



Life Products and Post-Pandemic Effects

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Gen Re Today

AM BEST	MOODY'S	STANDARD & POOR'S
A++ (Superior)	Aa1	AA+

\$15.8 billion capital
\$11.5 billion in net written premiums*

22
Countries

42
Offices

2,000
Associates

MENA team offices : Dubai – Paris - Cologne

* US GAAP Equity per December 31, 2022; Net Written Premiums are last 12 months to December 31, 2022. Net premiums written exclude the impact of retrocessional agreements with Berkshire Hathaway affiliates.

Berkshire Hathaway Inc.
Group Companies



FARADAY

LONDON MARKET



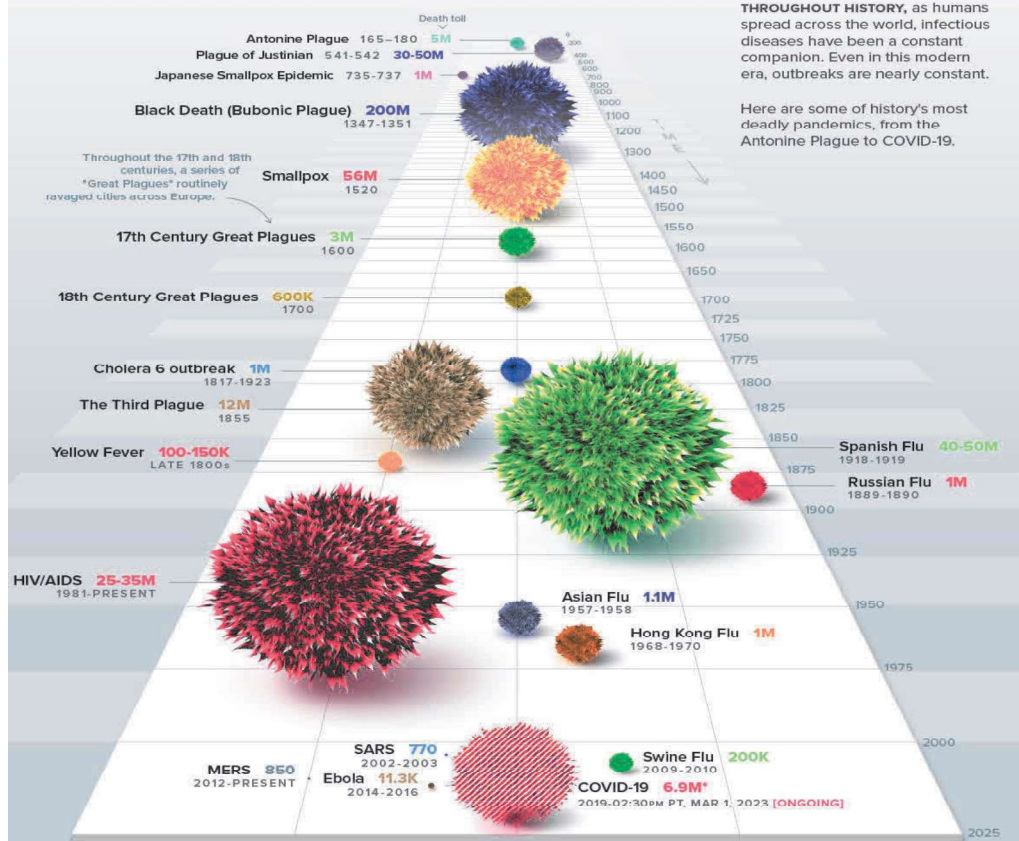
ASSET MANAGEMENT



INSURANCE COMPANIES

HISTORY OF PANDEMICS

PAN-DEM-IC (of a disease) prevalent over a whole country or the world.



We tend to underestimate bad events

- Optimism bias
- Confirmation bias

Source:
Visual Capitalist
www.visualcapitalist.com





Death Rate per 1,000 people

Consider Excess Mortality

Country Name	1990	2000	2010	Average 2017-2019	2020	2020 / Average (2017-2019)
Bahrain	3.21	2.60	1.88	2.01	2.24	111%
Algeria	5.73	5.04	4.75	4.47	5.40	121%
Jordan	4.35	3.72	3.60	3.15	3.48	110%
Kuwait	2.70	1.87	1.83	2.05	3.25	158%
Lebanon	7.85	4.55	4.07	4.79	6.25	130%
Qatar	2.24	2.28	1.26	0.99	1.22	124%
Tunisia	5.50	4.77	5.33	6.05	6.75	112%
Egypt, Arab Rep.	8.19	6.38	6.02	5.52	5.85	106%
United Arab Emirates	2.70	2.11	0.80	1.47	1.65	112%
Saudi Arabia	4.85	3.48	2.50	2.65	2.91	110%

Data source : world Development Indicators – World Bank , update date : 3/1/2023



Death Rate per 1,000 people

Country Name	1990	2000	2010	Average 2017-2019	2020	2020 / Average (2017-2019)
Canada	7.30	7.10	7.00	7.60	8.10	107%
United States	8.60	8.50	8.00	8.67	10.30	119%
United Kingdom	11.20	10.30	8.90	9.13	10.40	114%
France	9.30	8.90	8.50	9.10	9.90	109%
Norway	10.90	9.80	8.50	7.67	7.50	98%
Finland	10.00	9.50	9.50	9.83	10.00	102%
Spain	8.60	8.90	8.20	9.00	10.40	116%
Germany	11.60	10.20	10.50	11.37	11.90	105%
Cyprus	8.84	7.46	6.41	6.61	6.93	105%
Belgium	10.40	10.20	9.70	9.60	11.00	115%
Brazil	7.16	6.40	6.20	6.53	7.42	114%
Chile	5.63	4.96	5.96	6.27	7.22	115%
Colombia	5.83	5.35	4.92	5.32	6.61	124%
India	10.69	8.70	7.39	6.65	7.35	111%



Excess Mortality development – Long Covid

- General (non- underwritten) population
- Excess mortality in 2022 is still considerable
- Cooling down would be progressive
- Increased medical claims frequency is equally observed
- Excess mortality materially different by type of product (underwritten population)

Year	Number of insured	Sum Insured (in USD)	Total Claims (in USD)	BC
2018	1,375,447	19,705,211,306	36,867,938	1.87
2019	1,406,613	20,924,893,170	38,968,375	1.86
2020	1,473,946	23,472,889,661	65,694,544	2.80
2021	1,443,873	25,984,043,687	73,425,409	2.83
2022	1,532,962	29,312,816,989	69,836,400	2.38



Projecting future pandemic impact

Pandemic effect could be correlated with one or more of the following variables :

- GDP per capita combined with the Gini index (wealth inequality in the nation)
- Availability of hospital beds (per 1000 population)
- Healthcare spending per capita (adjusted for population age distribution)
- Government expenditure on education (or other Indicator on nation Education level such as School enrollment indicator, etc. - source : World Development Indicators – World Bank)
- Health Security index (or other Indicator on nation Health level such as Bloomberg Health grade)



Pricing Implication

Reflect the Pandemic risk in the product pricing :

- Pandemic is a tail risk to be protected by risk management and Capital strength
- Observe covid as a $1/n$ year's event ($n=25, 30 \dots 100$) however pandemic are Independent yearly events
- Retained risk should increase Return on Capital hence increase target margin based on the assumed recurrence period
- Climate change and developed urbanization might increase pandemic frequency



Thank You

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