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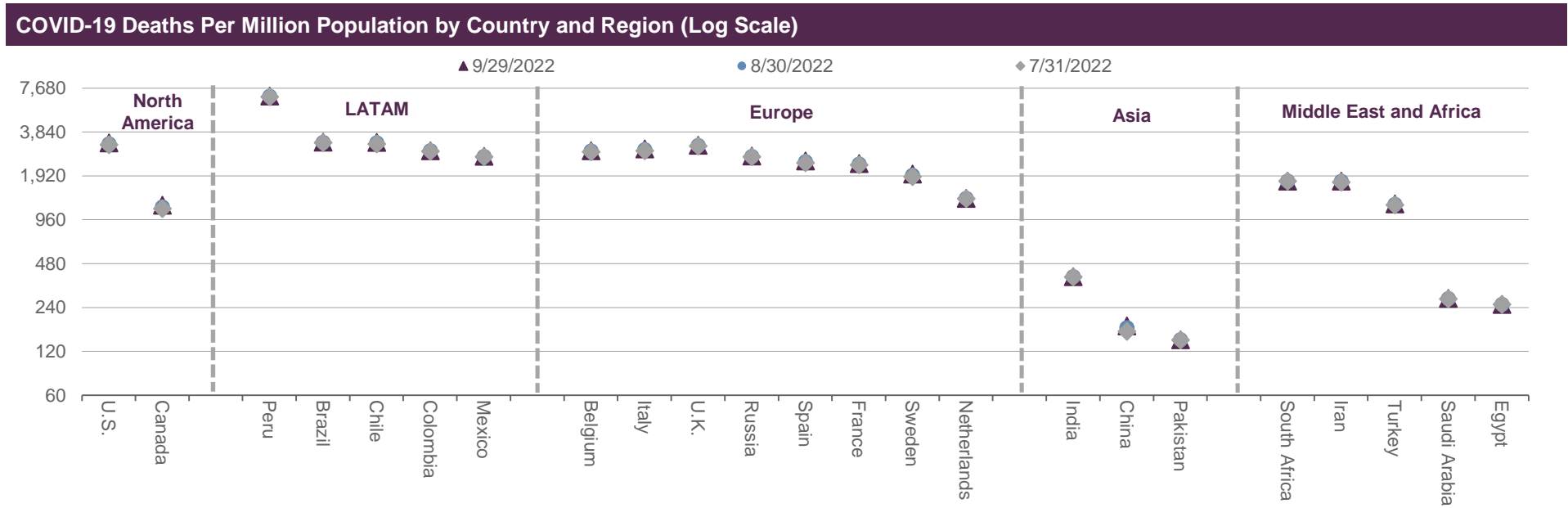
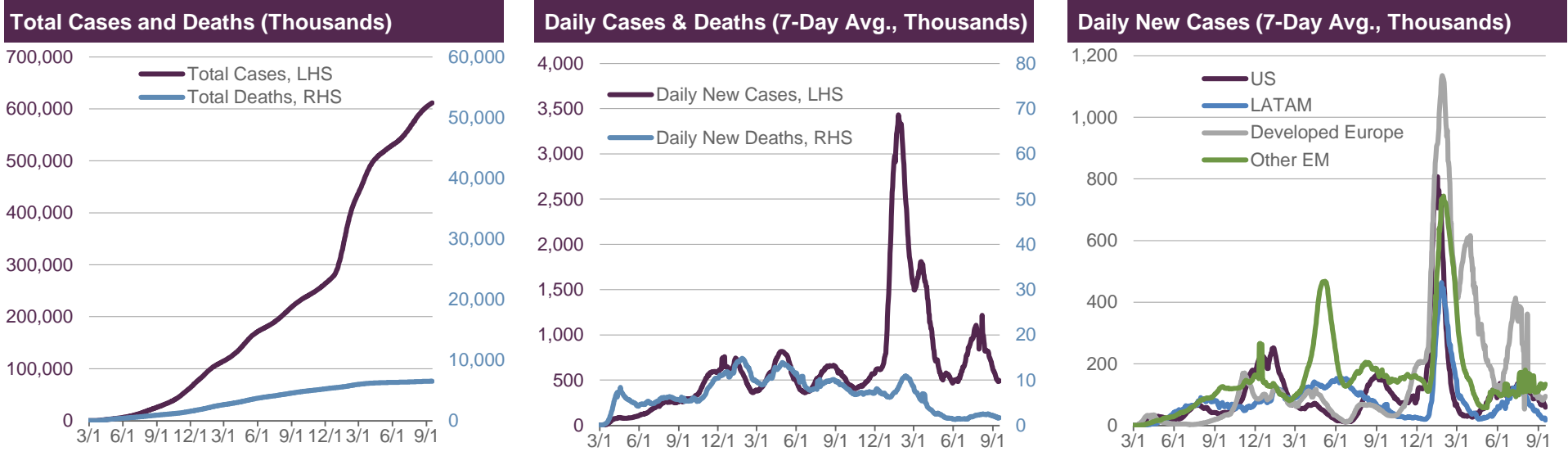
Guggenheim Partners

Global COVID-19 and Vaccine Monitor

September 30, 2022

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COVID-19 Globally



Source: Guggenheim Investments, Bloomberg, Ourworldindata.com. Data as of 9/29/2022

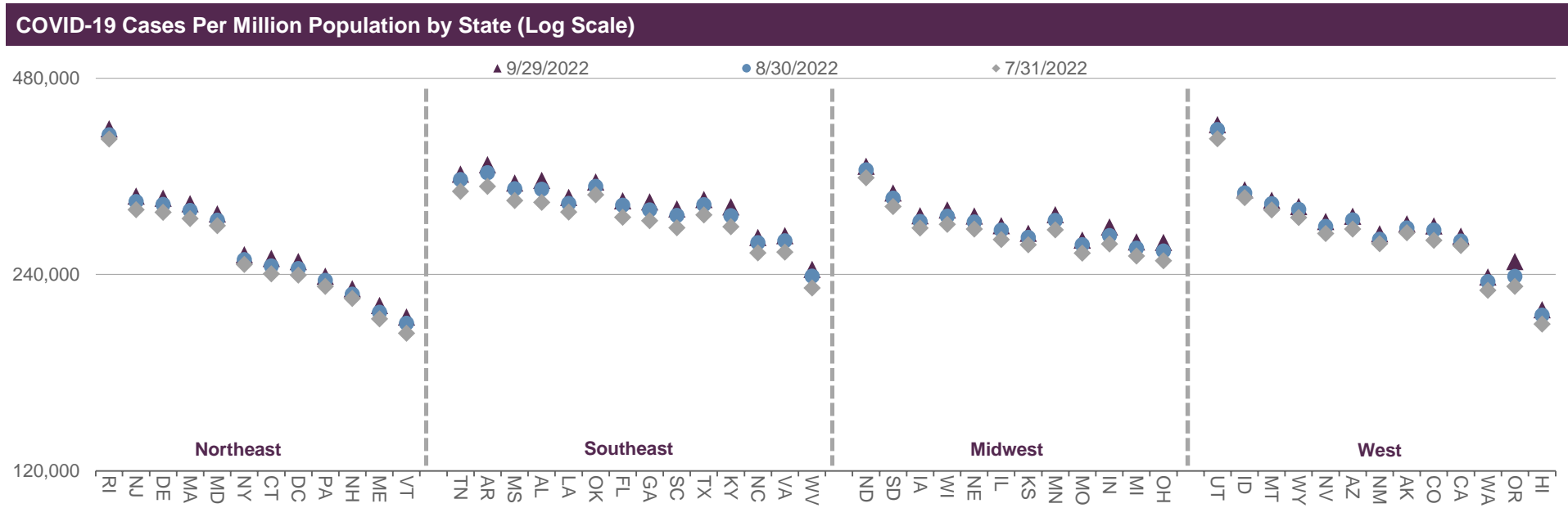
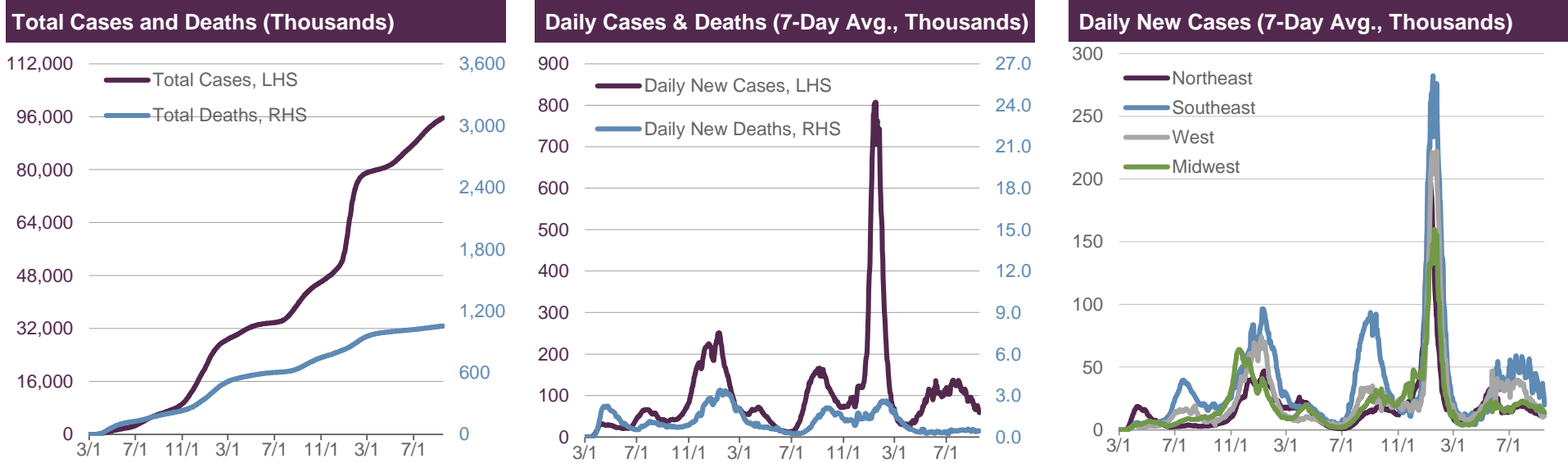
Key COVID-19 Statistics

Reported COVID-19 Cases: Mortality Rates and Other Statistics

Country	Total Cases	New Cases	Total Deaths	New Deaths	Cases Per 1M Pop.	Share of Total Cases		Share of Closed Cases		Tests Per 1M Pop.	Positive Rate (=Cases/Tests)
						Active (%)	Closed (%)	Recovered (%)	Deceased (%)		
USA	98,166,904	31,516	1,084,282	226	292,979	2%	98%	99%	1%	3,337,141	9%
India	44,587,307	3,947	528,629	18	31,614	0%	100%	99%	1%	634,165	5%
France	35,342,950	51,366	155,078	33	538,791	2%	98%	100%	0%	4,138,772	13%
Brazil	34,706,757	9,894	686,027	49	160,722	1%	99%	98%	2%	295,339	54%
Germany	33,312,373	96,367	149,948	140	394,773	3%	97%	100%	0%	1,449,717	27%
S. Korea	24,740,635	30,846	28,364	46	481,636	3%	97%	100%	0%	307,664	157%
UK	23,621,952	0	189,919	0	343,920	0%	100%	99%	1%	7,607,650	5%
Italy	22,432,803	37,521	177,054	30	372,249	2%	98%	99%	1%	4,092,677	9%
Japan	21,229,216	42,173	44,678	127	169,009	4%	96%	100%	0%	606,650	28%
Russia	20,948,470	38,739	387,163	109	143,409	3%	97%	98%	2%	1,871,648	8%
Turkey	16,873,793	0	101,139	0	195,364	N/A	N/A	N/A	N/A	1,884,231	10%
Spain	13,412,263	0	114,084	0	286,616	1%	99%	99%	1%	10,065,888	3%
Vietnam	11,477,886	978	43,148	1	115,588	7%	93%	100%	0%	864,319	13%
Australia	10,234,015	5,558	15,168	43	391,172	0%	100%	100%	0%	3,013,294	13%
Argentina	9,708,420	0	129,897	0	210,483	0%	100%	99%	1%	774,342	27%
Netherlands	8,427,791	2,934	22,648	2	489,426	1%	99%	100%	0%	1,225,768	40%
Iran	7,548,320	352	144,421	5	87,364	1%	99%	98%	2%	626,103	14%
Mexico	7,084,488	0	330,065	0	53,684	6%	94%	95%	5%	139,378	39%
Indonesia	6,429,767	2,003	158,093	17	22,963	0%	100%	98%	2%	388060	6%
Taiwan	6,417,895	44,834	11,003	53	268,382	13%	87%	100%	0%	1,087,197	25%
Colombia	6,307,372	820	141,794	25	121,069	0%	100%	98%	2%	700,987	17%
Poland	6,289,668	4,271	117,539	30	166,597	N/A	N/A	N/A	N/A	988,922	17%
Portugal	5,490,639	2,671	25,024	2	542,008	1%	99%	100%	0%	4441015	12%
Ukraine	5,177,217	0	109,206	0	119,993	2%	98%	98%	2%	N/A	N/A
Austria	5,118,832	12,637	20,738	4	561,187	2%	98%	100%	0%	21,657,069	3%
Total	622,340,730	463,344	6,547,097	1,218	N/A	2%	98%	98.9%	1.1%	N/A	N/A

Source: Guggenheim Investments, Worldometers.info. Data as of 9/29/2022

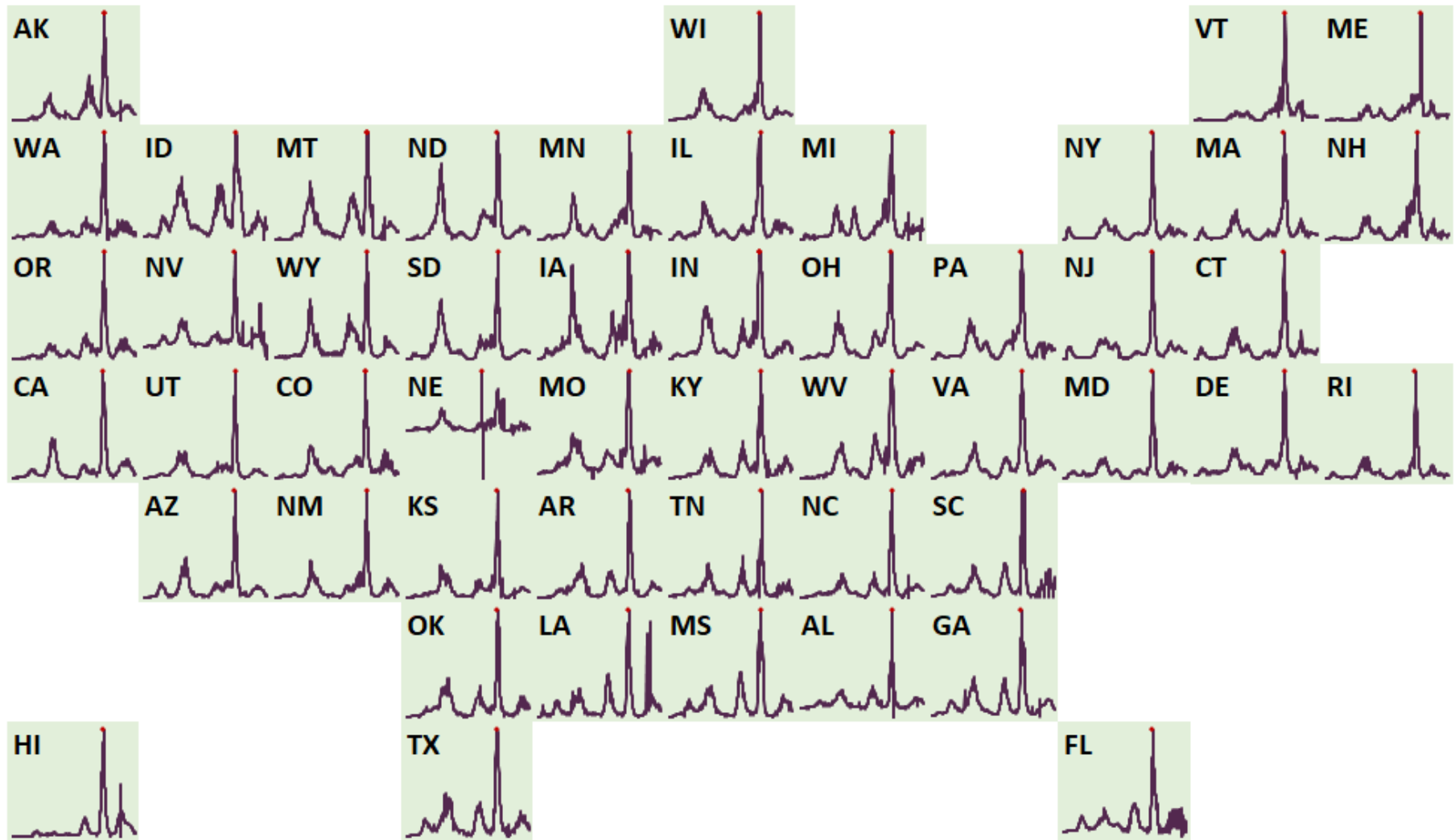
COVID-19 in the U.S.



Source: Guggenheim Investments, Bloomberg. Data as of 9/29/2022

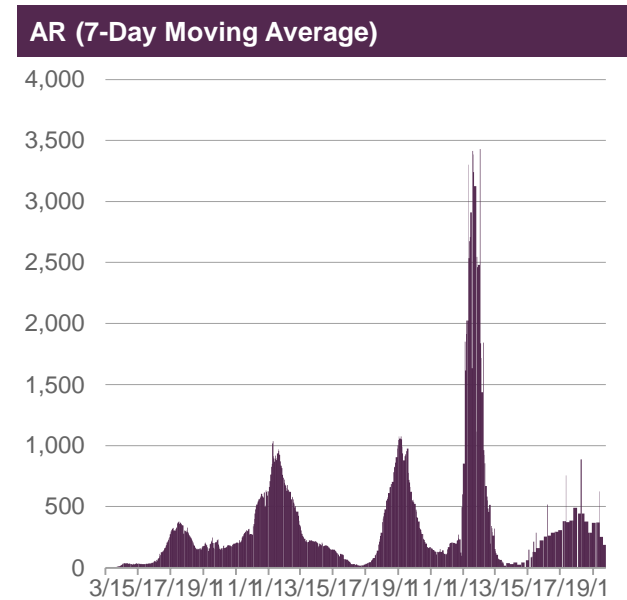
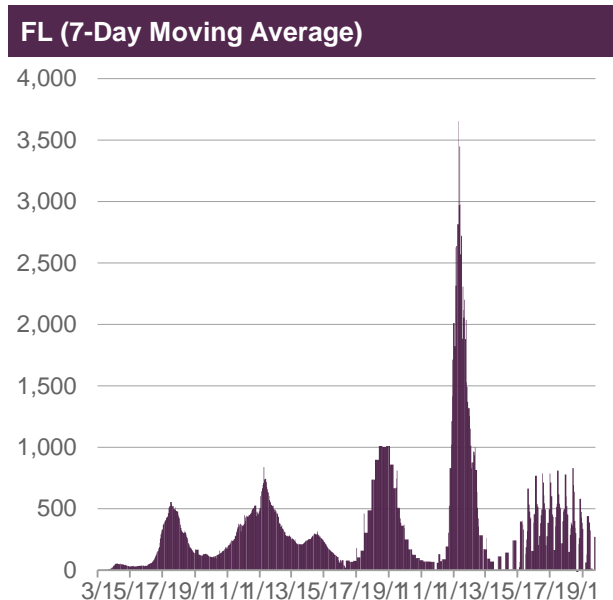
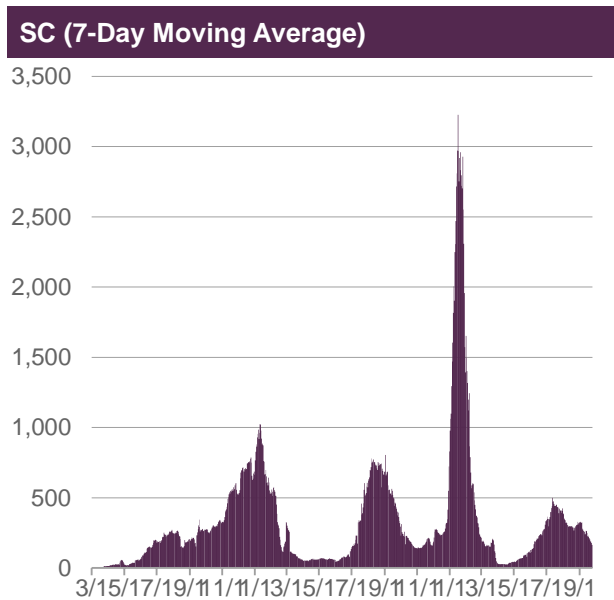
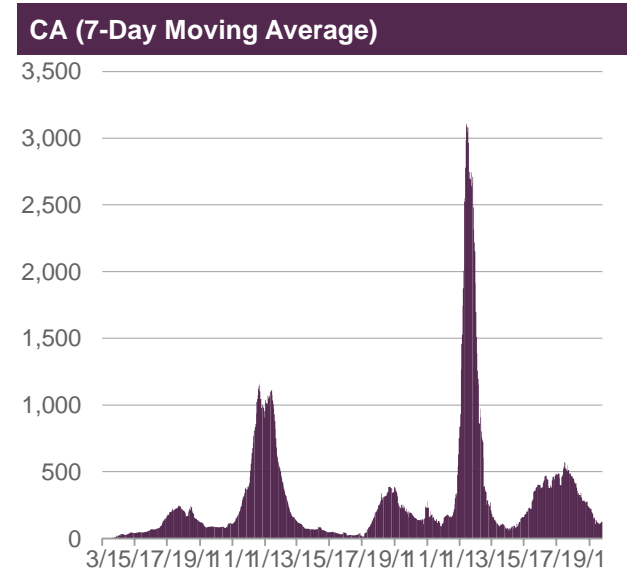
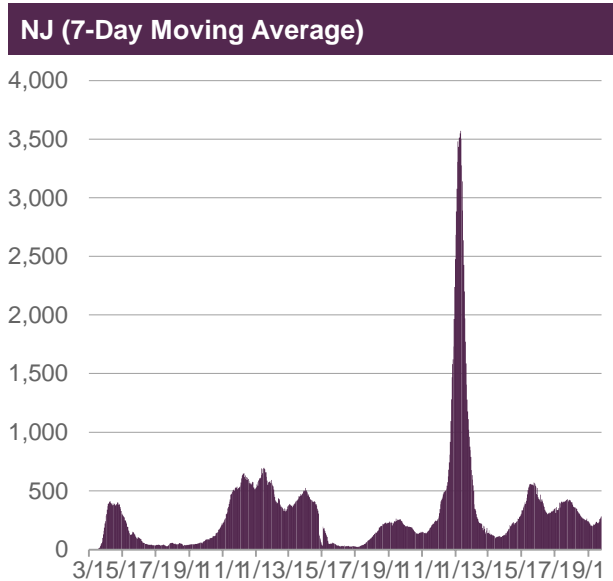
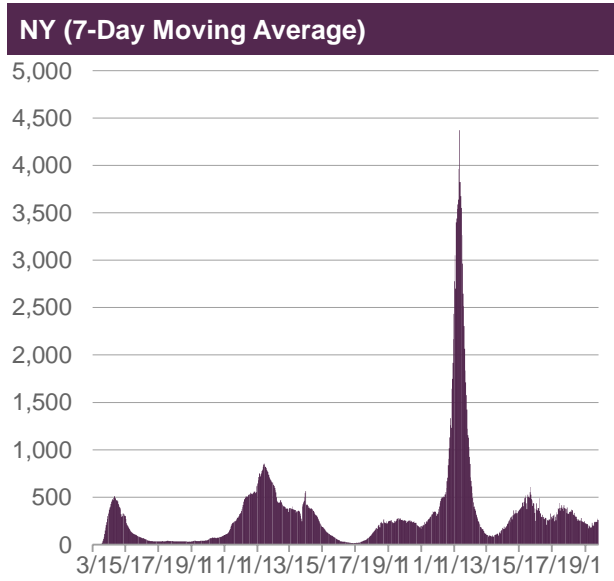
U.S. Map of Daily New Cases

Daily New Cases by State (7-Day Moving Average)



Source: Guggenheim Investments, Bloomberg. Data as of 9/29/2022; Start date: 1/23/2020.

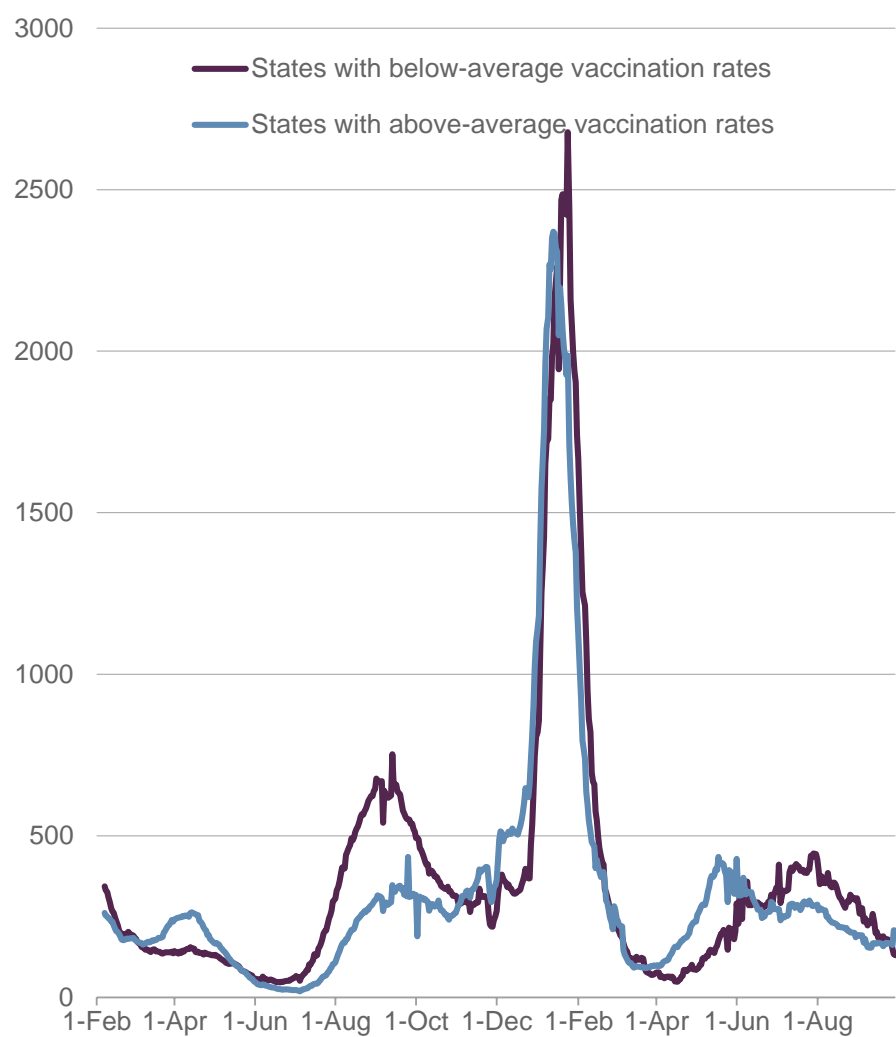
Daily New Cases per Million Population in Major Epicenters: The U.S.



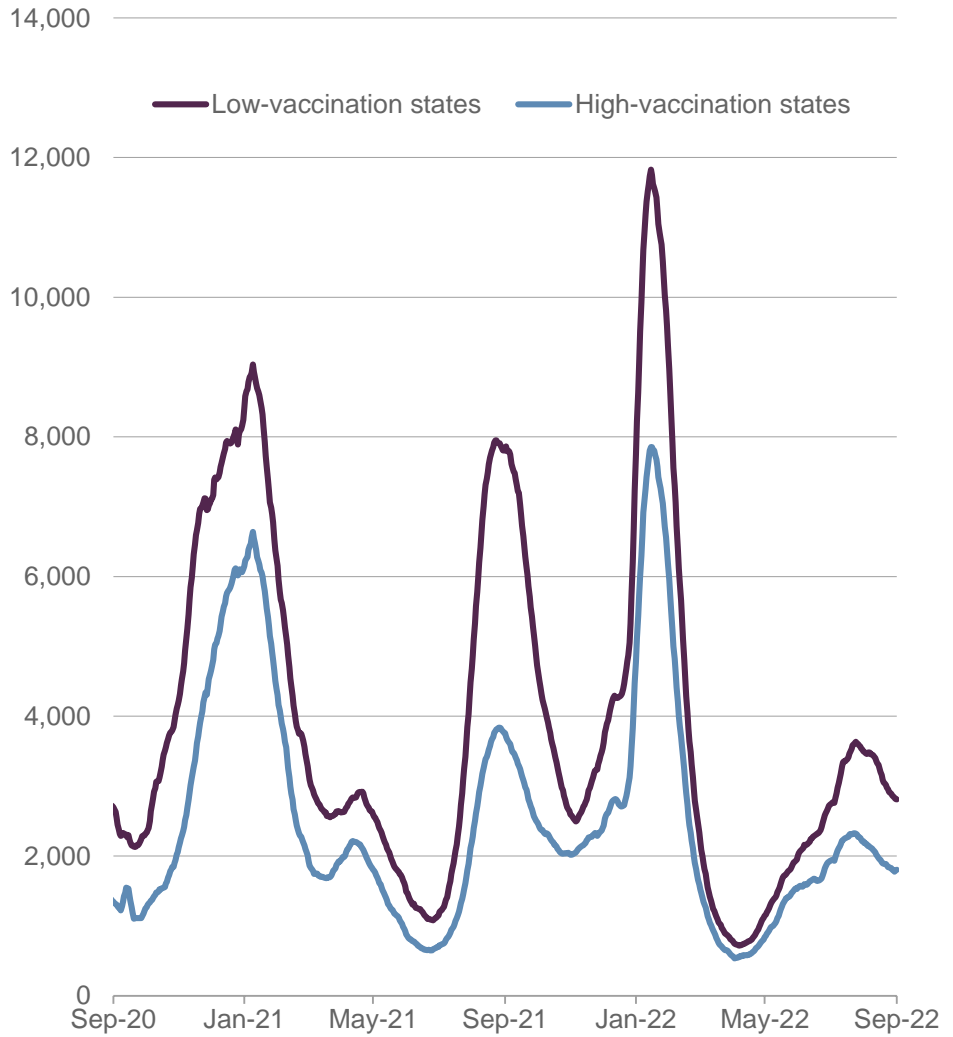
Source: Guggenheim Investments, Bloomberg. Data as of 9/29/2022

U.S. Daily Cases and Deaths in High- and Low-Vaccination States

Daily New Cases Per Million People, 7-Day Moving Average

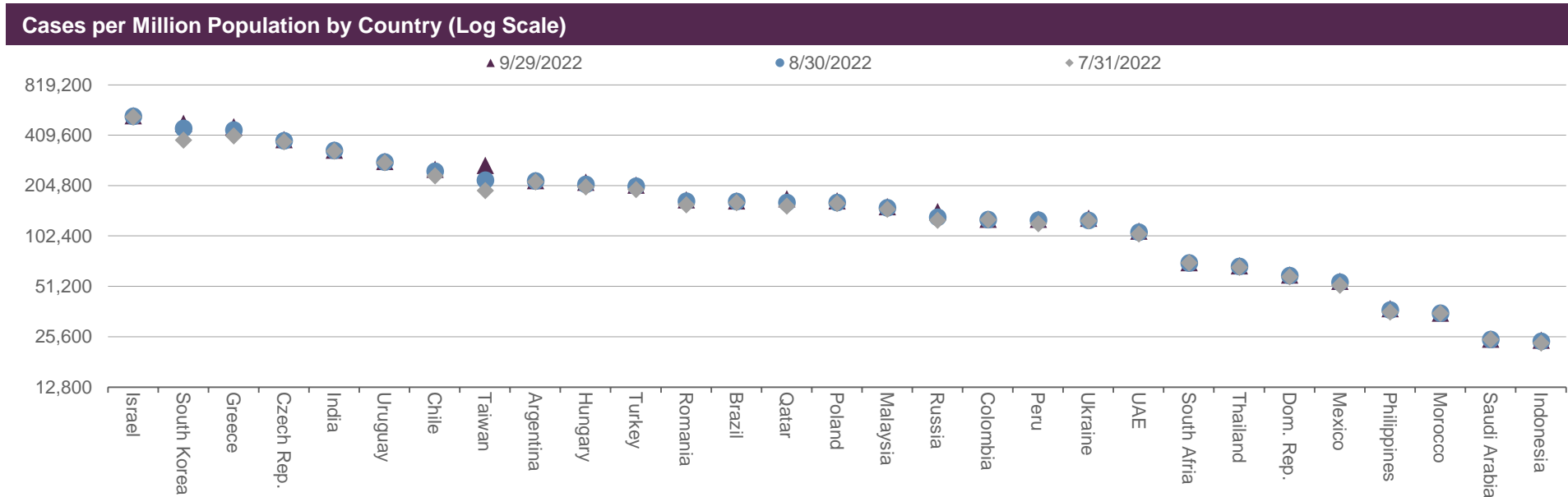
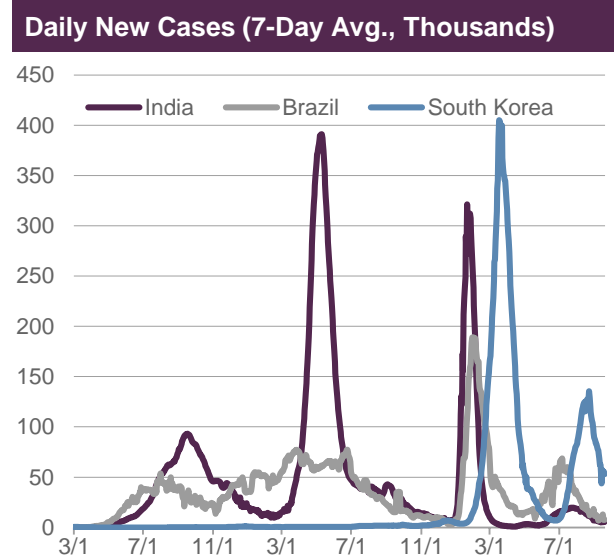
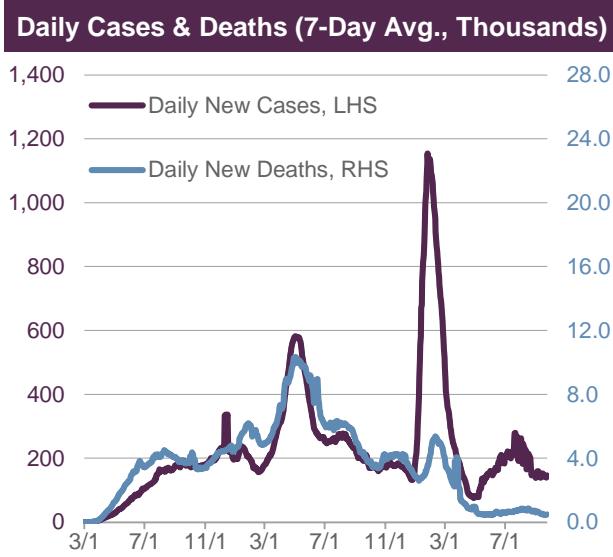
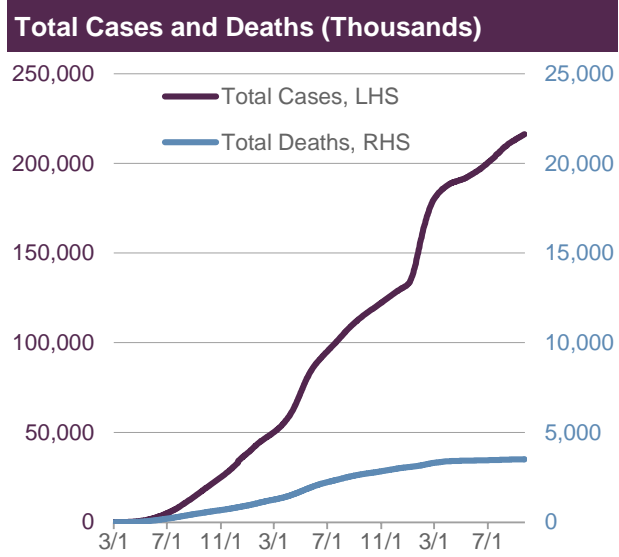


Daily Hospital Admissions Due to Covid-19, 7-Day Average



Source: Guggenheim Investments, Ourworldindata.com, Bloomberg. Data as of 9/29/2022

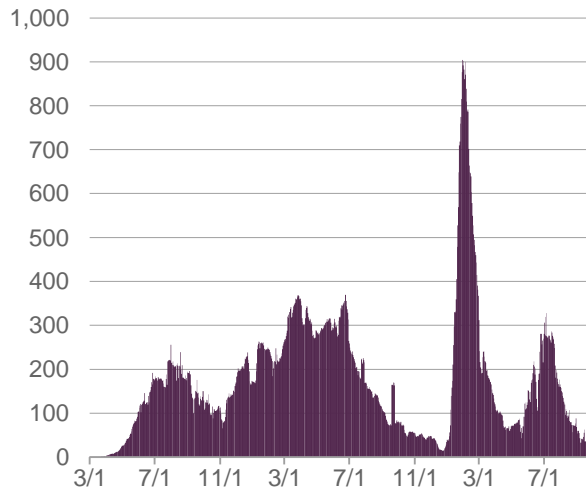
COVID-19 Cases in Emerging Markets



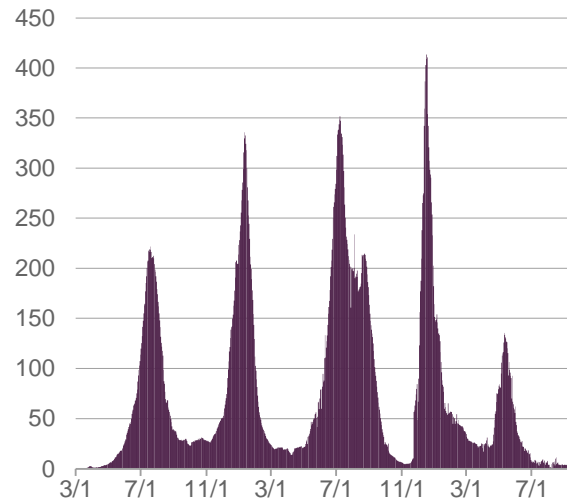
Source: Guggenheim Investments, Bloomberg. Data as of 9/29/2022

Daily New Cases per Million Population in Major Epicenters: EM

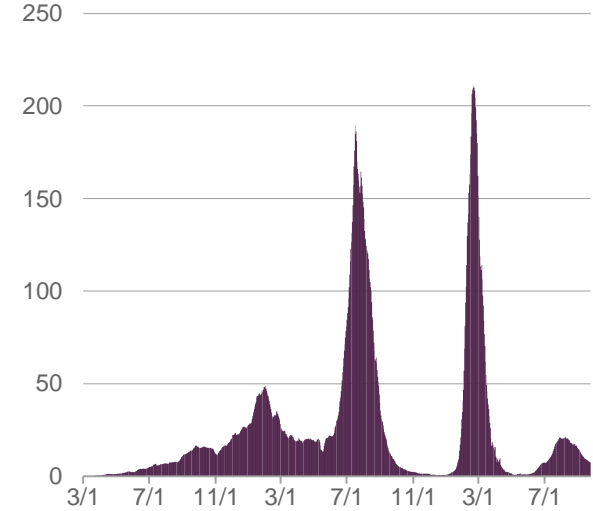
Brazil (7-Day Moving Average)



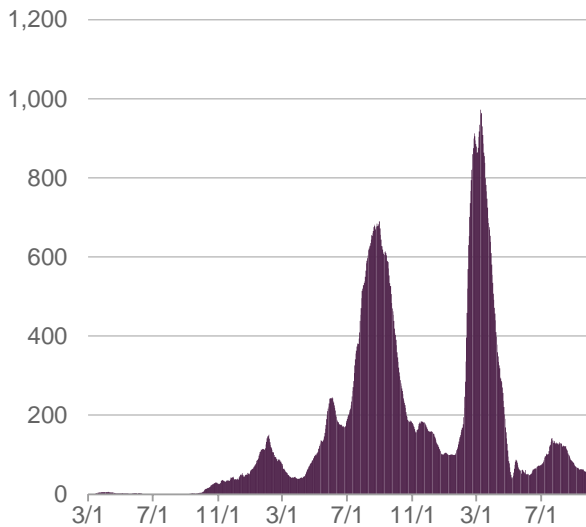
South Africa (7-Day Moving Average)



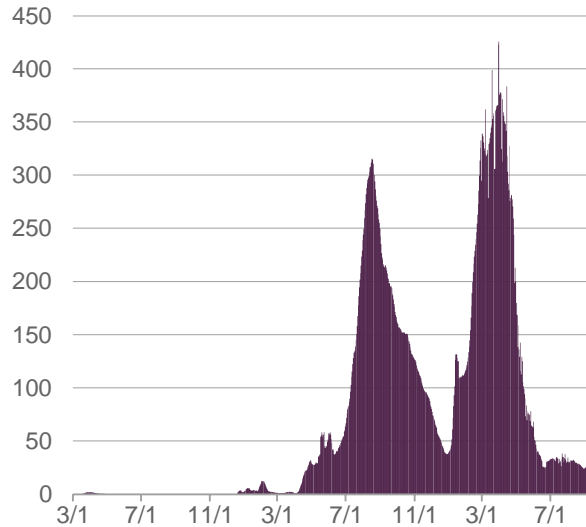
Indonesia (7-Day Moving Average)



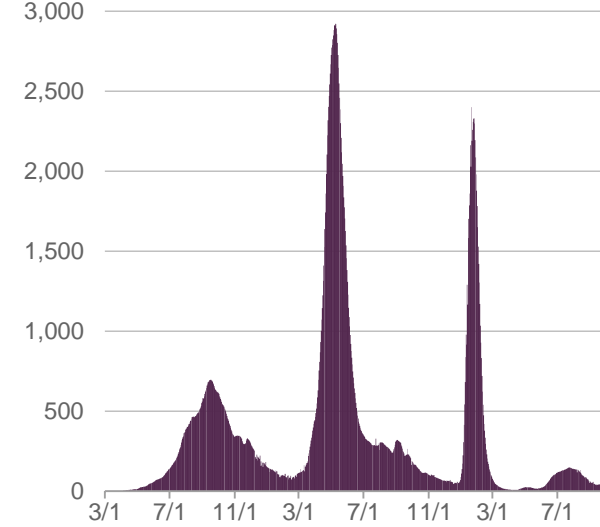
Malaysia (7-Day Moving Average)



Thailand (7-Day Moving Average)

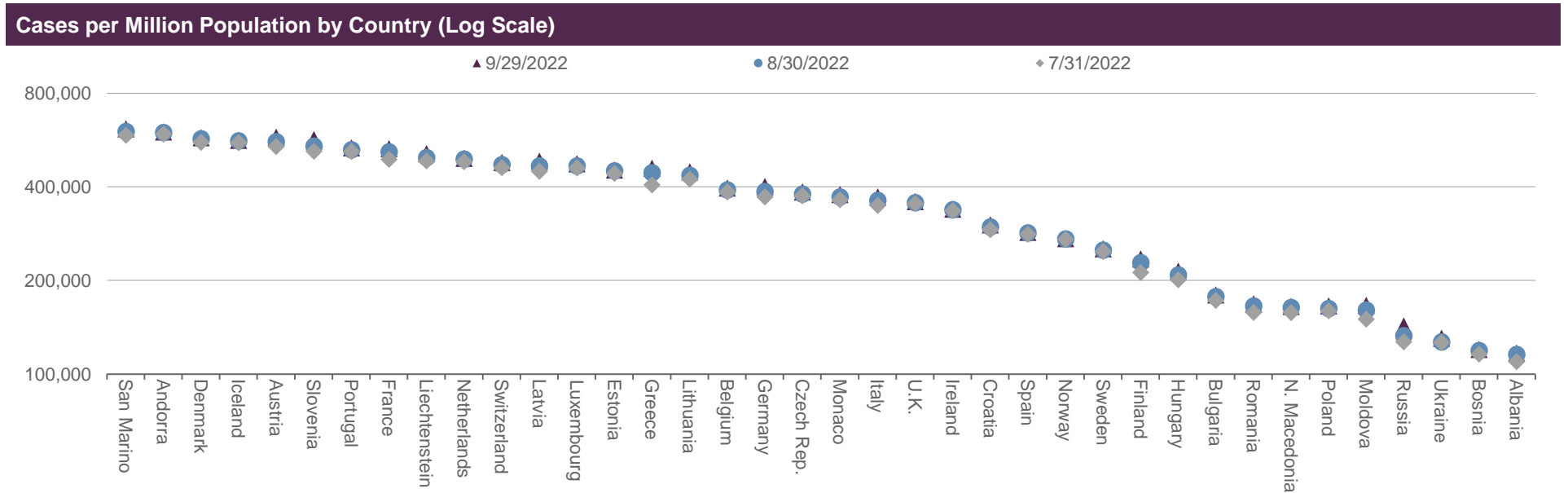
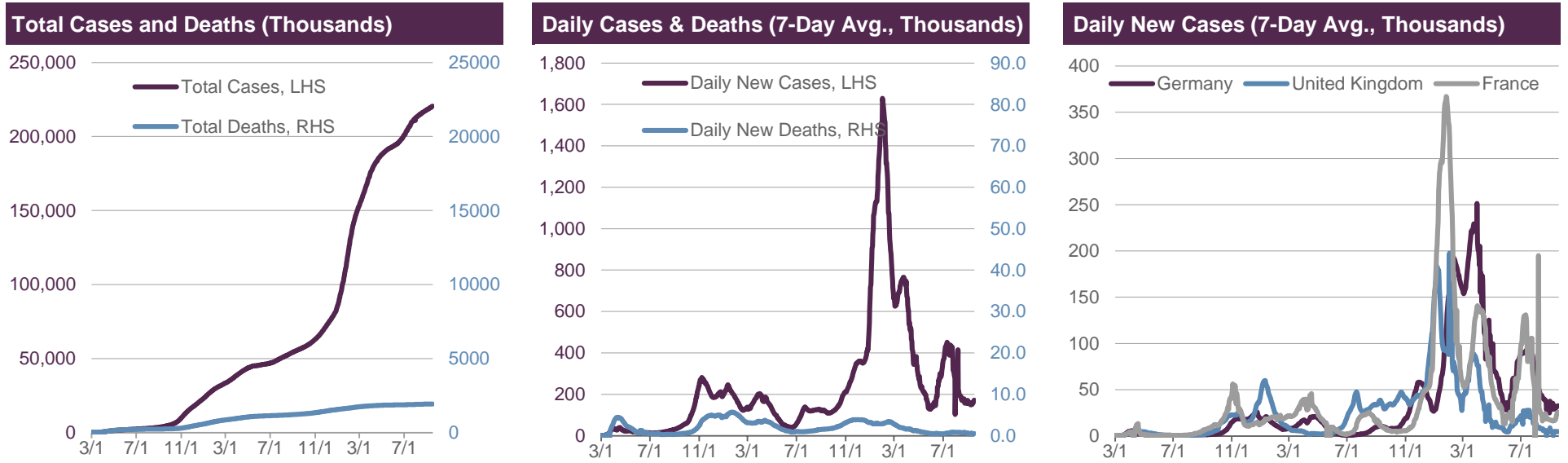


India (7-Day Moving Average)



Source: Guggenheim Investments, Bloomberg. Data as of 9/29/2022

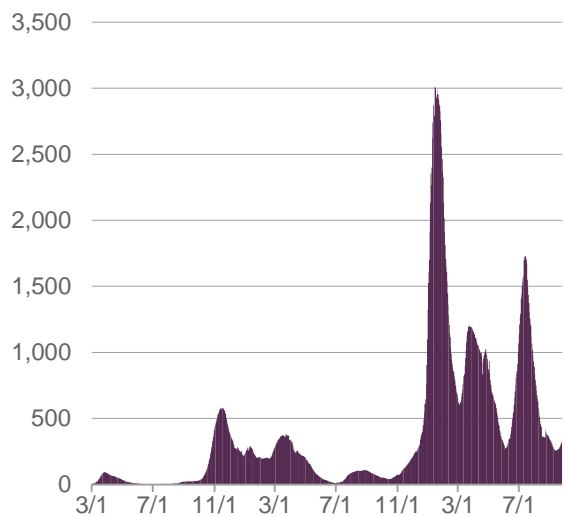
COVID-19 Cases in Europe



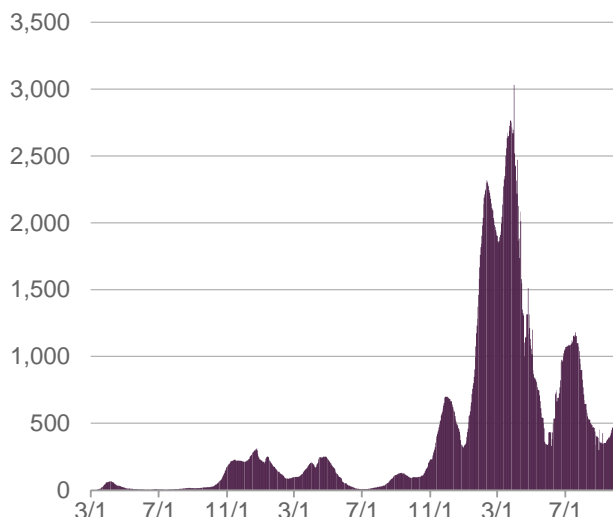
Source: Guggenheim Investments, Bloomberg. Data as of 9/29/2022

Daily New Cases per Million Population in Major Epicenters: Europe

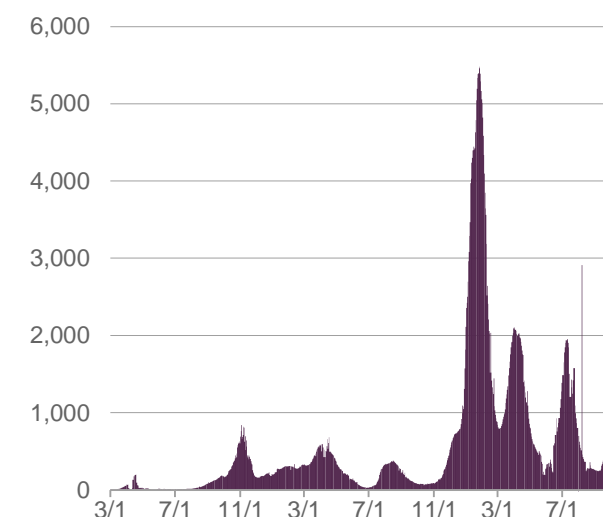
Italy (7-Day Moving Average)



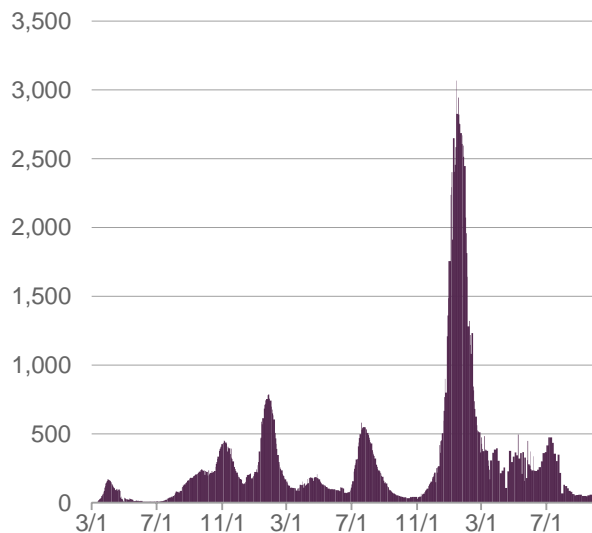
Germany (7-Day Moving Average)



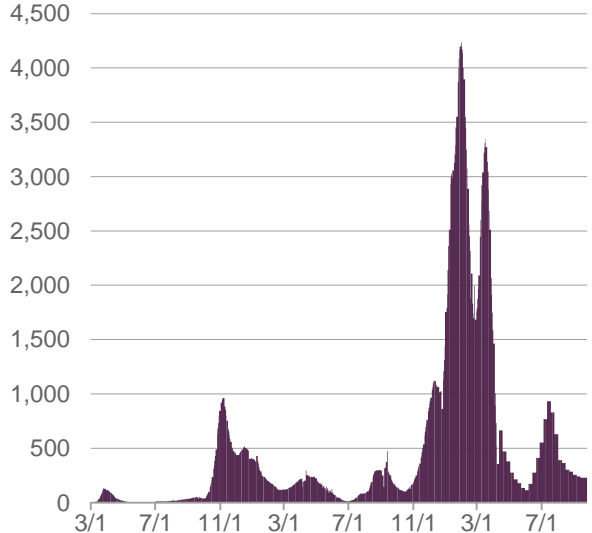
France (7-Day Moving Average)



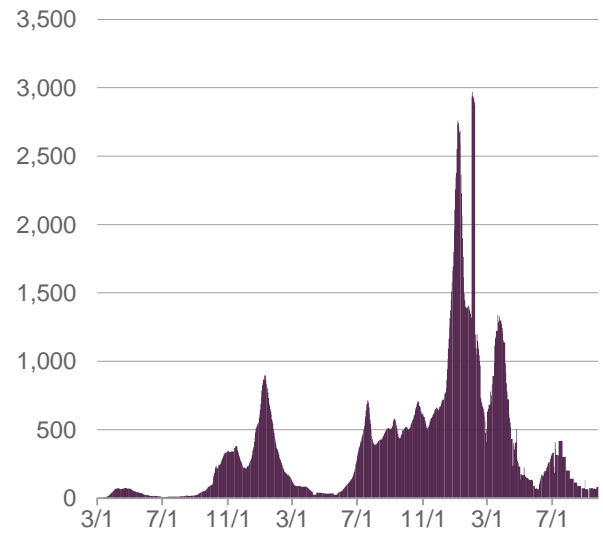
Spain (7-Day Moving Average)



Switzerland (7-Day Moving Average)



United Kingdom (7-Day Moving Average)



Source: Guggenheim Investments, Bloomberg. Data as of 9/29/2022

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