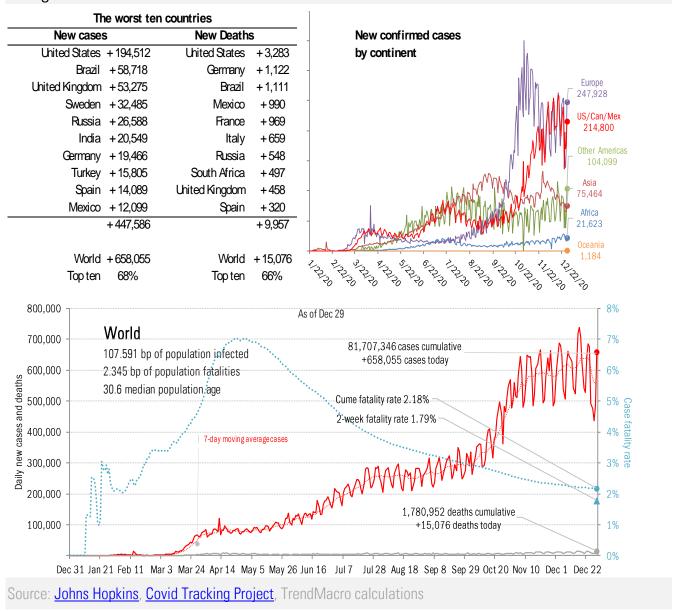


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

Wednesday, December 30, 2020

The global scorecard



For more information contact us: Donald Luskin: 312 273 6766 don@trendmacro.com

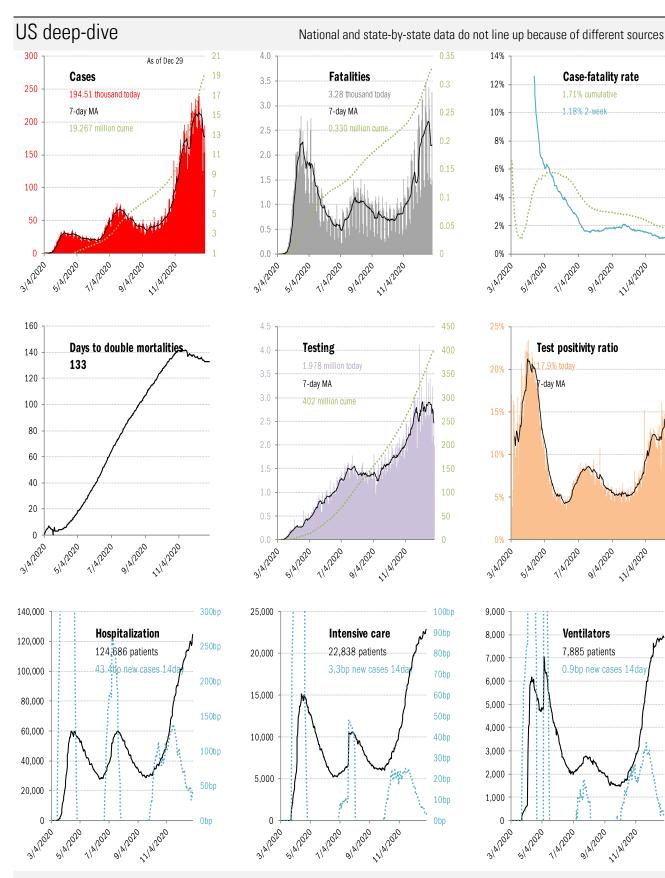
Thomas Demas: 704 552 3625 tdemas@trendmacro.com

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The US scorecard

							n worst US						
New cases		New Deaths		New in hospital		Cume cases					in hospital	Hospital use ICU use	
	+ 32,552	PA	+267	CA	+ 598		2,187,221	NY	29,756	NY	89,995	NV 169%	NM 98%
	+31,245	CA	+242	ΤX	+ 424		1,715,978	ΤX	26,762	R	62,999	RI 87%	AL 92%
R.	+11,748	TX	+241	NY	+ 255	Æ	1,270,063	CA	24,526	NJ	46,784	GA 81%	RI 91%
NY	+11,438	MI	+212	CK	+ 198	IL	948,006	R.	21,718	GA	41,403	MD 79%	GA 90%
PA	+ 8,545	AZ	+ 171	NC	+ 185	NY	943,990	NJ	18,777	Ю	37,636	SC 79%	NV 87%
СН	+7,526	IN	+ 165	Æ	+ 171	СН	682,570	IL	17,596	AZ	36,075	CA 78%	OK 87%
GA	+ 5,853	СН	+ 151	NJ	+ 146	PA	622,349	PA	15,353	IN	34,534	AZ 77%	CA 87%
IL	+ 5,644	NY	+ 127	VA	+ 135	TN	572,589	MI	12,966	AL	33,452	DC 75%	TX 85%
TN	+ 4,797	IL	+ 126	TN	+ 123	GA	552,712	MA	12,218	MD	26,247	MA 75%	WV 85%
MA	+ 4,145	NJ	+ 126	MO	+ 111	NC	524,279	GA	10,779	MN	21,605	FL 75%	TN 84%
	+ 123,493		+1,828		+2,346		10,019,757		190,451		430,730		
II - t - t	. 404 540		. 0.000		.0454		40.007.000		000.005		070 050		700
	+ 194,512		+3,283		+3451		19,267,233		329,605		676,253	All states 70%	76%
Top ten	63%		56%		68%	Top ten	52%		58%	na etatae r	64% ot reporting	Median 67%	74%
						Five most	improved	US stat		6 310103 11	otroponing		
Fewer	daily case	s		F	ewer new				new hosp	oitalizat	ions	Most recover	eries
CT	-7,690				CT	-93			AL -	215		TX	+29,782
AZ	-7,287				KS	-41			ОН -	135		СН	+ 11,993
KS	-6,373				WY	-32			NY -	121		PA	+ 11,692
СК	-2,254				NM	-11			GA -	120		TN	+ 10,218
CA	-1,925				IL	-8			AZ -	115		IN	+ 5,036
00,000 50,000 -	591.5 10.11	9 bp of p	population opulation f	atalities	a far a start a		As of Dec 29		1		3 cases cumula 12 cases today		- 6.0%
00,000 -	38.1 n	nedian po	opulation a	ge	/				Cu	me fatality	v rate 1.71%	M	- 5.0% - 4.0%
50,000 -	US	/accina	ations				A.		2-week f	atality rate	1.18%		
	11.45 million doses distibuted				2-week fatality rate 1.18%								
00,000 -			t doses re	1			-		9,605 death +3,283 dea		ve	land the second s	
50,000 -							AN	M	10,200 aca	NAA	A A A		- 2.0%
				\mathcal{N}	$\mathcal{M}_{\mathcal{N}}$	And	پ		· •				

Source: Covid Tracking Project, Dept. of Health and Human Services, CDC, TrendMacro calculations



30bp

25bp

20bp

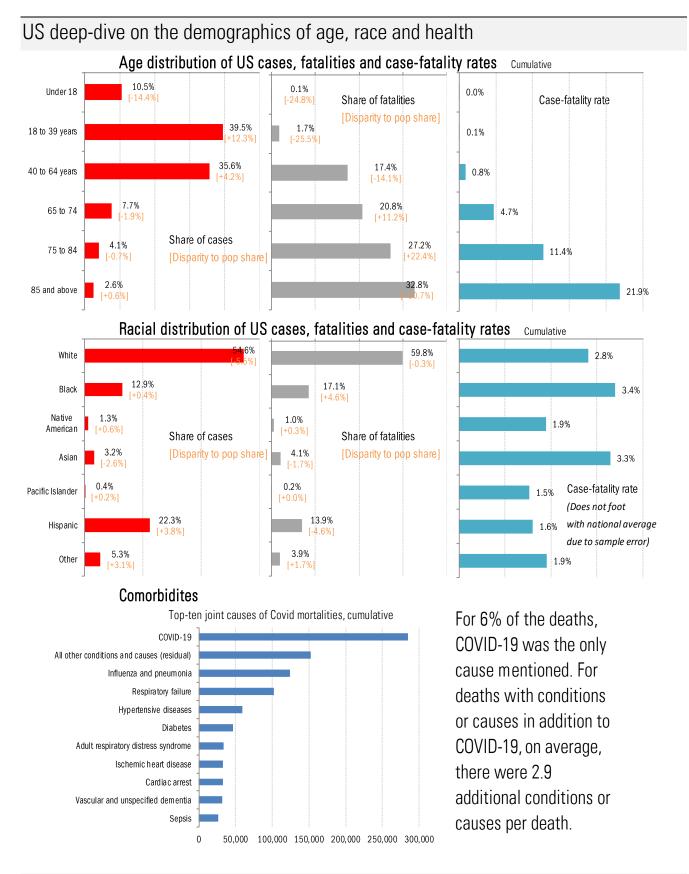
15bp

10bp

5bp

0bp

Source: Covid Tracking Project, TrendMacro calculations



Source: Distributions <u>CDC</u>, Comorbidities <u>CDC</u>, TrendMacro calculations

Recommended reading

U.S. Reports First Case of New Covid-19 Variant

Lukas I. Alpert and Daniela Hernandez *Wall Street Journal* December 29, 2020

Louisiana GOP Congressman-Elect Luke Letlow Dies of Covid-19

Natalie Andrews *Wall Street Journal* December 30, 2020

<u>Covid poses 'greatest threat to mental health since</u> second world war'

lan Sample *The Guardian* December 27, 2020

Executive Order on Expanding Educational Opportunity

Through School Choice

Donald J. Trump *The White House* December 28, 2020

Meme of day



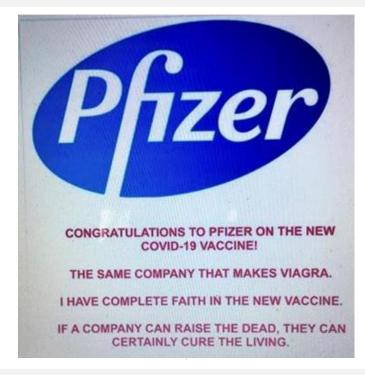
Paul Embery *The Post by Unherd* December 29, 2020

Mysterieuze, kunstzinnige protestmars in Nederland | Guerilla Mask Force

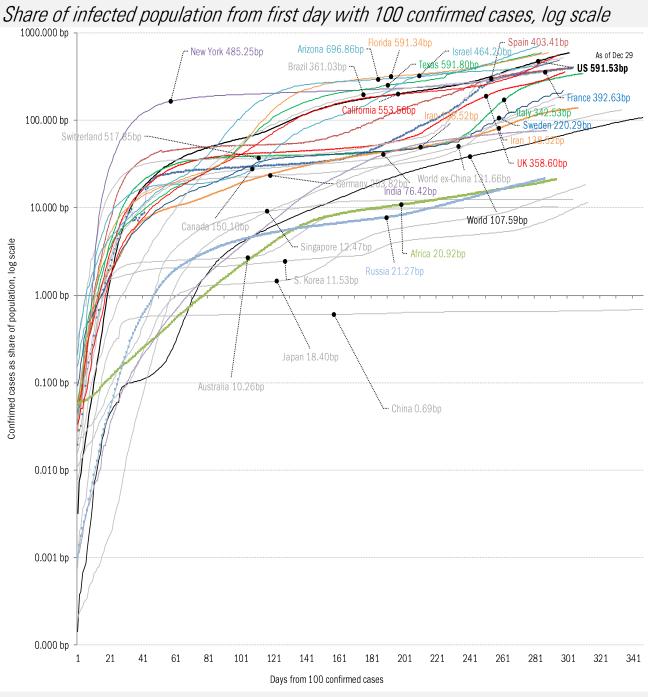
Cafe Weltschmerz December 1, 2020

Donald Trump, Michelle Obama Most Admired in 2020

Jeffrey M. Jones *Gallup* December 29, 2020



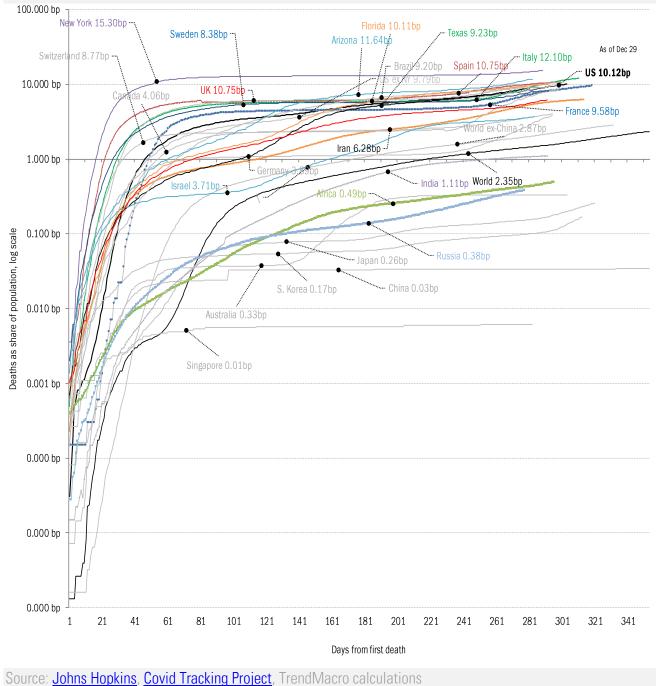
Source: Our beloved clients, and Power Line blog "The Week in Pictures"

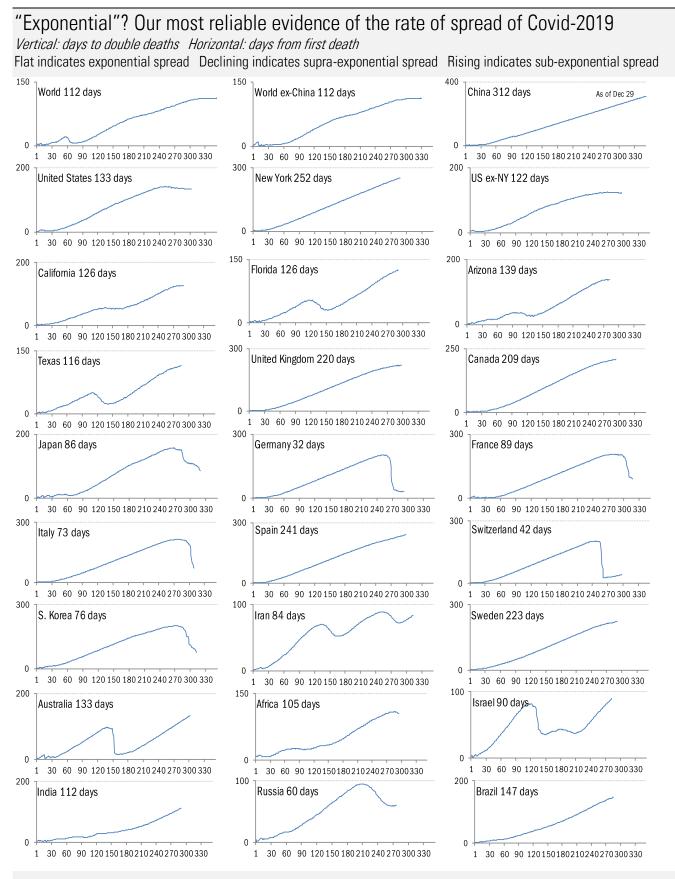


The coronavirus <u>case</u> accelerometer... tracking the world's infection curves Share of infected population from first day with 100 confirmed cases, log scale

Source: Johns Hopkins, Covid Tracking Project, TrendMacro calculations







Source: Johns Hopkins, Covid Tracking Project, 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 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

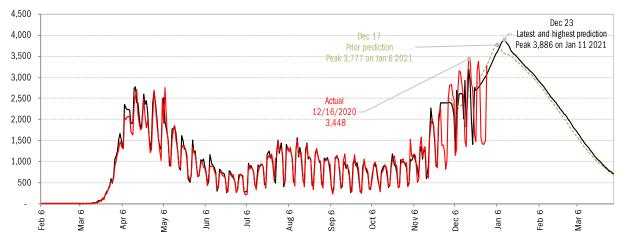


Source: Covid Tracking Project, TrendMacro calculations

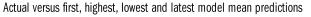
Reality-checking the models: actuals versus IHME predictions

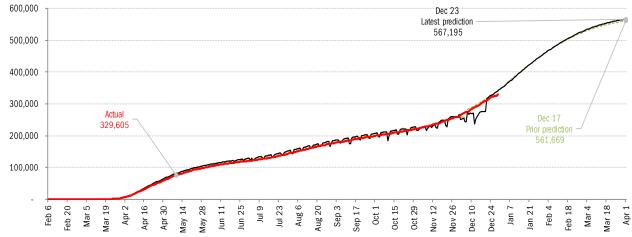
New daily fatalities

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

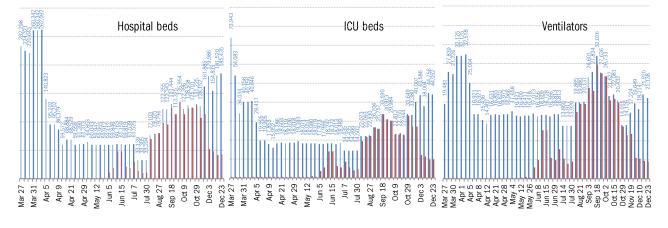


Cumulative fatalities



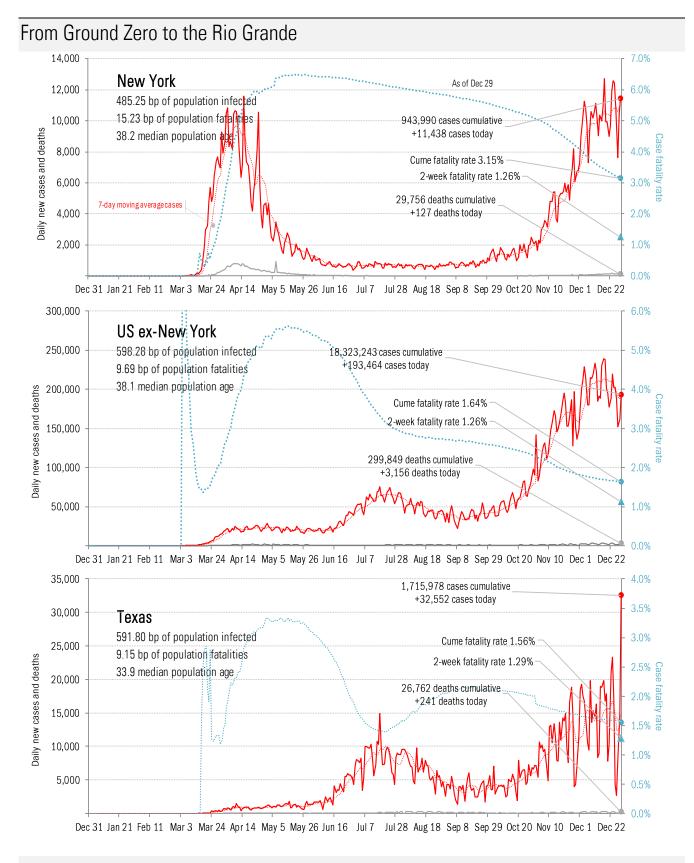


Healthcare system stress, peak and ultimate estimated at each model revision

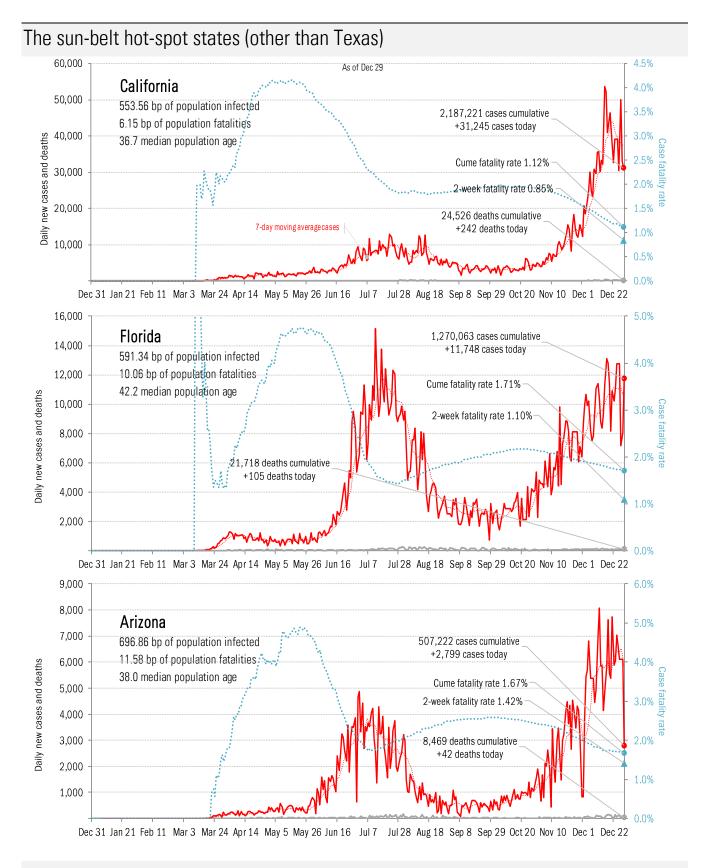


Source: IHME, Covid Tracking Project, TrendMacro calculations

As of Dec 29

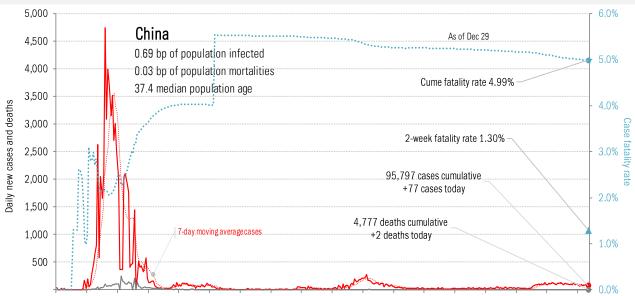


Source: Covid Tracking Project,, TrendMacro calculations

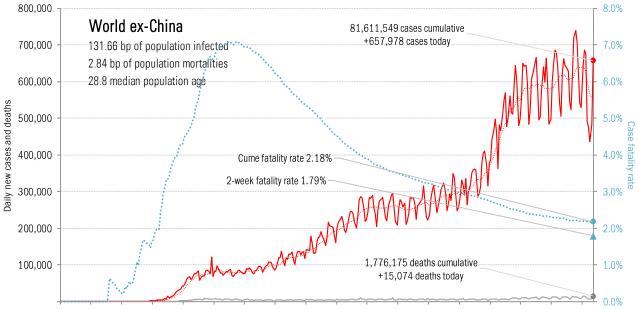


Source: Covid Tracking Project,, TrendMacro calculations

Patient zero... and then everyone else

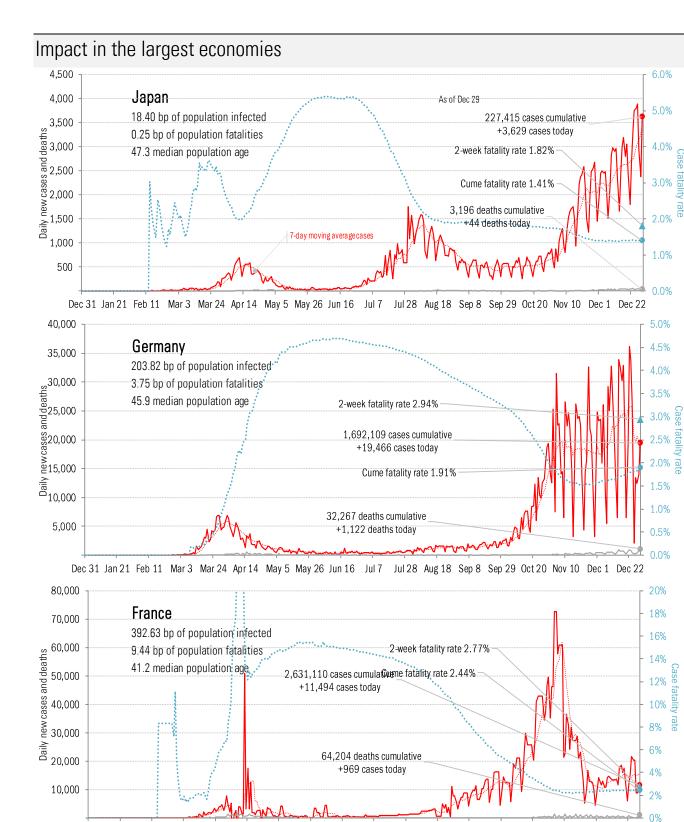


Dec 31 Jan 21 Feb 11 Mar 3 Mar 24 Apr 14 May 5 May 26 Jun 16 Jul 7 Jul 28 Aug 18 Sep 8 Sep 29 Oct 20 Nov 10 Dec 1 Dec 22



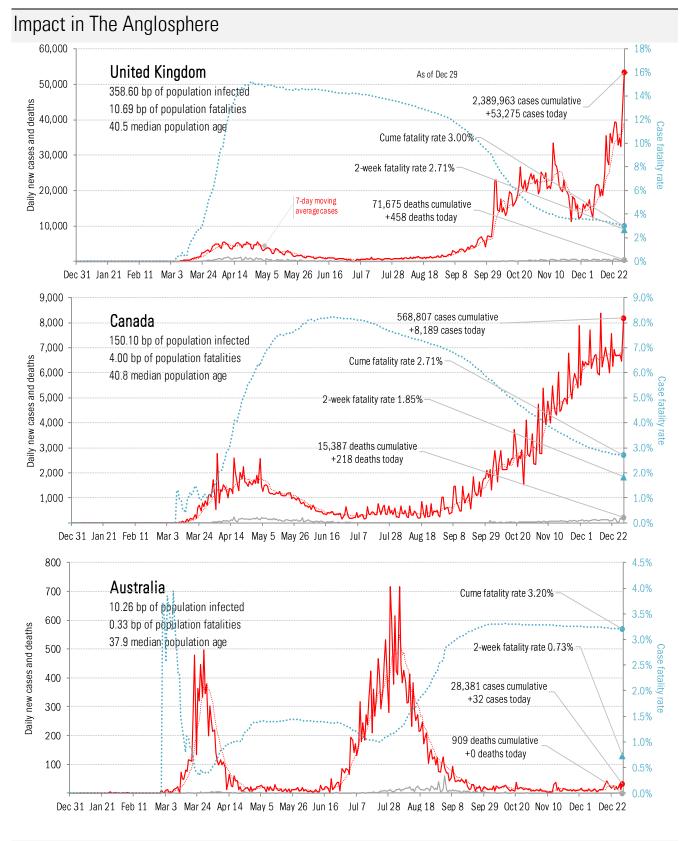
Dec 31 Jan 21 Feb 11 Mar 3 Mar 24 Apr 14 May 5 May 26 Jun 16 Jul 7 Jul 28 Aug 18 Sep 8 Sep 29 Oct 20 Nov 10 Dec 1 Dec 22

Source: Johns Hopkins, Covid Tracking Project, TrendMacro calculations

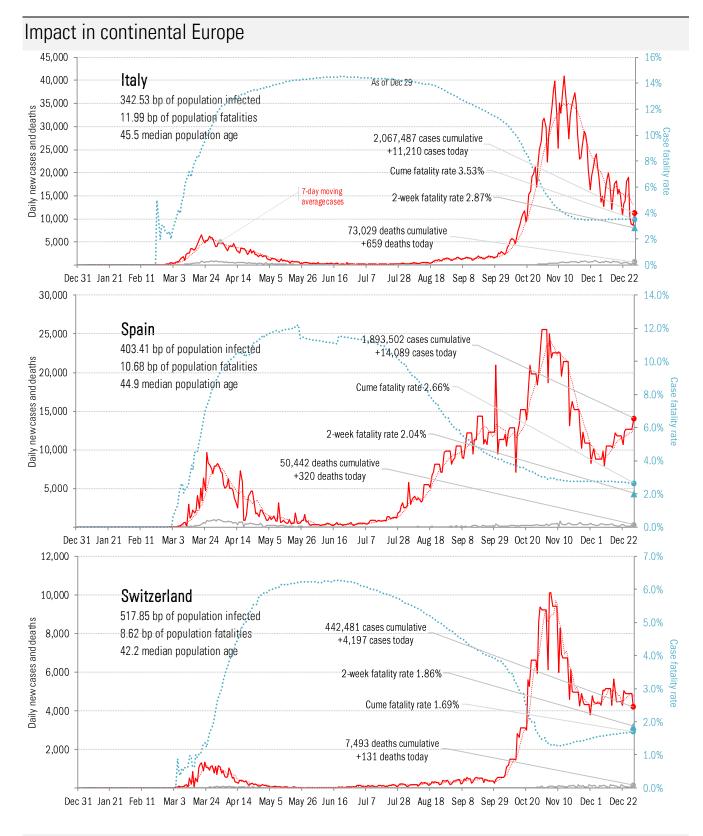


Dec 31 Jan 21 Feb 11 Mar 3 Mar 24 Apr 14 May 5 May 26 Jun 16 Jul 7 Jul 28 Aug 18 Sep 8 Sep 29 Oct 20 Nov 10 Dec 1 Dec 22

Source: Johns Hopkins, TrendMacro calculations

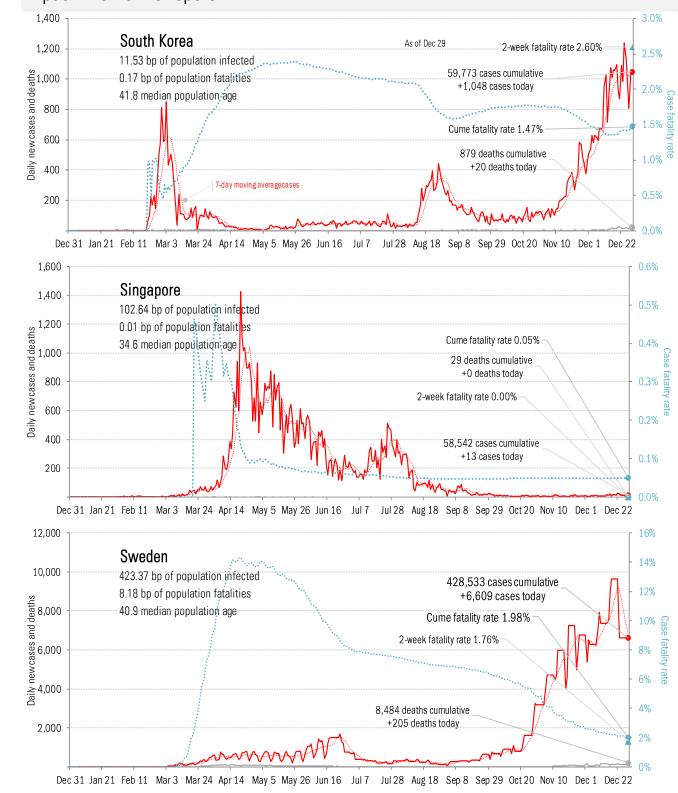


Source: Johns Hopkins, TrendMacro calculations

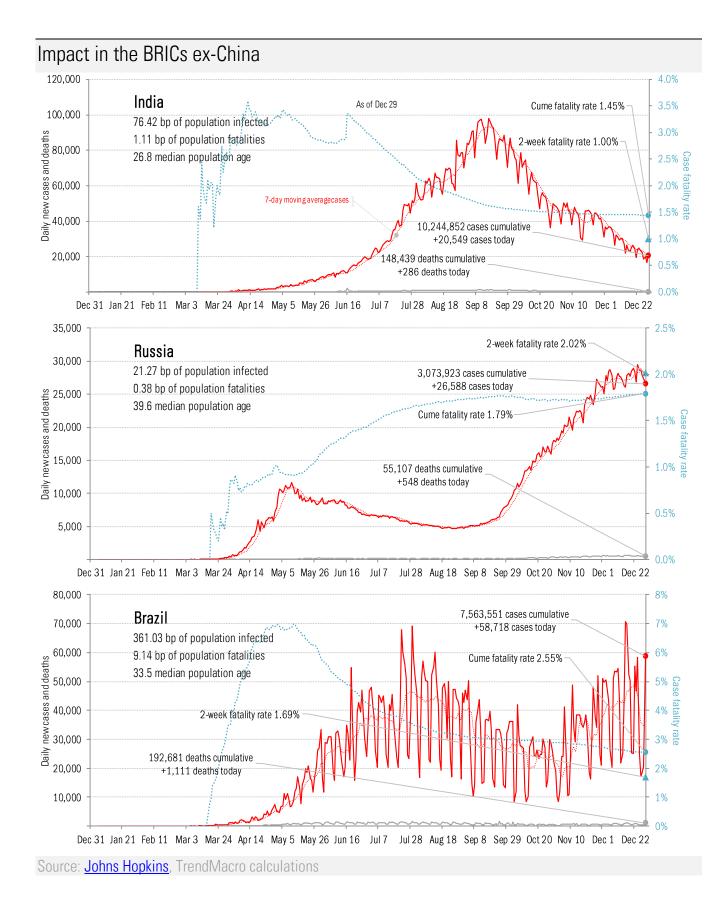


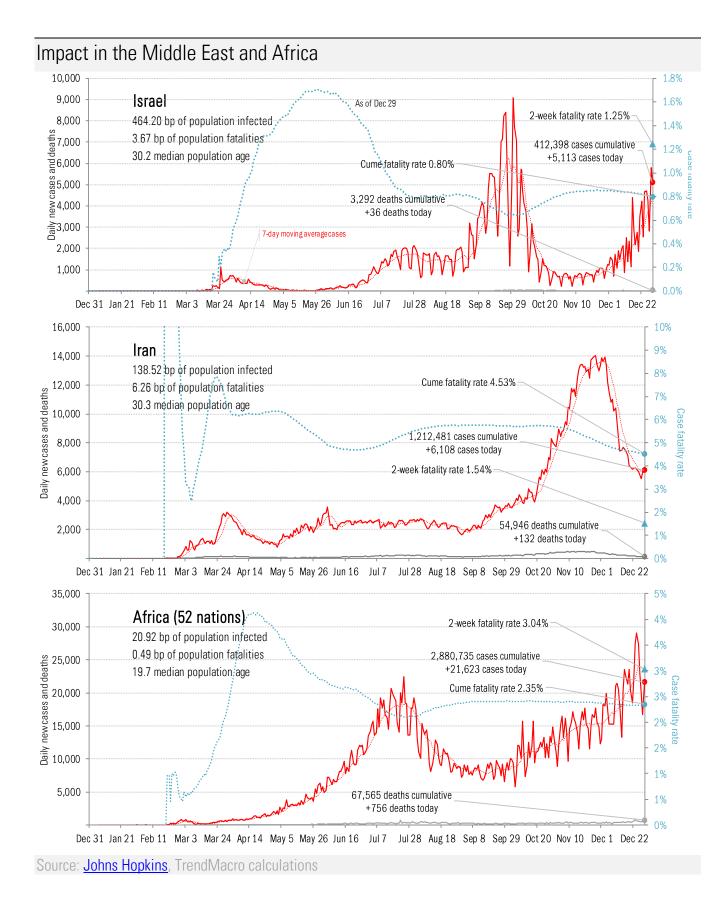
Source: Johns Hopkins, TrendMacro calculations

Impact in other hot-spots



Source: Johns Hopkins, TrendMacro calculations





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