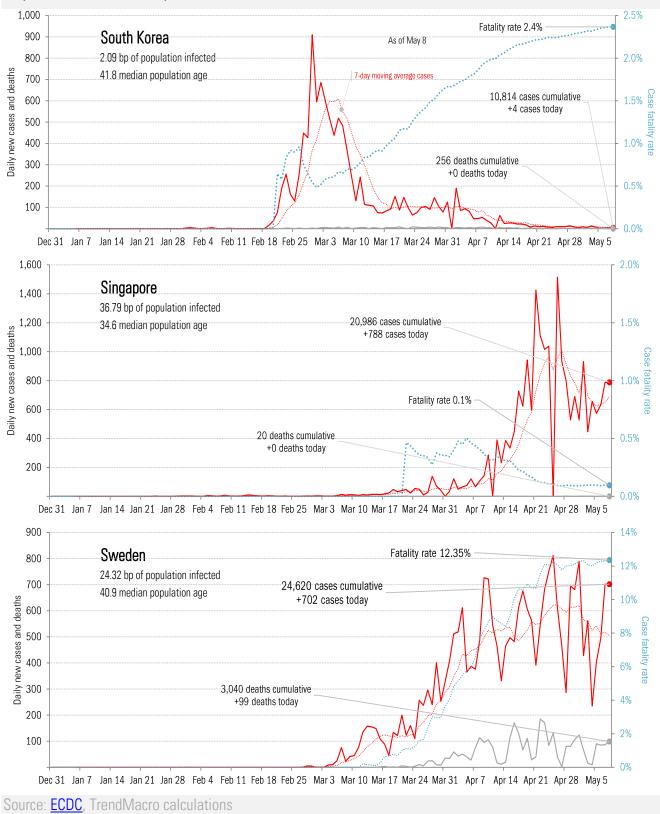
Dec 31 Jan 7 Jan 14 Jan 21 Jan 28 Feb 4 Feb 11 Feb 18 Feb 25 Mar 3 Mar 10 Mar 17 Mar 24 Mar 31 Apr 7 Apr 14 Apr 21 Apr 28 May 5

Impact in continental Europe



Source: ECDC, TrendMacro calculations

Impact in other hot-spots



Impact in the fragile emerging world

