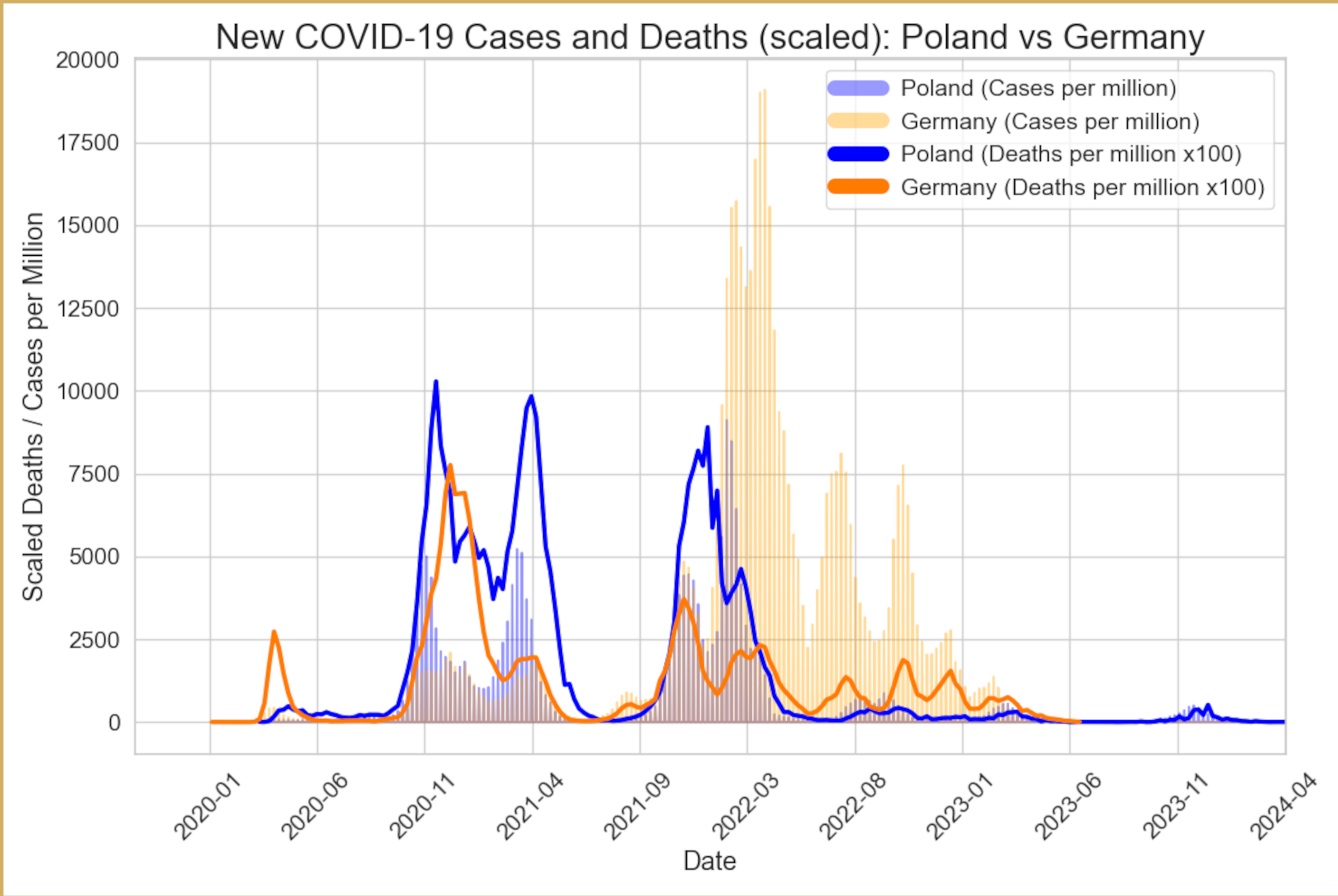
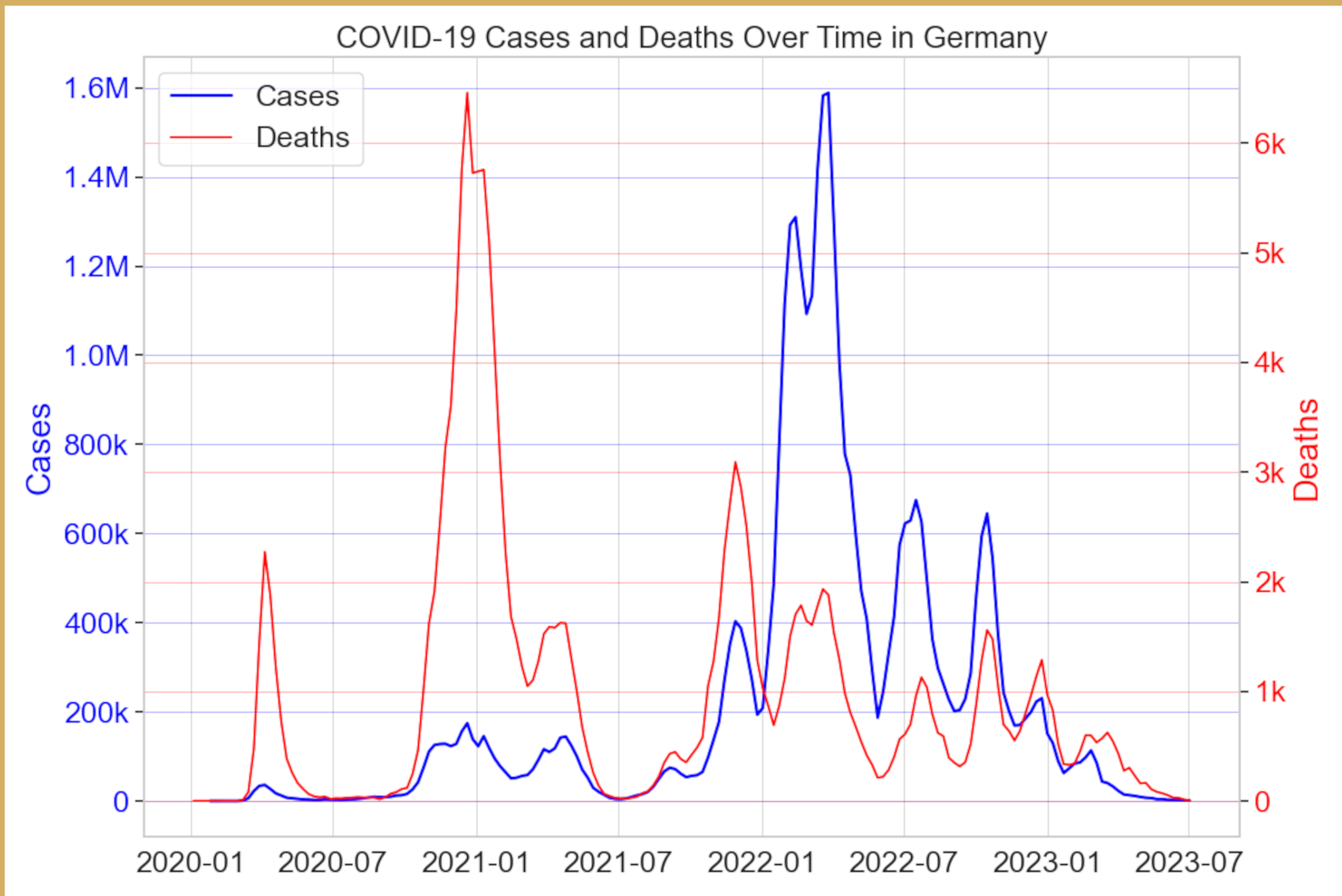


THE COVID-19 PANDEMIC IN GERMANY

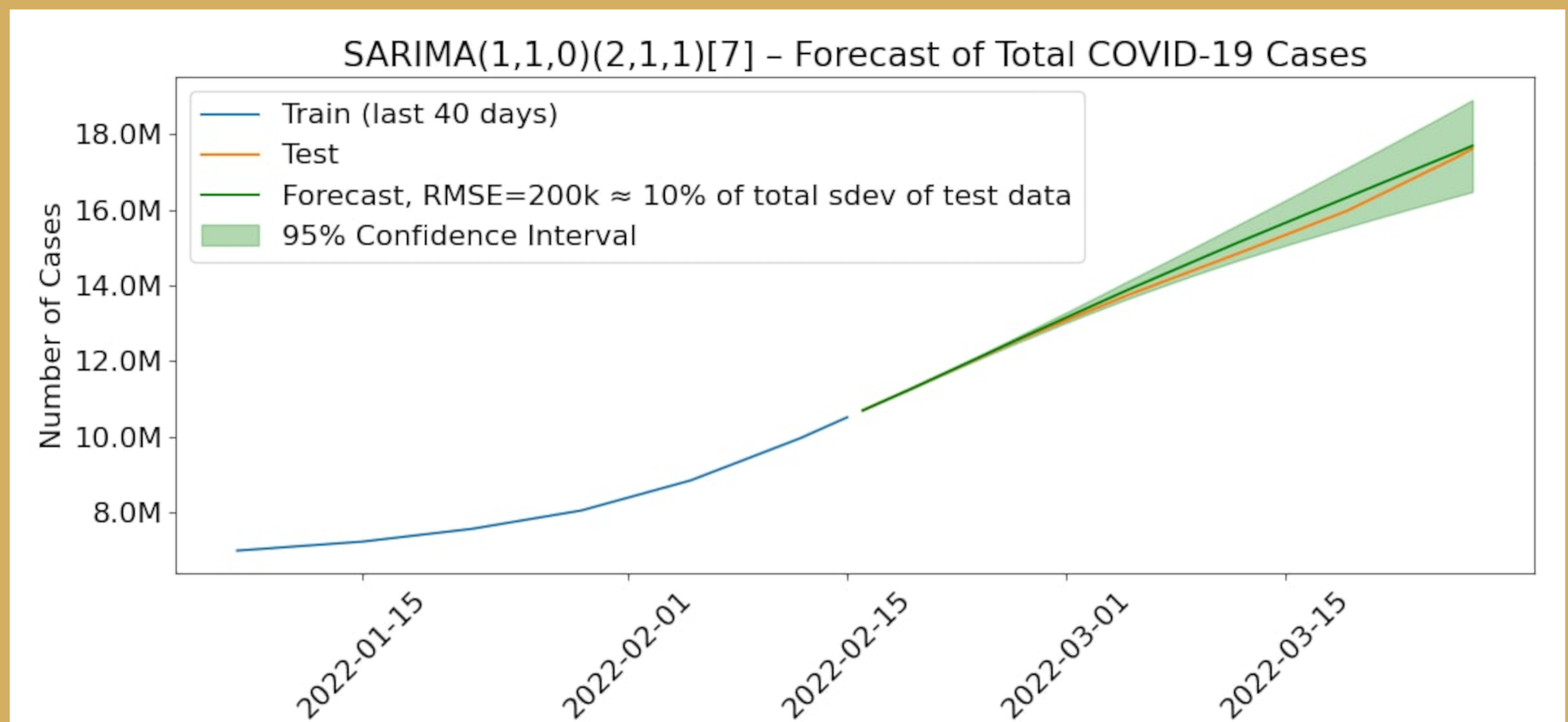
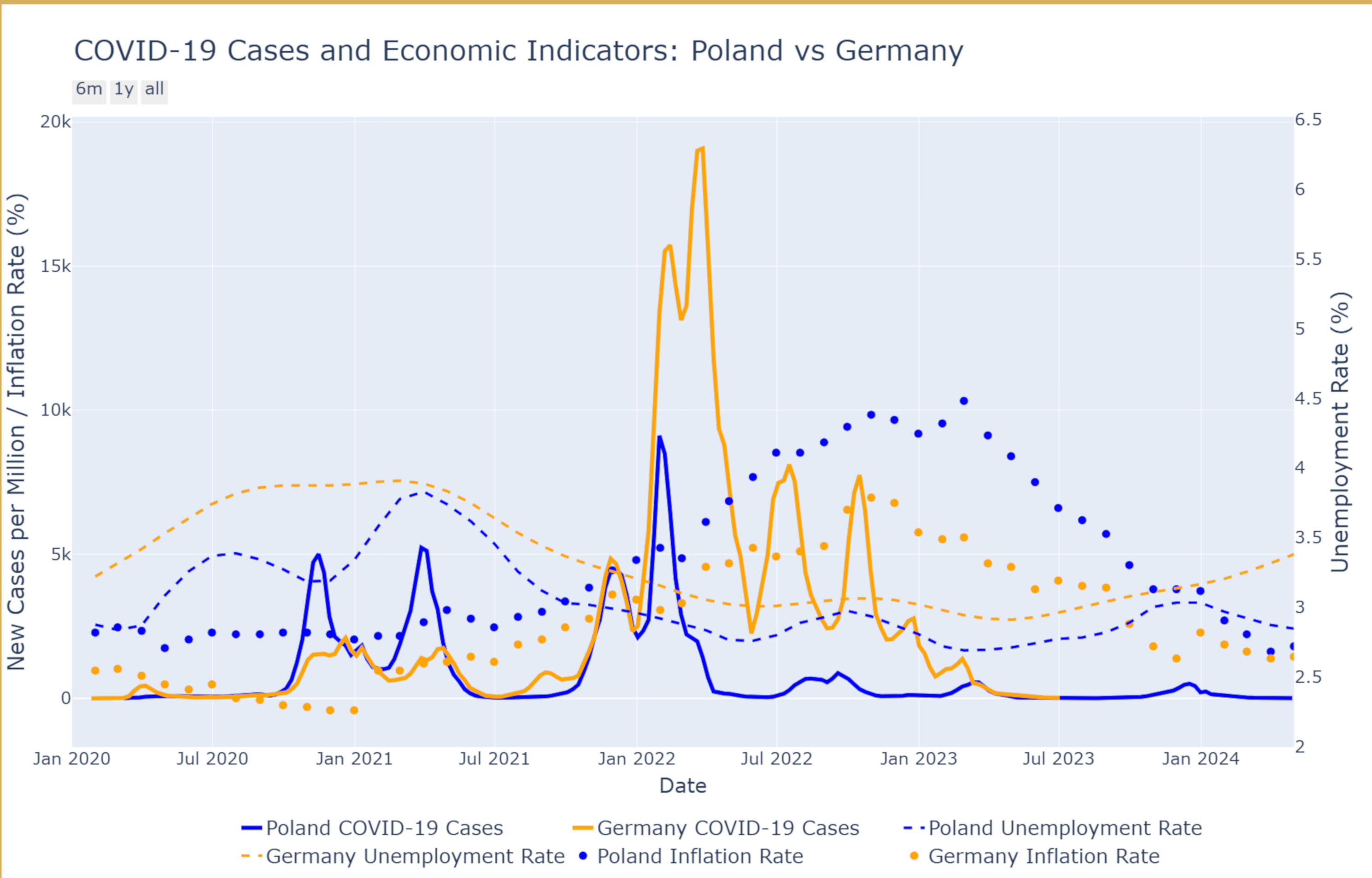
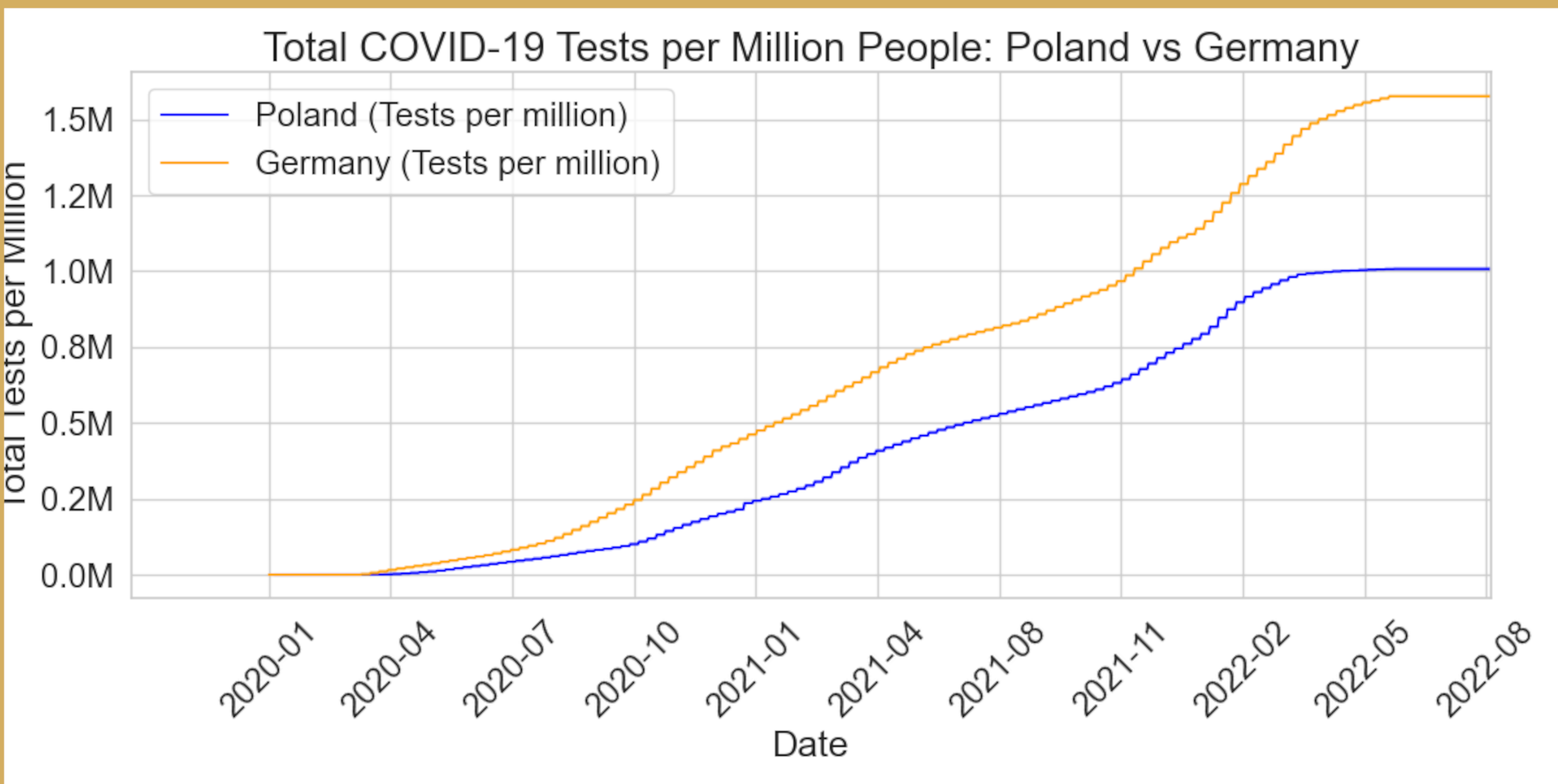
2020-2024: A DATA OVERVIEW. BARTOSZ SKOWRONEK, PIOTR TRZECIAK



GERMANY'S POPULATION IN 2020:-----**83.16 MILLION PEOPLE**
2020-2024 CONFIRMED COVID-19 CASES:-----**38.44 MILLION**
TOTAL COVID-19 DEATHS-----**174 979** (0.46% FATALITY RATE)
TOTAL COVID-19 VACCINE DOSES-----**193 MILLION**
FULLY VACCINATED-----**63.57 MILLION PEOPLE** (ABOUT 76.4% OF TOTAL POPULATION)

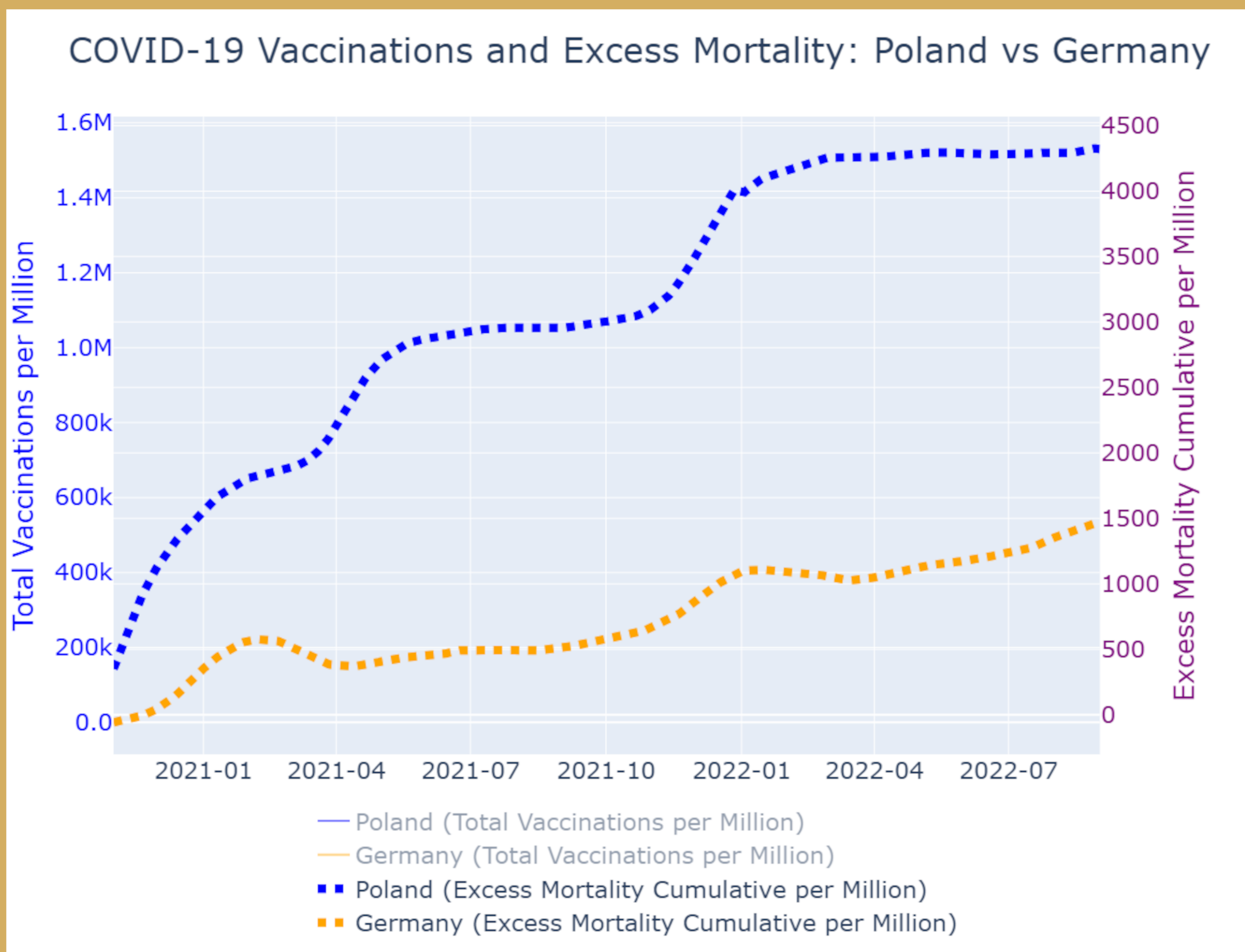


We can see at least 3 distinct waves of the pandemic in Germany. The first two (winter/spring of 2020, 2021) had a way higher ratio of deaths to detected cases than the third, most likely due to improving natural and vaccine-induced immunity after 2021. Comparing new COVID cases between Poland and Germany we see that Germany had way less cases than Poland in 2020 and 2021, but a much larger, massive spike in 2022 and later. This may be caused by testing being more intense in Germany, because as the overlaid lines show, Germany had way less deaths per million. Indeed, the cumulative testing numbers show that Germany had nearly 50% more tests, making it a likely explanation for the discrepancy.



Both countries had problems with slightly increased unemployment and major inflation

SARIMA time-series prediction modeling yields good results for a prediction of 40 days in the beginning phase of a pandemic wave.



Germany had increasingly more vaccinations than Poland - but only one third of Poland's excess mortality! This data makes it seem like Poland did something really wrong, but we can't be sure if it's necessarily vaccination.

