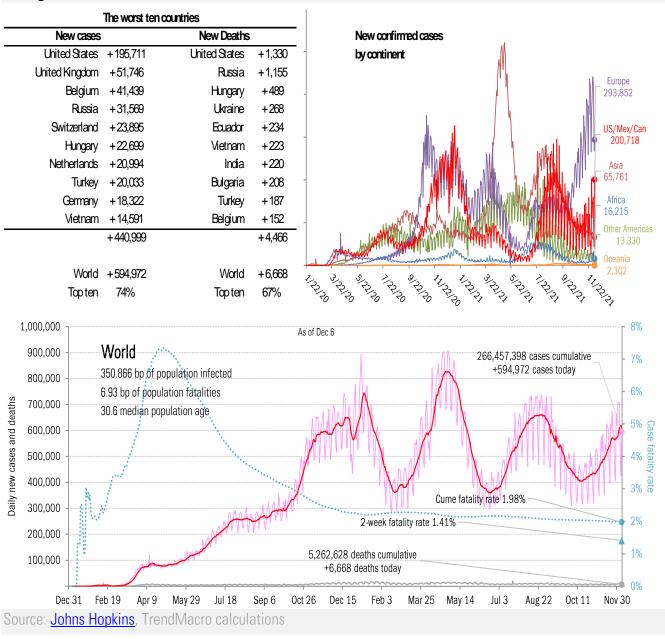


Trend Macrolytics, LLC Donald Luskin, Chief Investment Officer Thomas Demas, Managing Director Michael Warren, Energy Strategist

Data Insights: Covid-2019 Monitor

Tuesday, December 7, 2021

The global scorecard

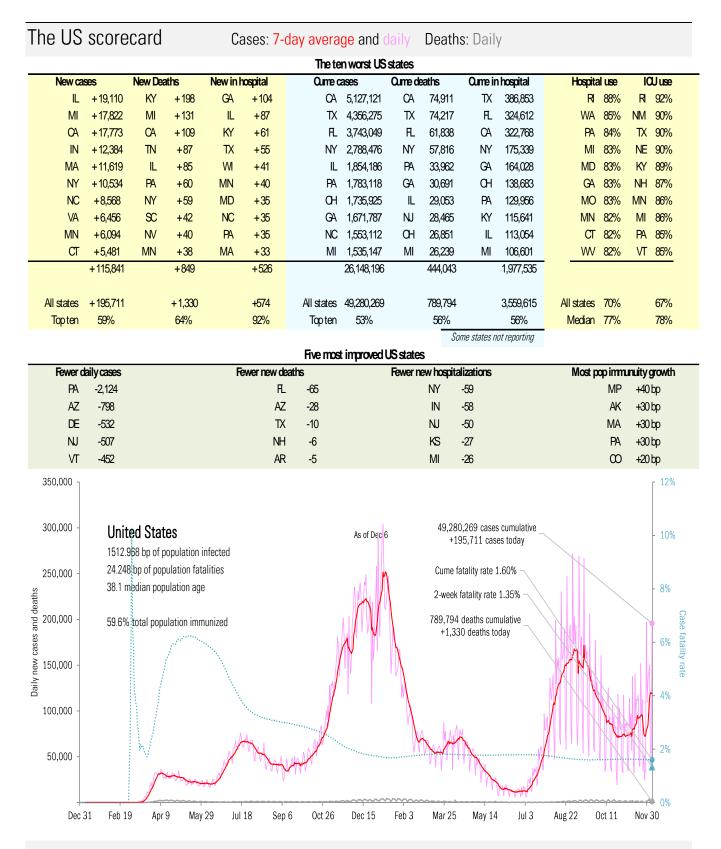


Cases: 7-day average and daily Deaths: Daily

For more information contact us:

Donald Luskin: 214 550 2121 <u>don@trendmacro.com</u> Thomas Demas: 704 552 3625 <u>tdemas@trendmacro.com</u>

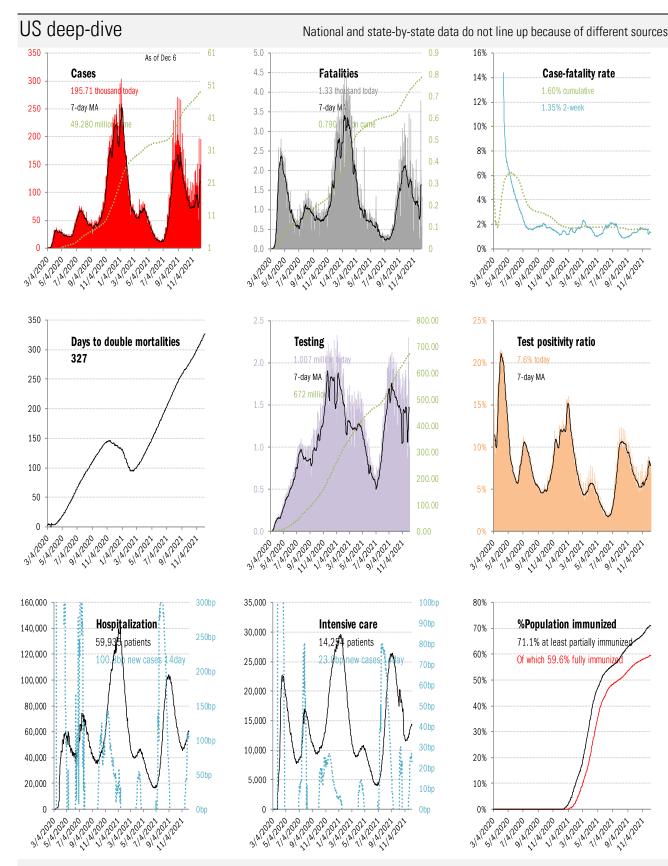
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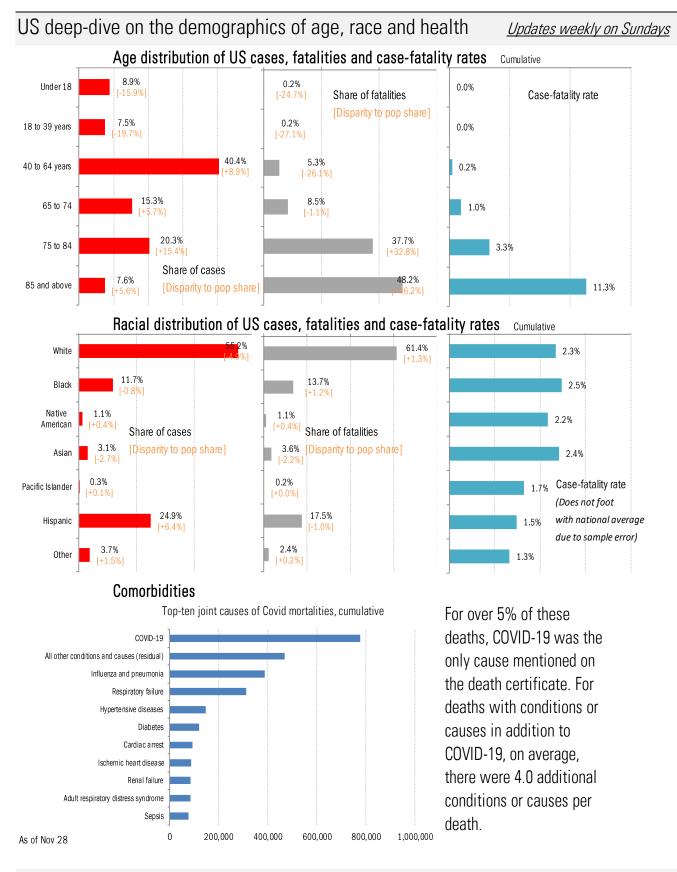
Source: Johns Hopkins, Dept. of Health and Human Services, CDC, TrendMacro calculations

Administer	ed	Cumu								Immunity	Full	Part
Doses Boosters		484,457,497 47,835,925 One dose							million	US	59.6%	71.1
				a/			~		million	UK	68.3%	75.0
				<u>% Pop</u>		Immune		New immune today +0.351 million			70.3%	77.1
otal population 241,902,75 ge 12 to 17 14,776,78					04,408,680	61%			Spain	80.6%	82.2	
					2,385,400	52%		million	Germany	68.5%	71.4	
				80% 140,674,654 100% 49,057,828		69% 89%		million	Italy Australia	73.2%	78.6	
		7,266,428	100 /0	2				million	Australia	73.9% 62.3%	78.0 68.7	
J&J 4%						Every Arr		L8 immun	ized in	Israel Canada	02.3 <i>%</i> 76.5%	81.2
r70						69	day	15		Japan	77.6%	79.3
AK 63.6%		State At least partial immunity as % population Full immunity as % population		Best	t i	by Eab 1		U		Africa	7.7%	11.7
						by Feb 12, 2022 73.3% of population		n >18 immunized		India	34.5%	57.6
				Middle		17.3% previously te				Brazil	64.2%	76.9
								adult herd immunity		China	76.9%	84.8
				Wors	st	30.17	V3 0070 u	,		Global data diff		
						WI		As of Dec 6		Γ	ME	l i
55.0%						66.4%					82.8%	
JJ.U /0						60.2%					72.9%	
	WA	ID	MT	ND	MN	IL	МІ	1	NY	VT	NH	
	73.4%	51.1%	60.3%	58.5%	69.7%	69.9%	61.8%		79.4%	86.5%	89.6%	
	65.5%	45.5%	52.2%	49.2%	63.4%	62.3%	55.3%		69.2%	74.0%	65.2%	
	OR	NV	WY	SD	IA	IN	00.070 OH	PA	NJ	MA	00.2 /0	L
	72.1%	67.1%	54.2%	67.9%	63.0%	56.3%	58.9%	82.8%	80.1%	86.9%		
	64.8%	55.0%	46.0%	55.2%	57.2%	51.0%	53.7%	59.3%	68.5%	72.2%		
	CA	UT	CO	NE	MO	KY	WV	VA	MD	СТ	RI	
-	79.8%	65.1%	72.2%	64.5%	60.5%	60.9%	69.3%	76.4%	77.7%	85.0%	84.3%	
	64.0%	55.9%	64.1%	57.9%	51.7%	52.8%	49.2%	65.9%	68.4%	72.8%	73.7%	
		AZ	NM	KS	AR	TN	NC	SC	DC	DE		•
		65.1%	77.7%	66.9%	61.1%	57.2%	71.5%	60.9%	83.0%	73.5%		
		55.3%	64.3%	55.3%	49.8%	49.8%	54.7%	51.9%	65.3%	61.9%		
				OK	LA	MS	AL	GA				
				63.6%	56.0%	54.1%	57.1%	59.4%				
HI				52.1%	49.2%	47.1%	46.5%	49.4%		F		
82.8%				TX					FL		PR	
61.7%				64.7%					72.5%		85.8%	
				55.3%					62.0%		74.6%	L
-	raphics	of US va	ccination									
70%61_7% of fomalos immunized			70%				100%]	0.00/ - (-10:			
	61.7% of females immunized			58.9% of whites immunized				90% -		<12 immuni	zea	
57.4% OF males				60% 48.8% of African Americans 59.1% of Hispanics				80% -	49.6% 12-1	U V		
50%				50% 59.1% of Hispanics				70% -	56.2% 16-1 57.3% 18/2			
101								60% -	61.7% 28-3			
40%				40% -				50% -		6/		
30%		r		30% -		1/			77.1% 50-6			
								40% -	88.7% 65-7			
20%				20% -		1		30% -	83.5% 75+			
10%				10% -				20% -		1		
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Source: Johns Hopkins, Covid Act Now, TrendMacro calculations



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

Recommended reading

Omicron: Keep Calm and Carry On

Marc Siegel *Wall Street Journal* December 6, 2021

<u>South Africa Fuels Omicron Hope as Hospitalizations in</u> Check

Michael Cohen and Janice Kew Bloomberg December 6, 2021

<u>Omicron Is Fast Moving, but Perhaps Less Severe, Early</u> Reports Suggest

Lynsey Chutel, Richard Pérez-Peña and Emily Anthes New York Times December 6, 2021

A note on sampling biases in the Bangladesh mask trial

Maria Chikina et al. *Cornell University* December 2, 2021

Meme of the day

Biden goes out to eat maskless in DC despite cold, with Kennedy Center event on Sunday

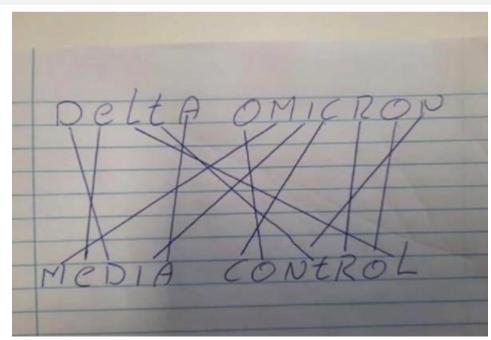
Kelly Laco *Fox News* December 4, 2021

Broad Institute researcher wants to fade into obscurity, but first she hopes her COVID book is a bestseller

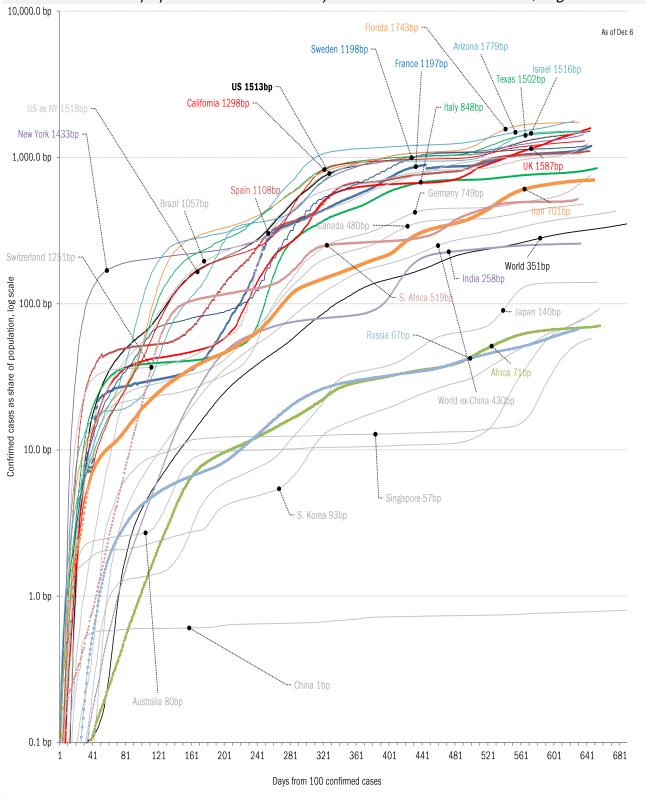
Jonathan Saltzman *Boston Globe* November 14, 2021

Initial Hospital Data in Omicron Epicenter Shows

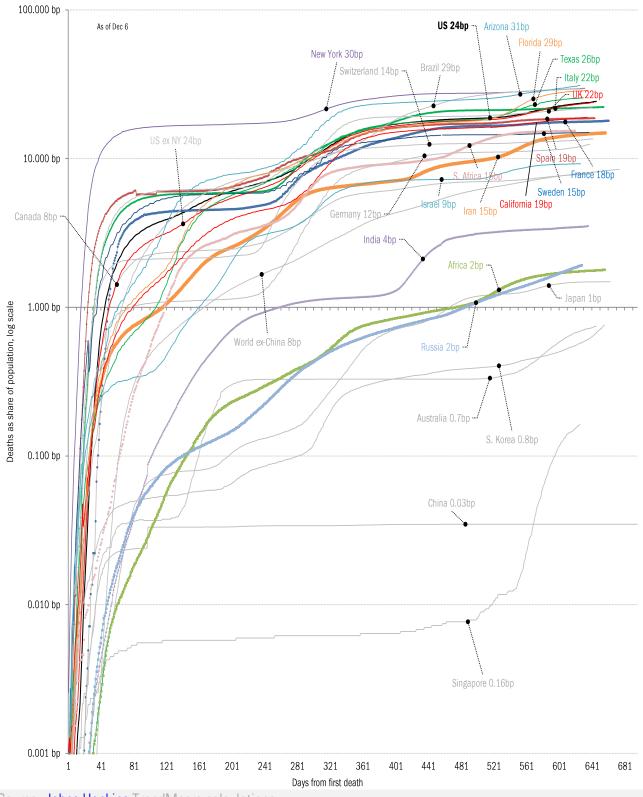
<u>Milder Disease</u> Janice Kew *Bloomberg* December 5, 2021



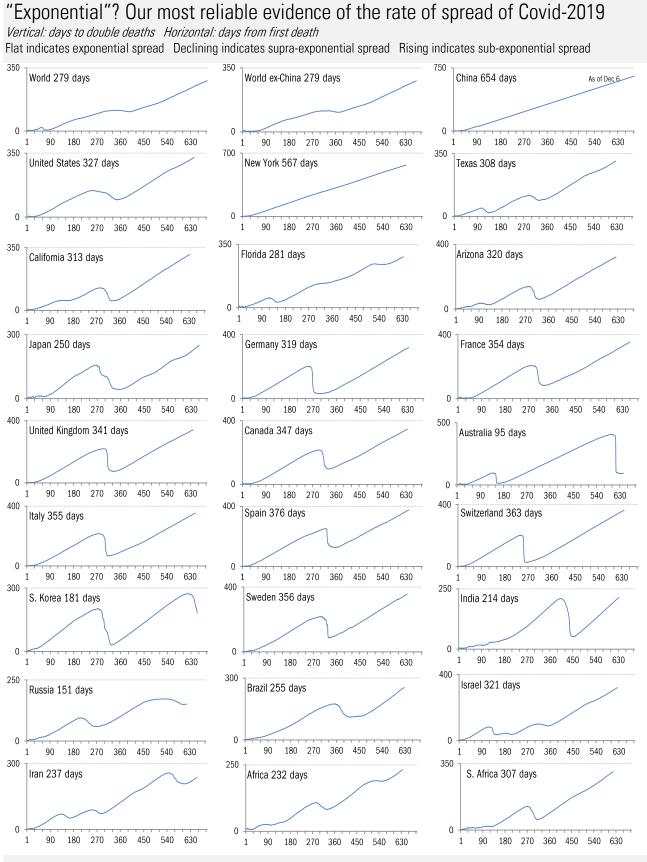
Source: Our beloved clients, Power Line blog "The Week in Pictures" and CTUP



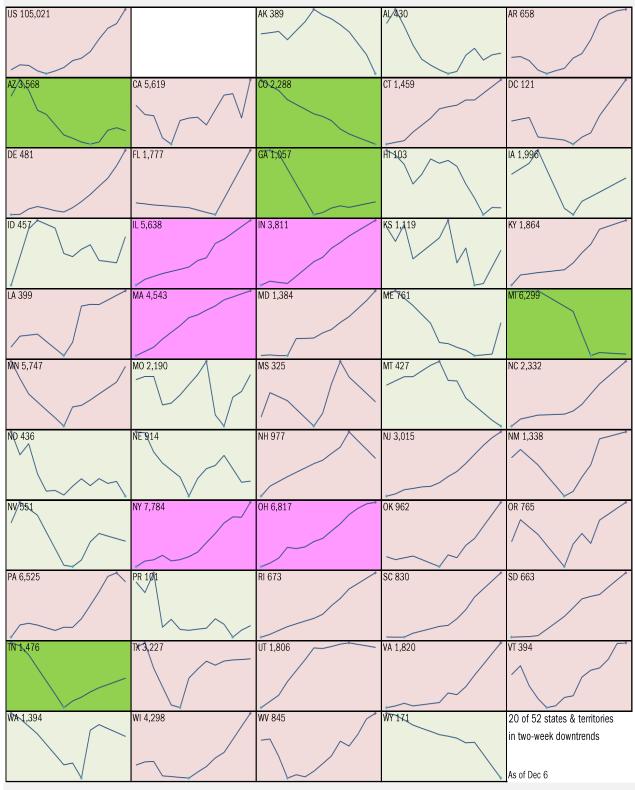
The coronavirus <u>case</u> accelerometer... tracking the world's infection curves *Share of infected population from first day with 100 confirmed cases, log scale*



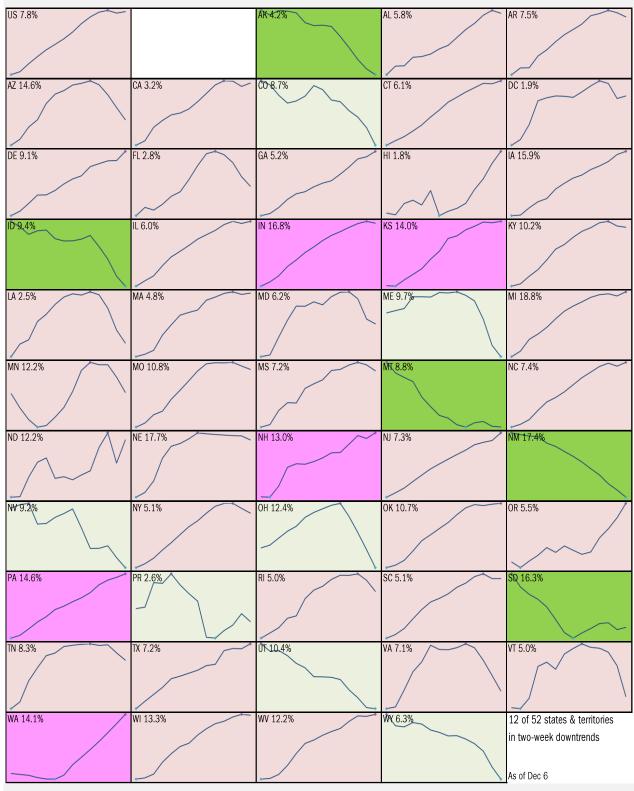
The coronavirus <u>mortality</u> accelerometer ... tracking the world's fatality curves *Share of deceased population from day of first fatality, log scale*



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



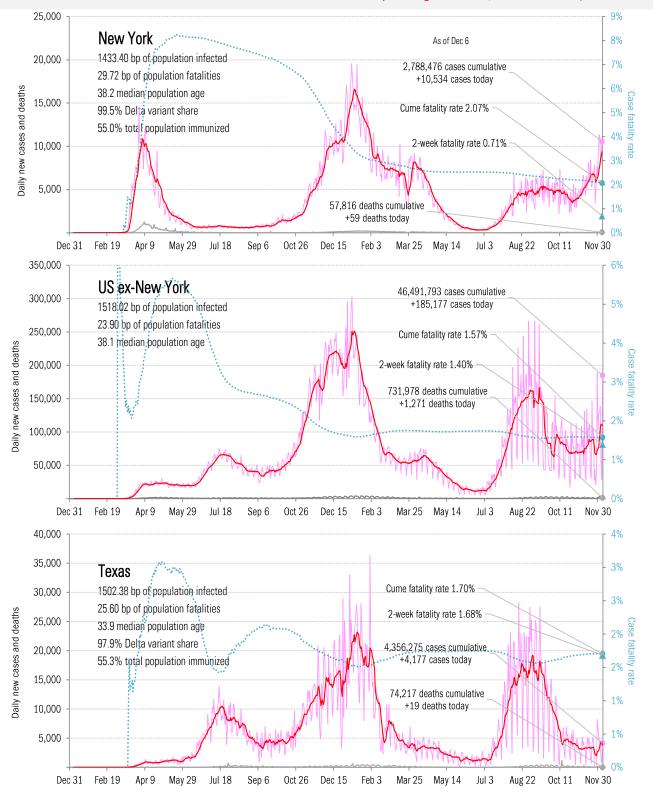
Alt requirement to <u>Open Up America Again</u>: 14-day "downward trajectory" in pos tests *14-day moving average, last 14 days Most recent value displayed* • High • Low Downward trajectory Five best Upward trajectory Five worst



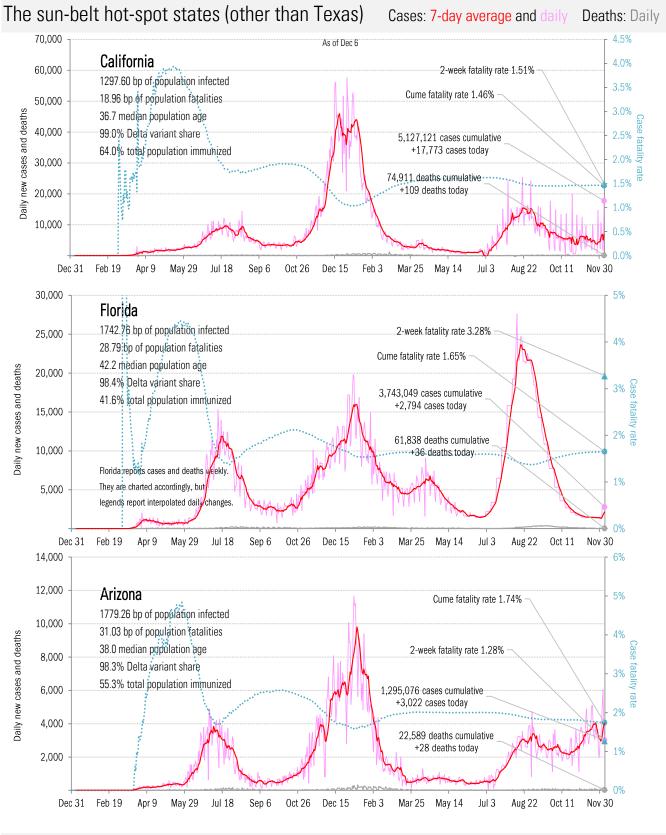
Source: Covid Act Now, TrendMacro calculations

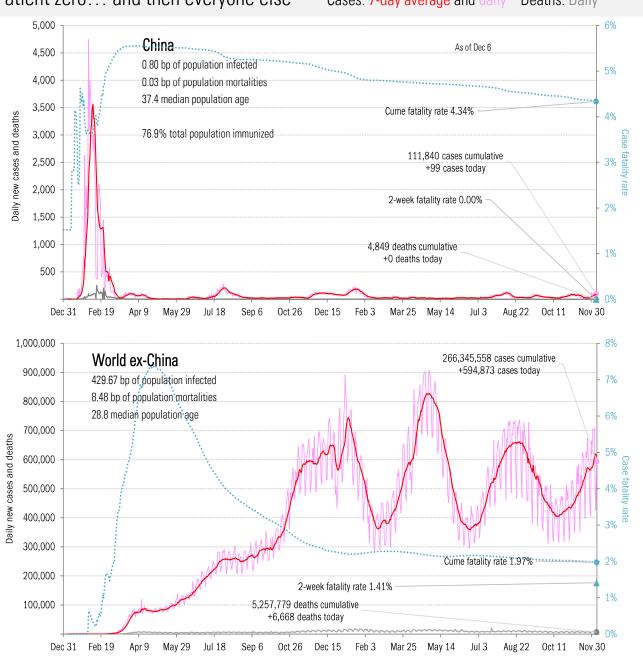
From Ground Zero to the Rio Grande

Cases: 7-day average and daily Deaths: Daily



Source: Johns Hopkins, TrendMacro calculations



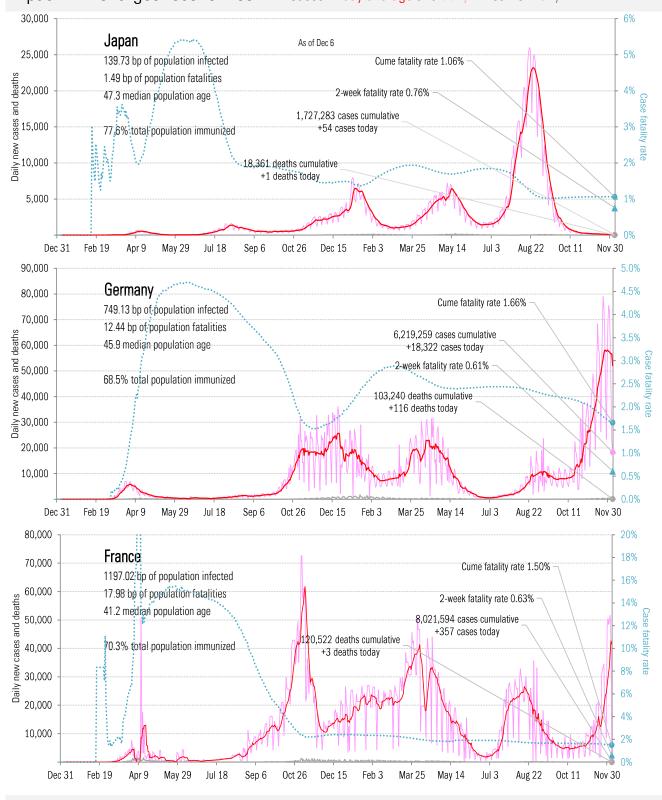


Patient zero... and then everyone else

Cases: 7-day average and daily Deaths: Daily

Source: Johns Hopkins, TrendMacro calculations

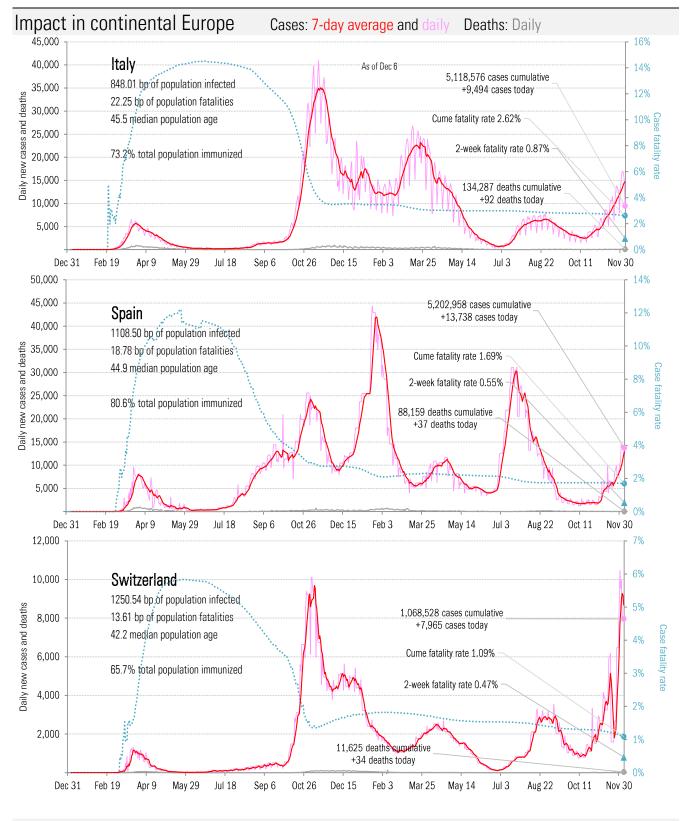
Impact in the largest economies Cases: 7-day average and daily Deaths: Daily



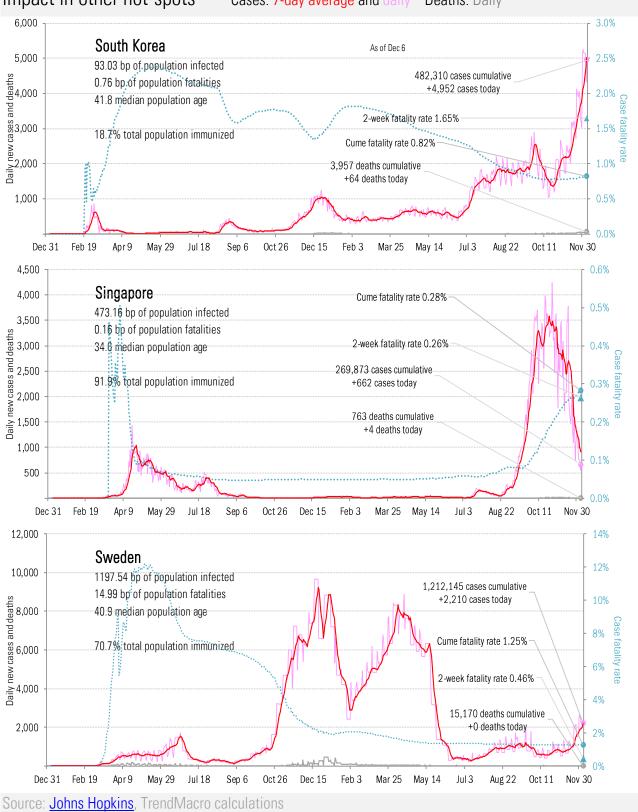
Source: Johns Hopkins, TrendMacro calculations

Impact in The Anglosphere Cases: 7-day average and daily Deaths: Daily 80,000 18% United Kingdom 16% 70,000 As of Dec 6 1586.72 bp of population infected strap pure set 60,000 50,000 \$50,000 \$50,000 \$50,000 \$50,000 \$50,000 \$50,000 \$50,000 \$50,000 \$50,000 \$50,000 \$50,000 14% 10,575,062 cases cumulative 21.92 bp of population fatalities +51,746 cases today 12% 40.5 median population age 10% fatality Cume fatality rate 1.38% 68.3% total population immunized 8% rate 2-week fatality rate 0.30% 6% Alia 20,000 6,101 deaths cumulative 4% +46 deaths today 10,000 2% 0% Dec 31 Feb 19 Apr 9 May 29 Jul 18 Sep 6 Oct 26 Dec 15 Feb 3 Mar 25 Aug 22 Oct 11 May 14 Jul 3 Nov 30 12,000 9.0% Canada 1,820,693 cases cumulative 8.0% +5,007 cases today 10,000 480.46 bp of population infected 7.0% 7.88 bp of population fatalities Daily new cases and deaths 8,000 6.0% 40.8 median population age Cume fatality rate 1.64% 5.0% 6,000 76.5% total population immunized 2-week fatality rate 0.78% 4.0% 4,000 3.0% 2.0% 2,000 29,854 deaths cumulative 1.0% +33 deaths today 0.0% Aug 22 Dec 31 Feb 19 Apr 9 May 29 Jul 18 Sep 6 Oct 26 Dec 15 Feb 3 Mar 25 May 14 Jul 3 Oct 11 Nov 30 3,000 4.5% Australia 4.0% 2,500 7972 bp of population infected 3.5% 0.35 bp of population fatalities Daily new cases and deaths 2,000 379 median population age 220,555 cases cumulative 2.5% +1,434 cases today 1,500 73.9% total population immunized Cume fatality rate 0.94% 2.0% 1,000 1.5% 2-week fatality rate 0.55% 1.0% 500 2,065 deaths cumulative 0.5% +9 deaths today 0.0% Dec 31 Feb 19 Apr 9 May 29 Jul 18 Sep 6 Oct 26 Dec 15 Feb 3 Mar 25 May 14 Jul 3 Aug 22 Oct 11 Nov 30



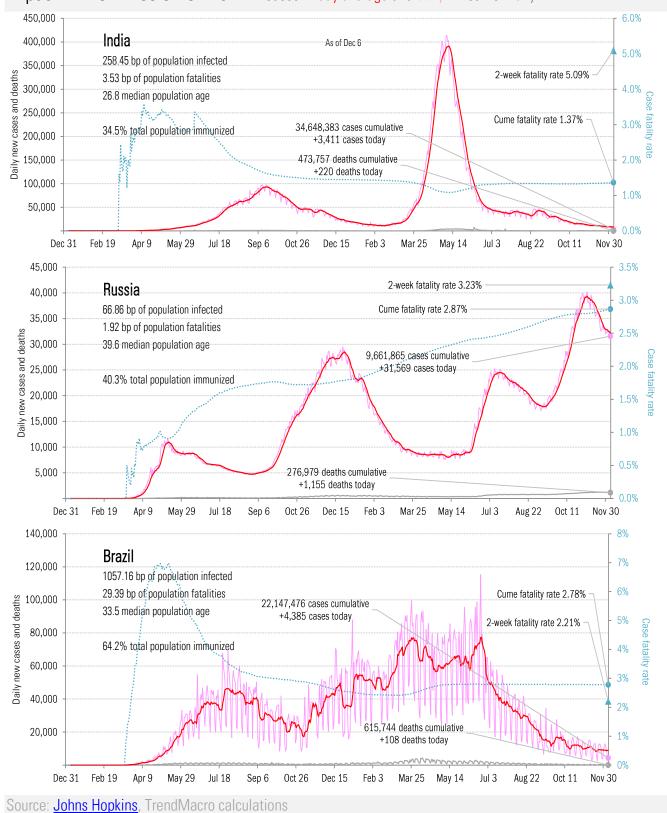






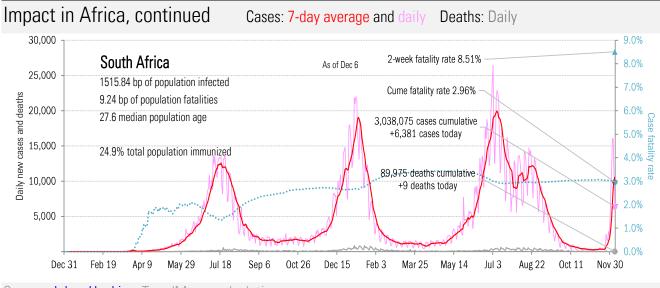
Impact in the BRICs ex-China Cas

Cases: 7-day average and daily Deaths: Daily



Impact in the Middle East and Africa Cases: 7-day average and daily Deaths: Daily 18,000 2% Israel 16,000 2% As of Dec 6 1515.84 bp of population infected 14,000 Cume fatality rate 0.61% 1% Daily new cases and deaths 9.24 bp of population fatalities 12,000 1% 30.2 median population age 2-week fatality rate 0.50% 10,000 1% 62.3% total population immunized 1,346,670 cases cumulative 8,000 1% +755 cases today 6,000 1% 8,209 deaths cumulative 4,000 0% +5 deaths today 2,000 0% 0% Feb 19 May 29 Dec 31 Apr 9 Jul 18 Sep 6 Oct 26 Dec 15 Feb 3 Mar 25 May 14 Jul 3 Aug 22 Oct 11 Nov 30 60,000 10% Cume fatality rate 2.12% Iran 9% 50,000 701.21 bp of population infected 8% 14.88 bp of population fatalities 2-week fatality rate 1.41% Daily new cases and deaths 7% 40,000 30.3 median population age 6% 6,137,821 cases cumulative 56.6% total population immunized 30,000 +3,356 cases today 5% rate 4% 130,277 deaths cumulative 20,000 +77 deaths today 3% 2% 10,000 1% 0% Dec 31 Aug 22 Feb 19 Apr 9 May 29 Jul 18 Sep 6 Oct 26 Dec 15 Feb 3 Mar 25 May 14 Jul 3 Oct 11 Nov 30 60,000 5% Africa (52 nations) 4% 50,000 70.66 bp of population infected 4% 2-week fatality rate 2.65% 1.79 bp of population fatalities Daily new cases and deaths 40,000 19.7 median population age 3% Cume fatality rate 2.53% 3% 9,730,483 cases cumulative 7.7% total population immunized 30,000 +16,215 cases today 2% 20,000 2% 1% 10,000 246.010 deaths cumulative 1% +212 deaths today 0% Dec 31 Feb 19 Apr 9 May 29 Jul 18 Sep 6 Oct 26 Dec 15 Feb 3 Mar 25 Jul 3 Aug 22 Oct 11 Nov 30 May 14





Source: Johns Hopkins, TrendMacro calculations