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An Analysis of Behaviour, Health and GDP During the COVID-19 Pandemic in Europe

Ulf Persson

IHE, The Swedish Institute for Health Economics

Contributors

Pierre-Yves Geoffard, Paris School of Economics, Paris France

Jörgen Möller Evidera, London, United Kingdom

Gunnar Brådvik IHE, Lund, Sweden

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The Projects name is “International Joint study on Public Health Economics and Value Assessment of Prevention in Pandemic –Lessons learned from COVID-19 and evidence-based recommendations for future crisis”.

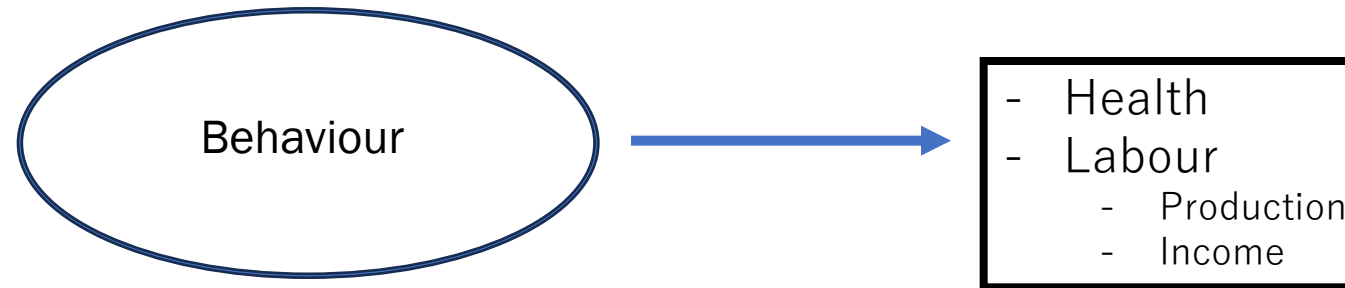
COVID-19 Pandemic in Sweden

Consequences and Challenges in Health Economics

Swedish Covid-19 policy

- Swedish policy response was, due to the constitution, based on voluntary measures and recommendations rather than on legally imposed restrictions.
- Sweden did impose lockdown measures that fully or partially closed sections of the economy, however most of the Swedish society remained open.
- Sweden faced severe criticism throughout the pandemic for its lenient and liberal approach.

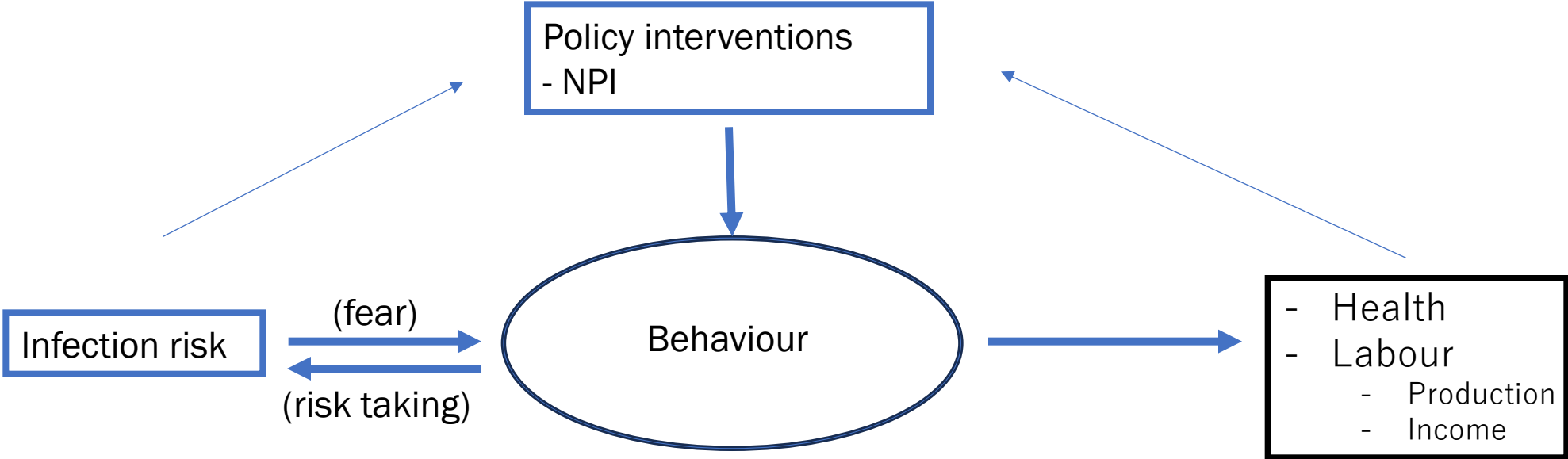
Conceptual framework : (1) life before covid



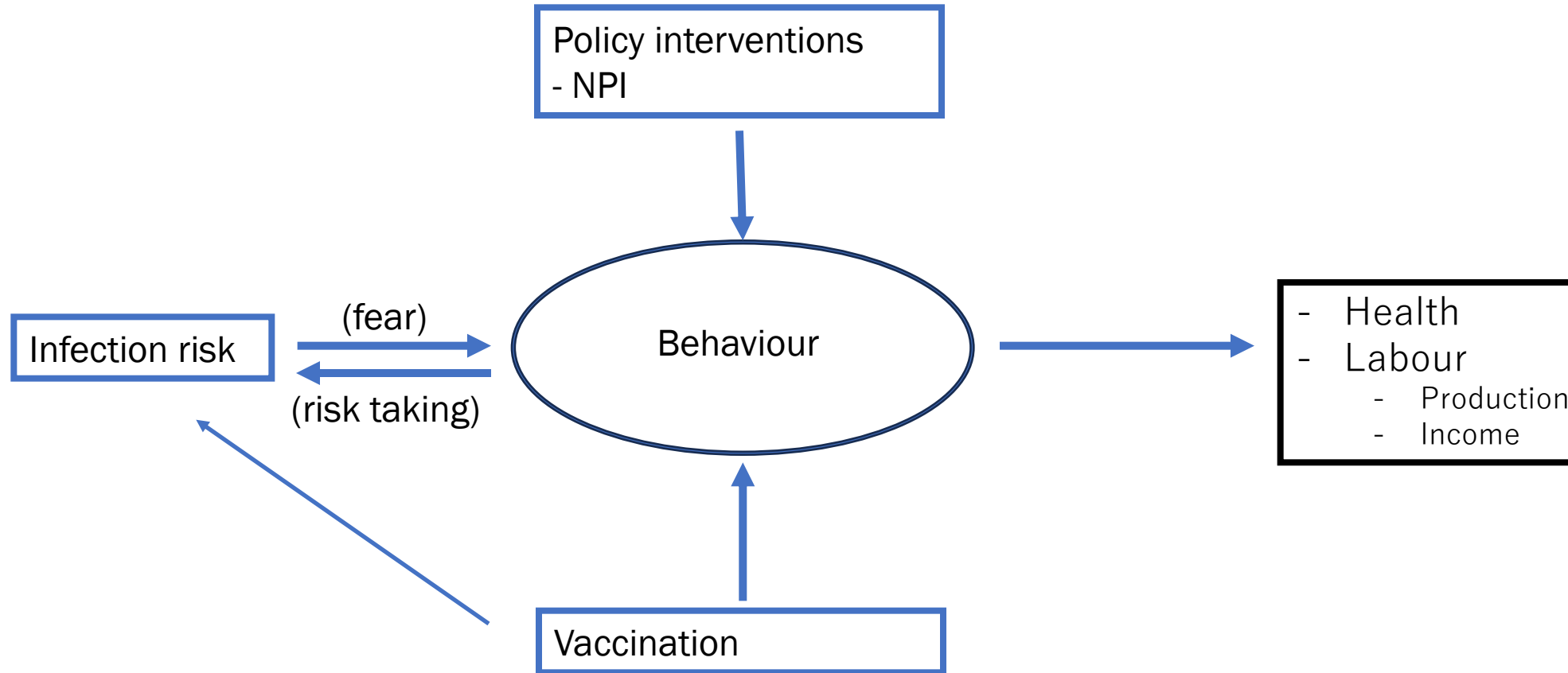
Conceptual framework : (2) enters covid-19



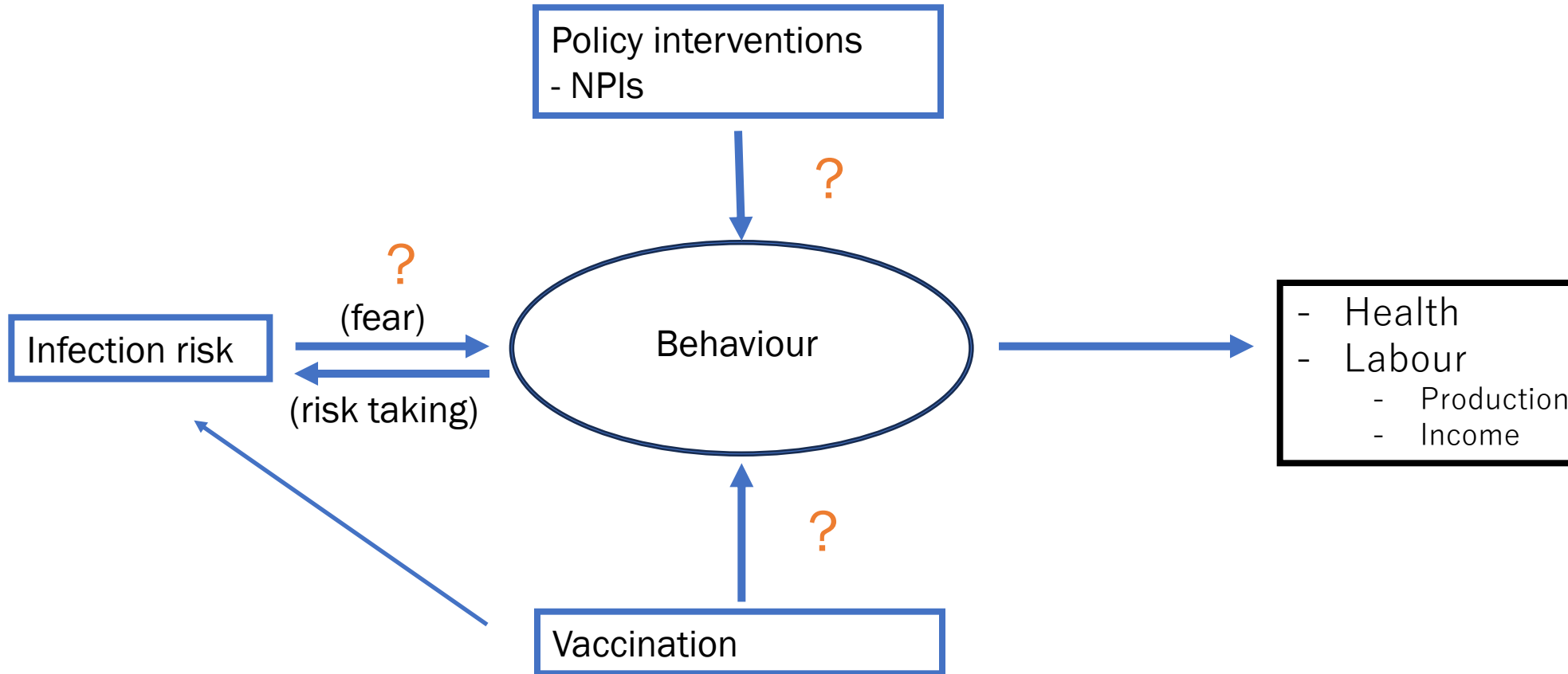
Conceptual framework : (3) early policy responses



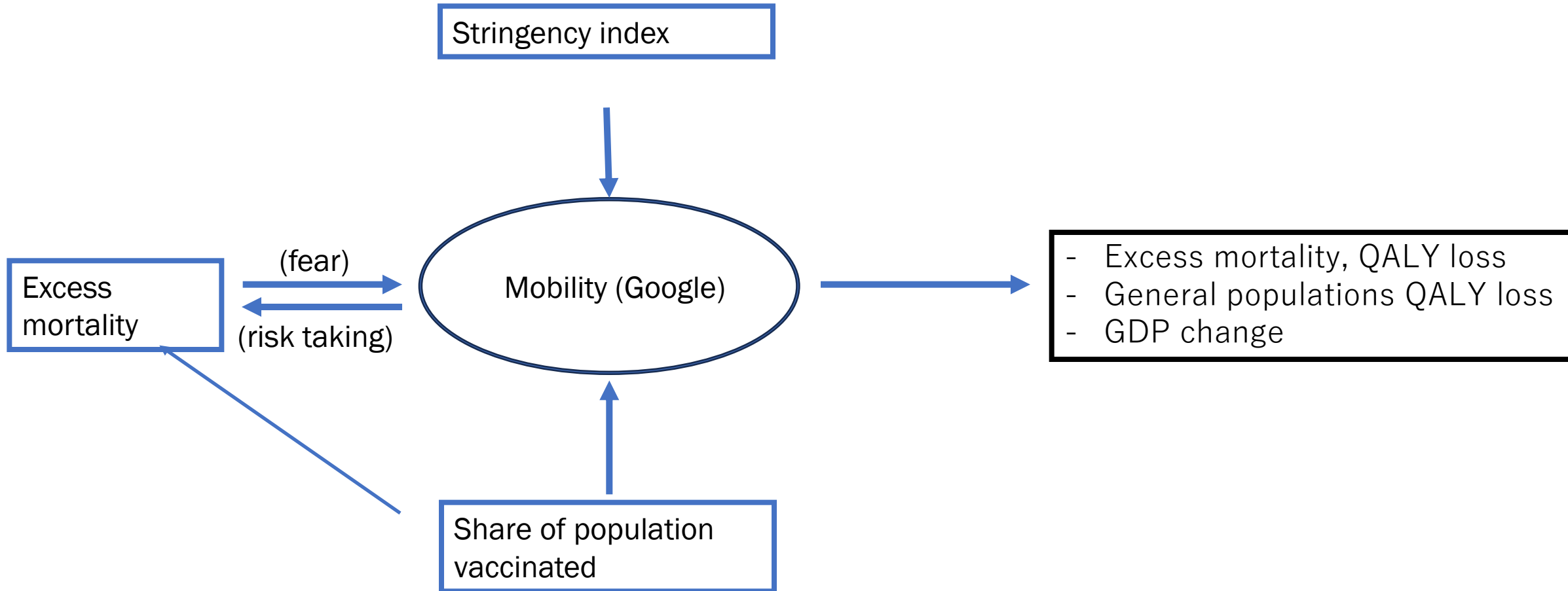
Conceptual framework : (4) vaccination



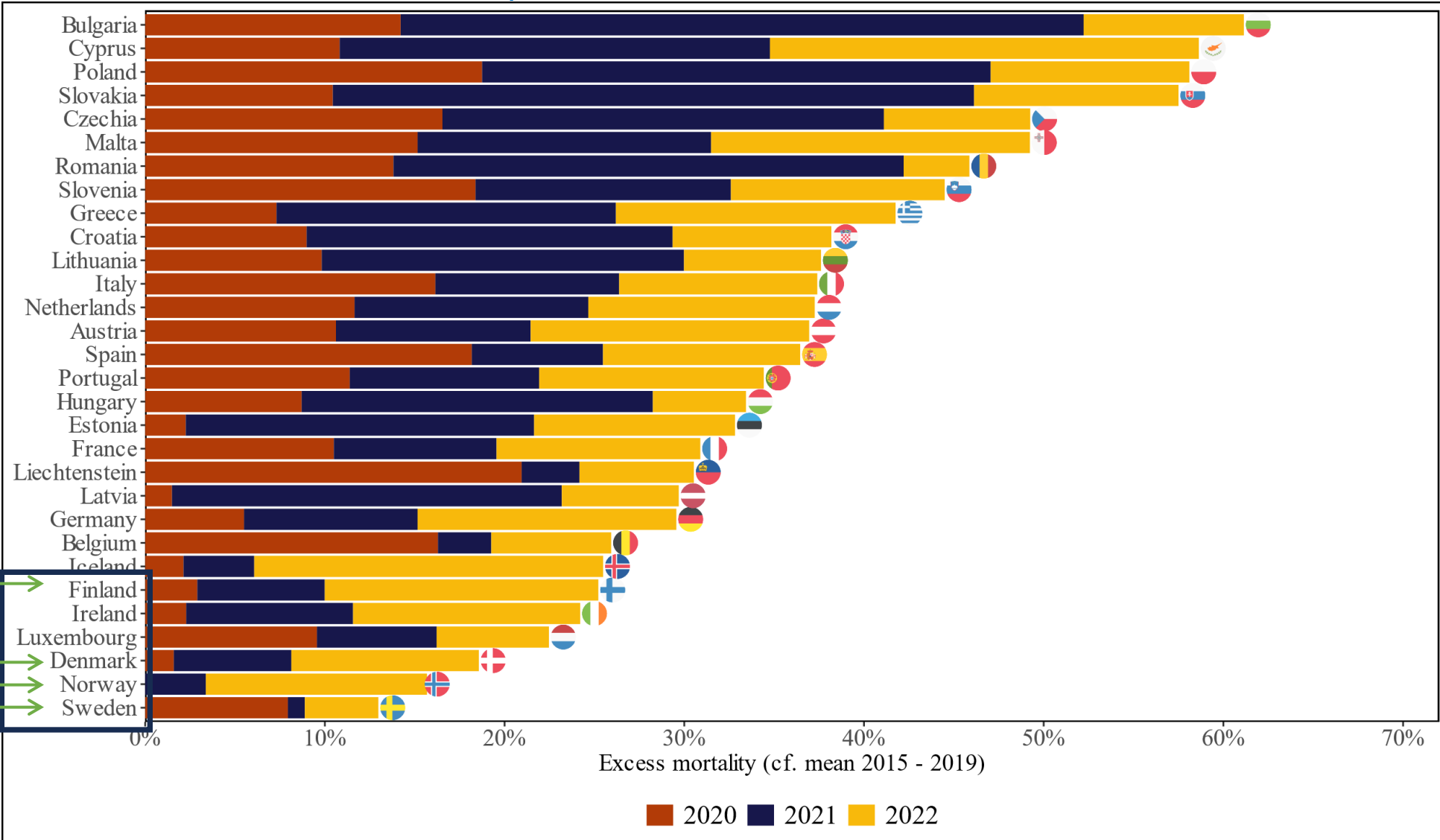
Conceptual framework : (open) Questions



Conceptual framework : our measures



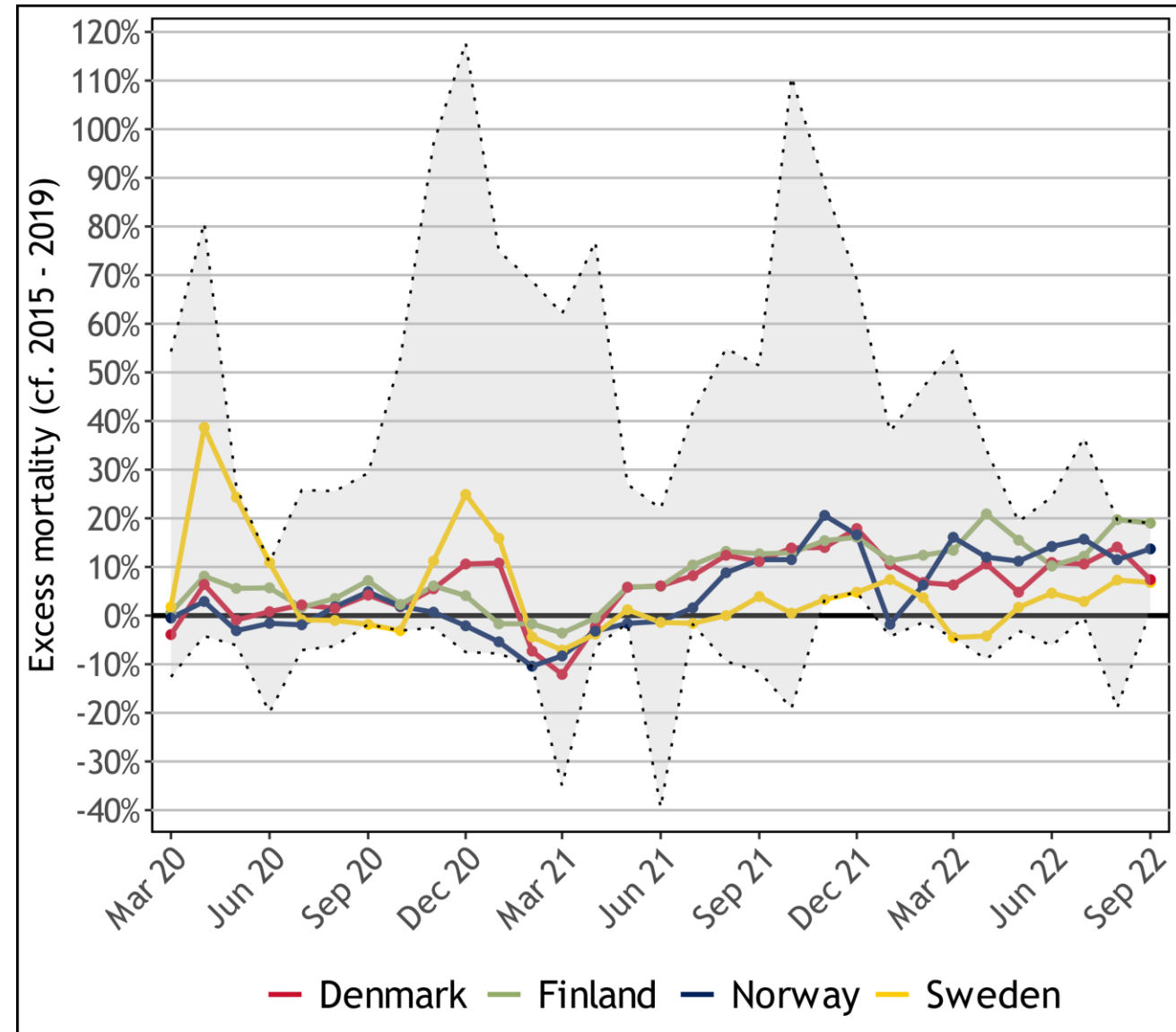
Excess mortality 2020 – 2022 in the EEA (European Economic Area)



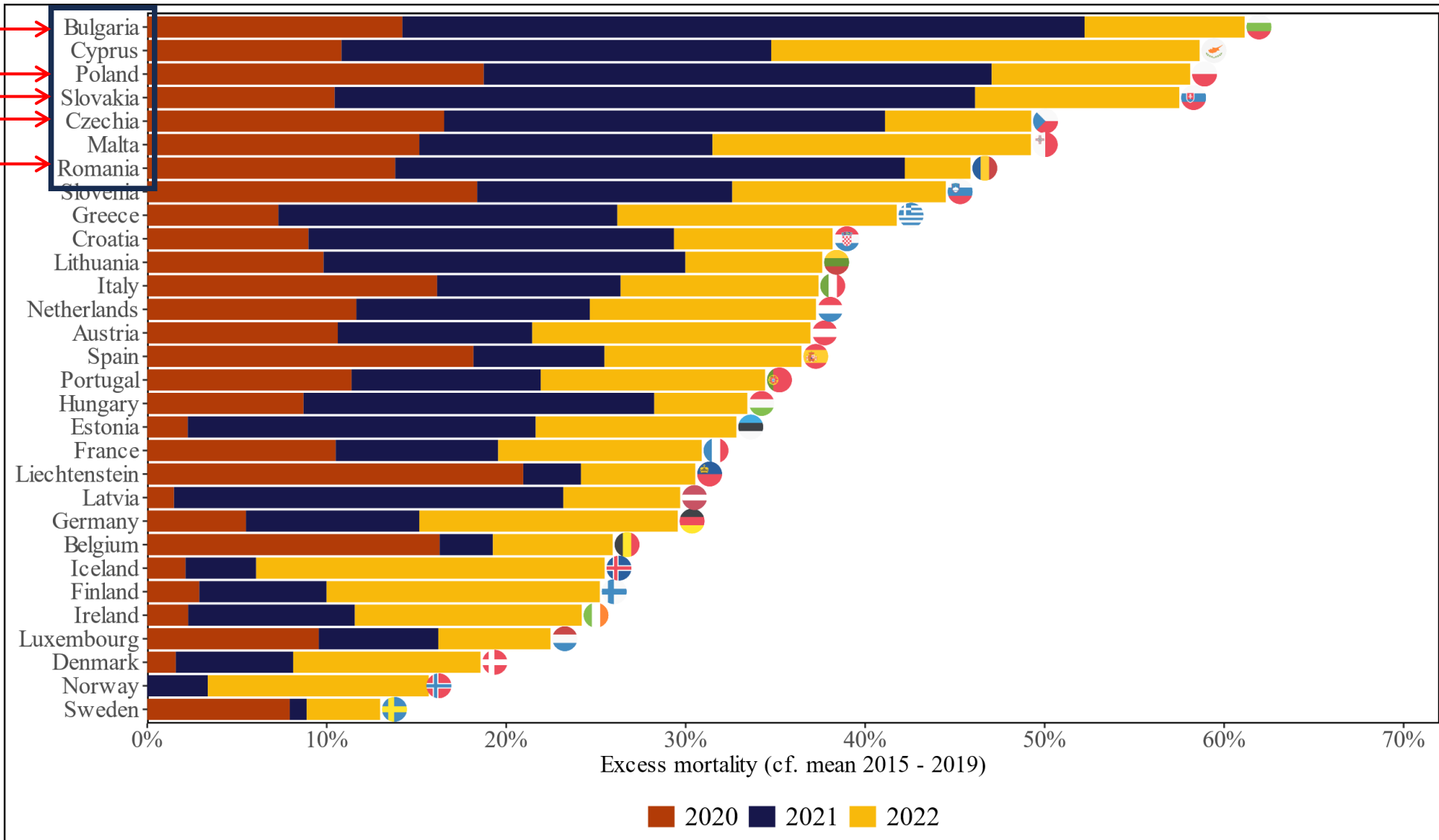
Four Nordic countries have all relatively low total excess mortality over the entire Covid-19 period compared to the other EEA countries

Excess mortality over time in the Nordic countries vs EEA (grey)

- Excess mortality
- Sweden had relatively one high during the first two waves of Covid-19 and low from spring 2021
- Denmark, Finland, and Norway had a low one during 2020, but it was relatively high during 2021 and 2022

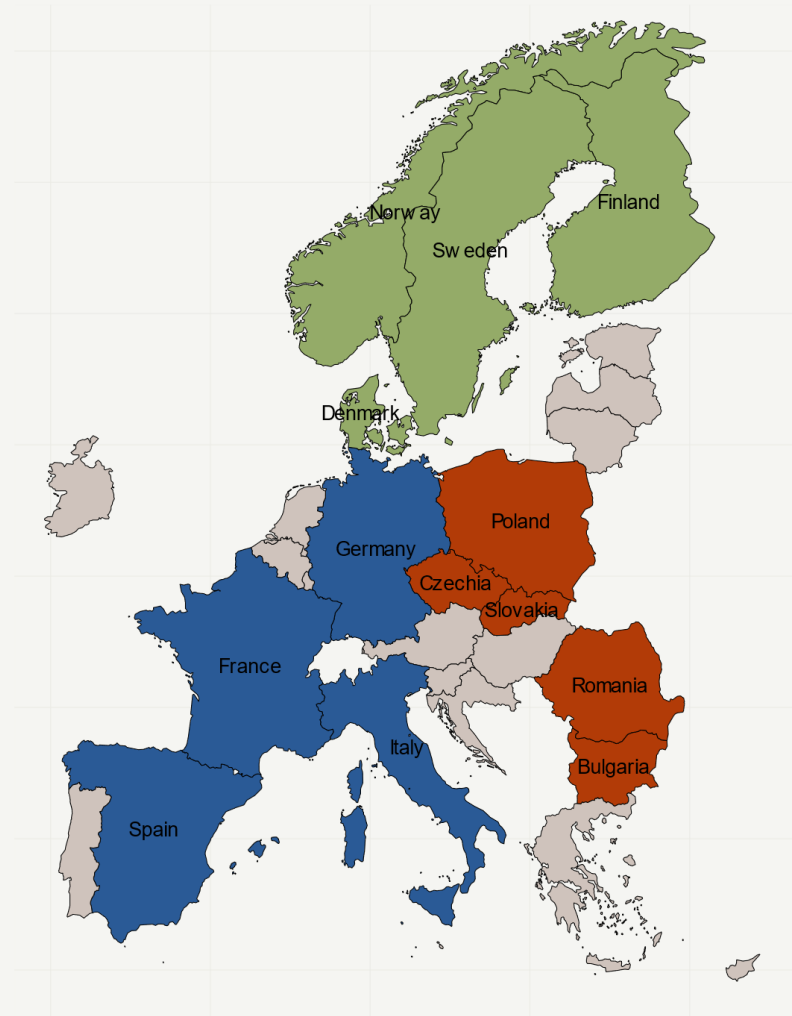


Five Eastern European countries with high excess mortality 2020 – 2022 vs the Four Nordic countries with lowest mortality



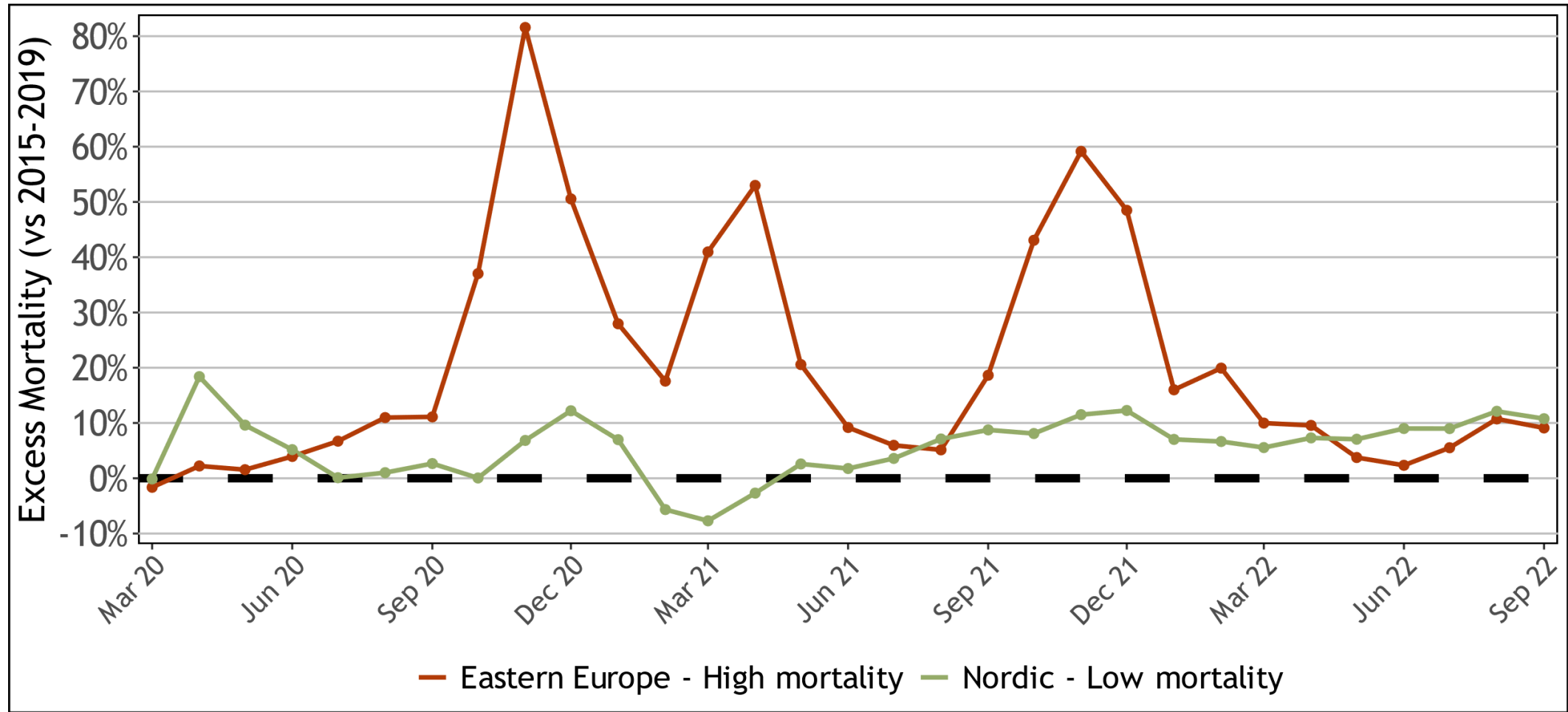
Five Eastern European countries have high total excess mortality over the entire Covid-19 period compared to the Four Nordic countries

Countries that we are looking closer at

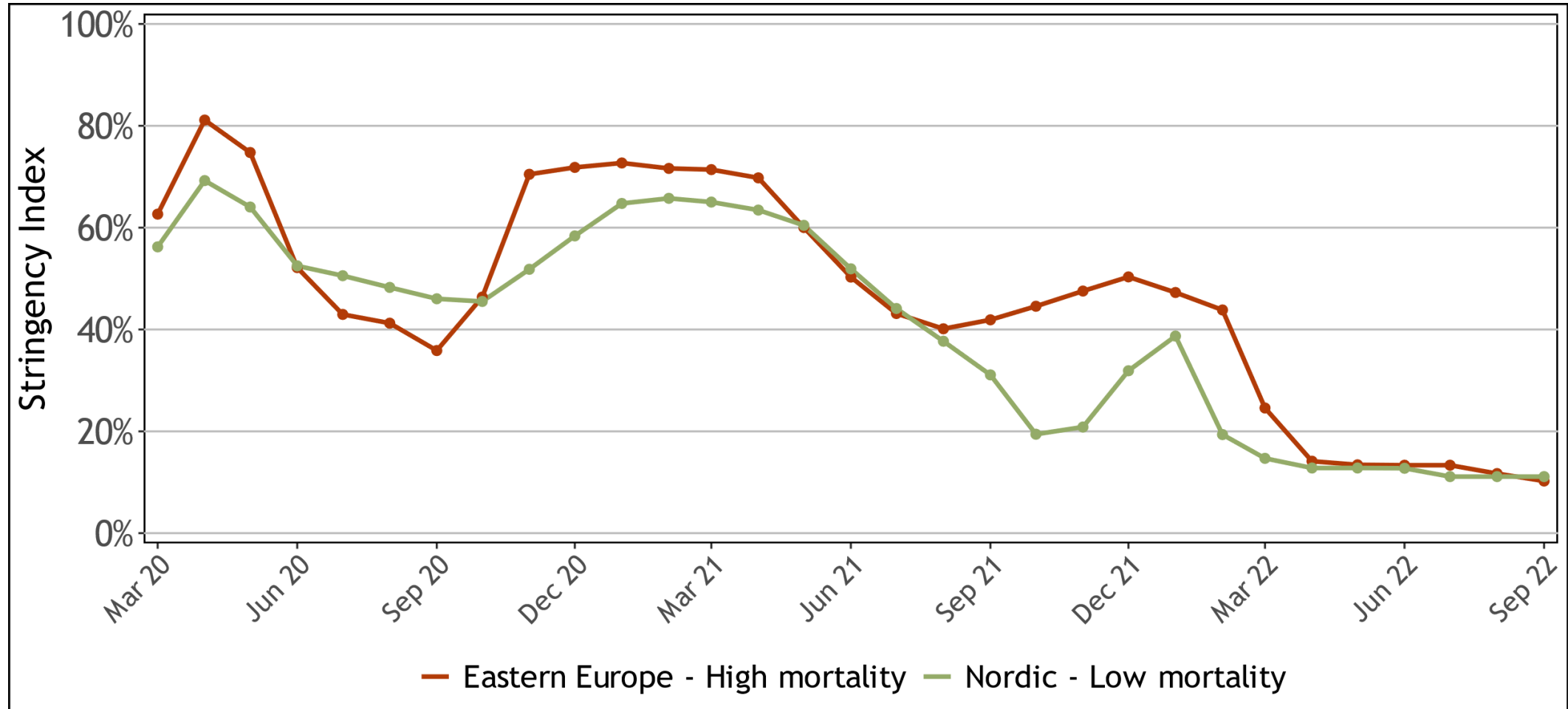


■ Big four ■ Eastern Europe - high mortality ■ Nordic - low mortality ■ Other

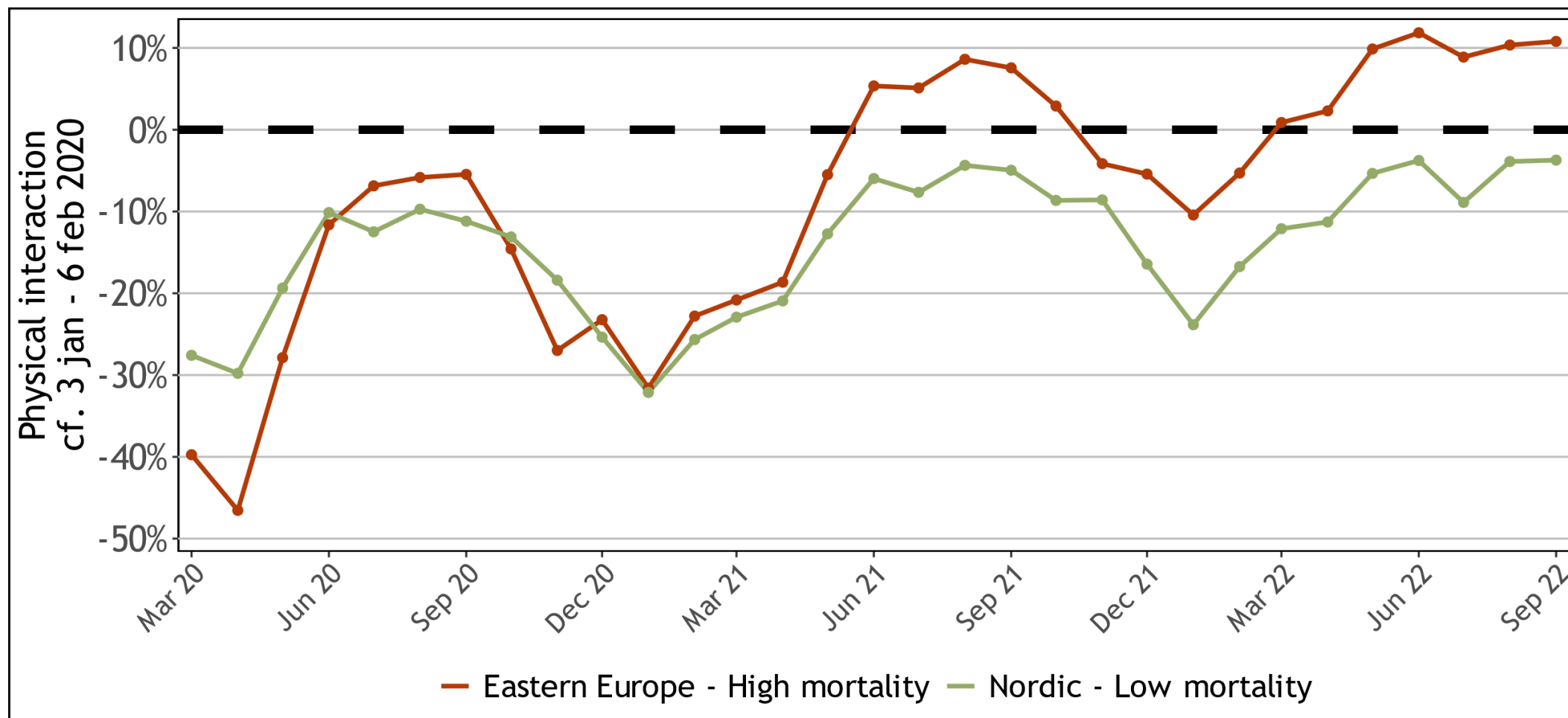
Excess mortality: five Eastern countries vs. four Nordic countries



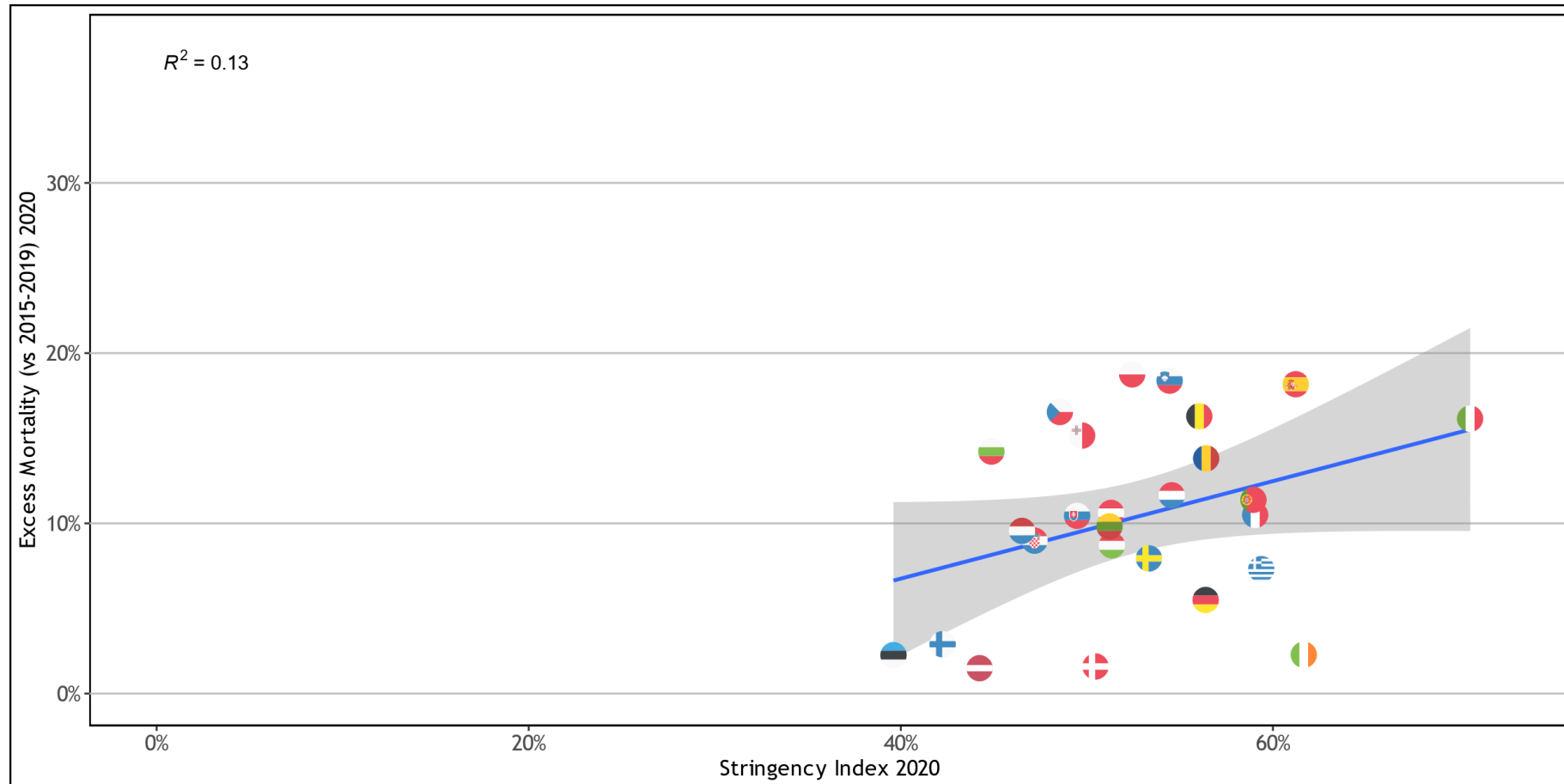
Stringency index: five eastern European countries vs. four Nordic countries



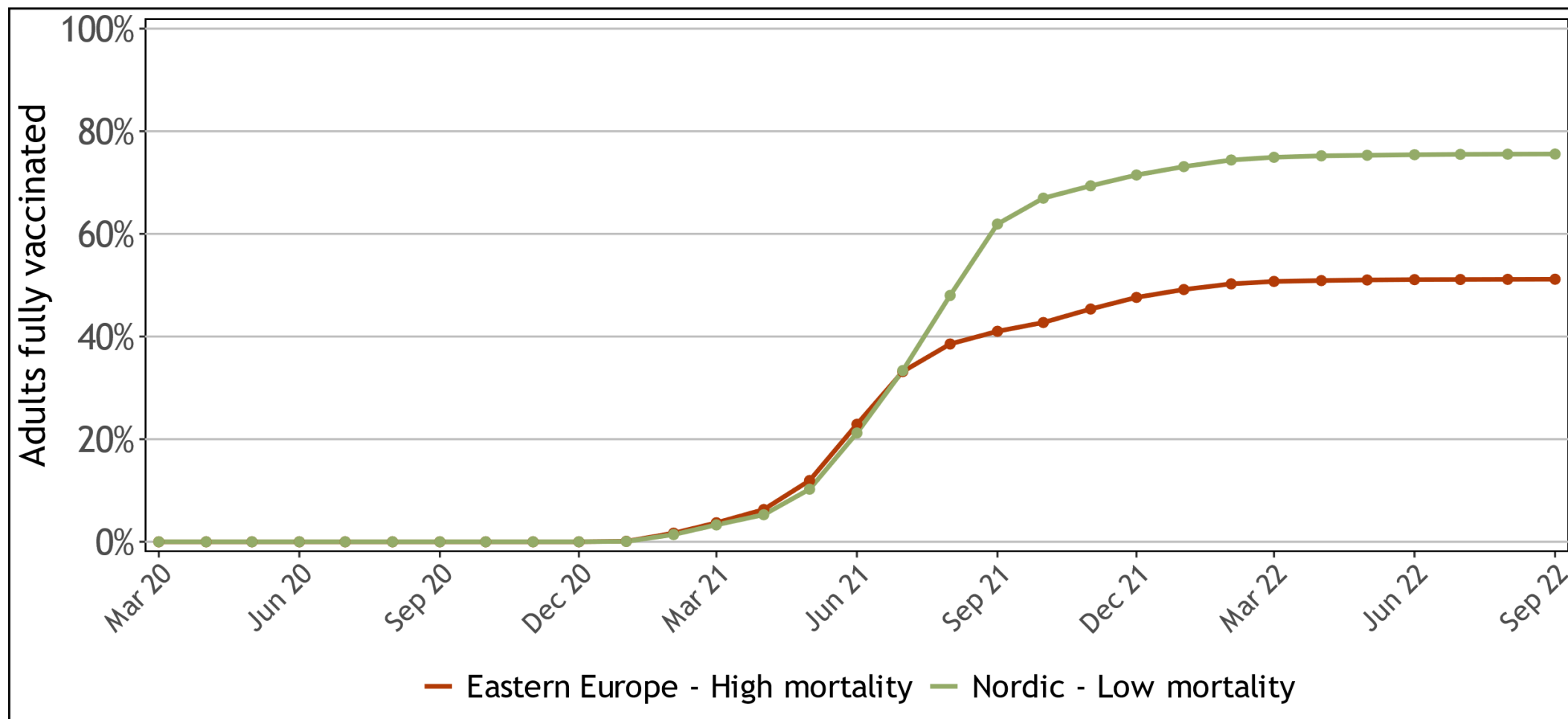
Mobility: five eastern European countries vs. four Nordic countries



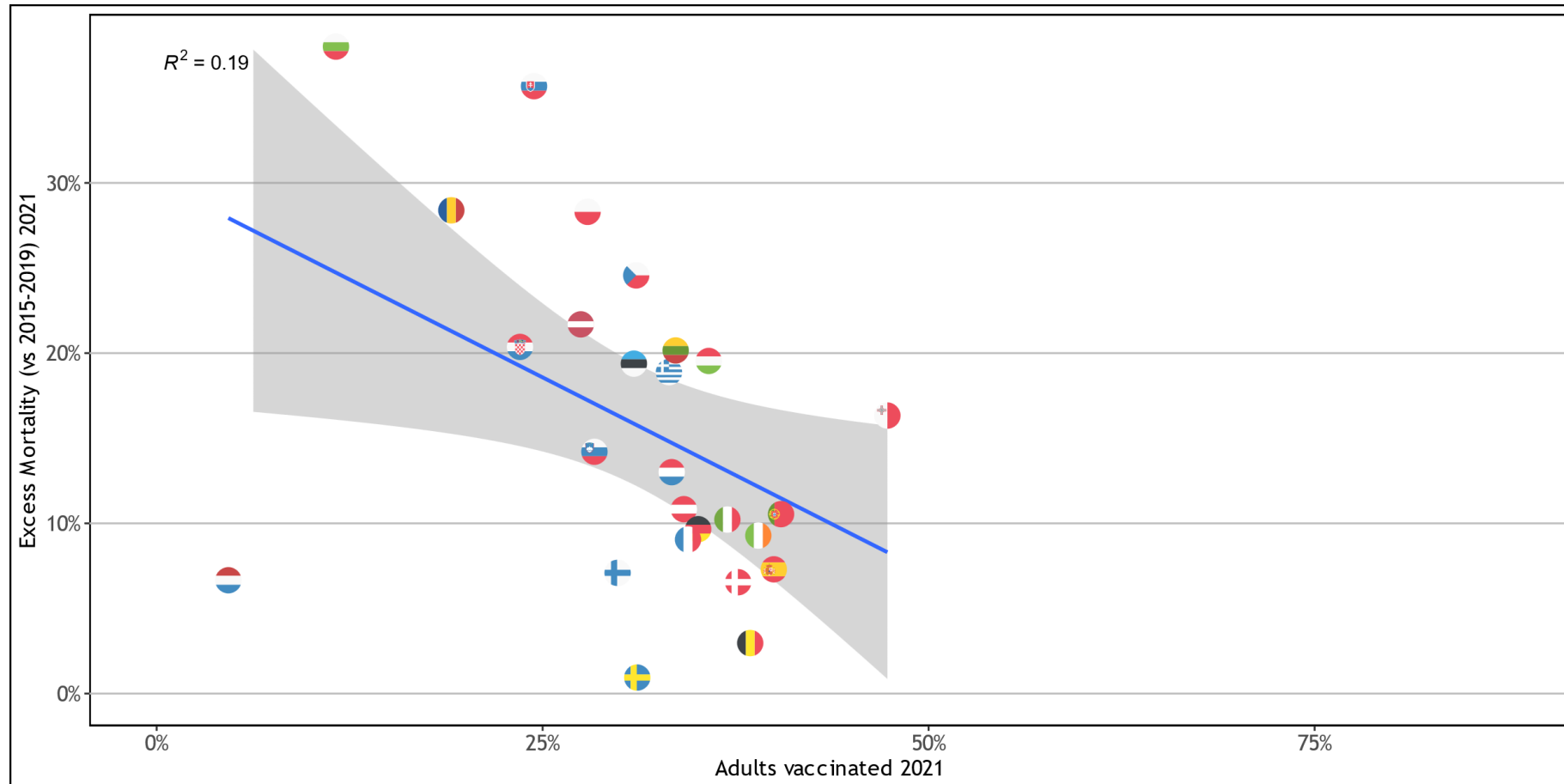
Excess mortality and Non Pharmaceutical Interventions (NPI) 2020 measured with Oxford stringency index, all EU countries



Vaccination: five eastern European countries vs. four nordic countries



Excess mortality and vaccination 2021, all EU countries



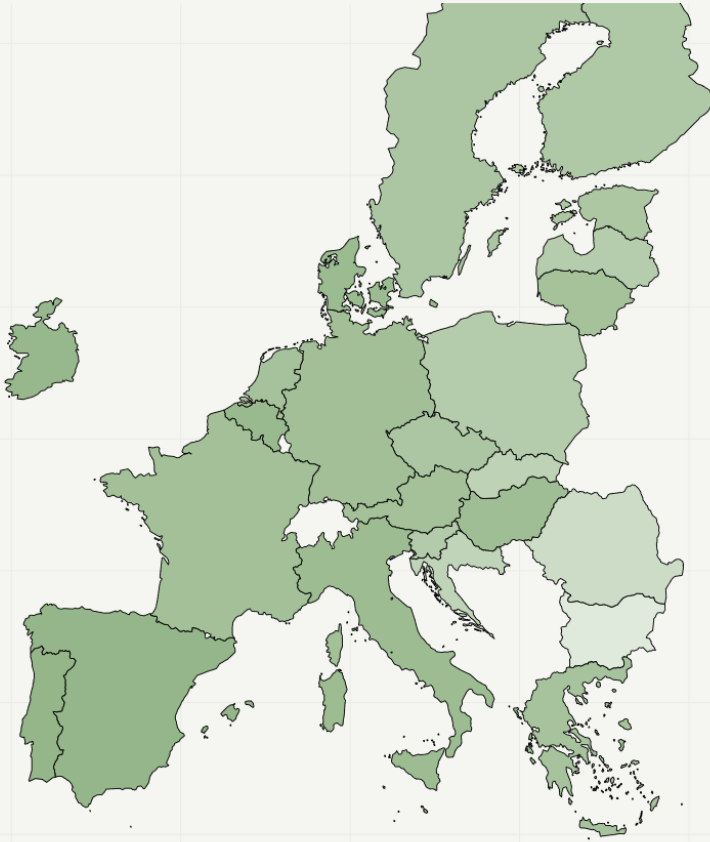
Proportion vaccinated in the EU during 11 March 2020 - 14 September 2022

% of the adult population

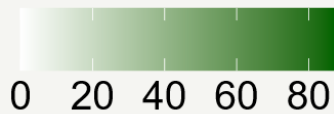
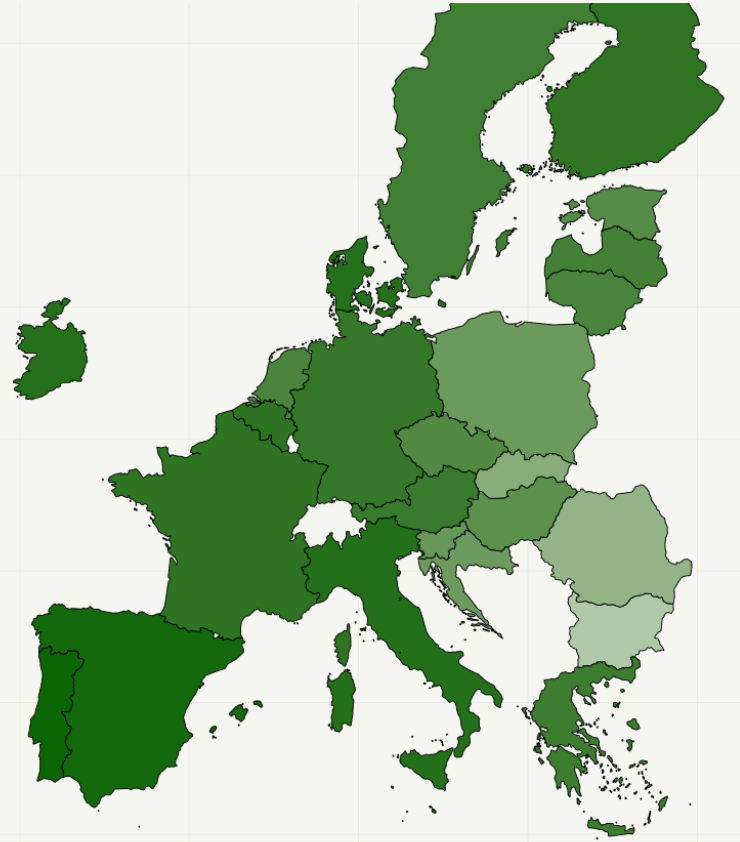
2020



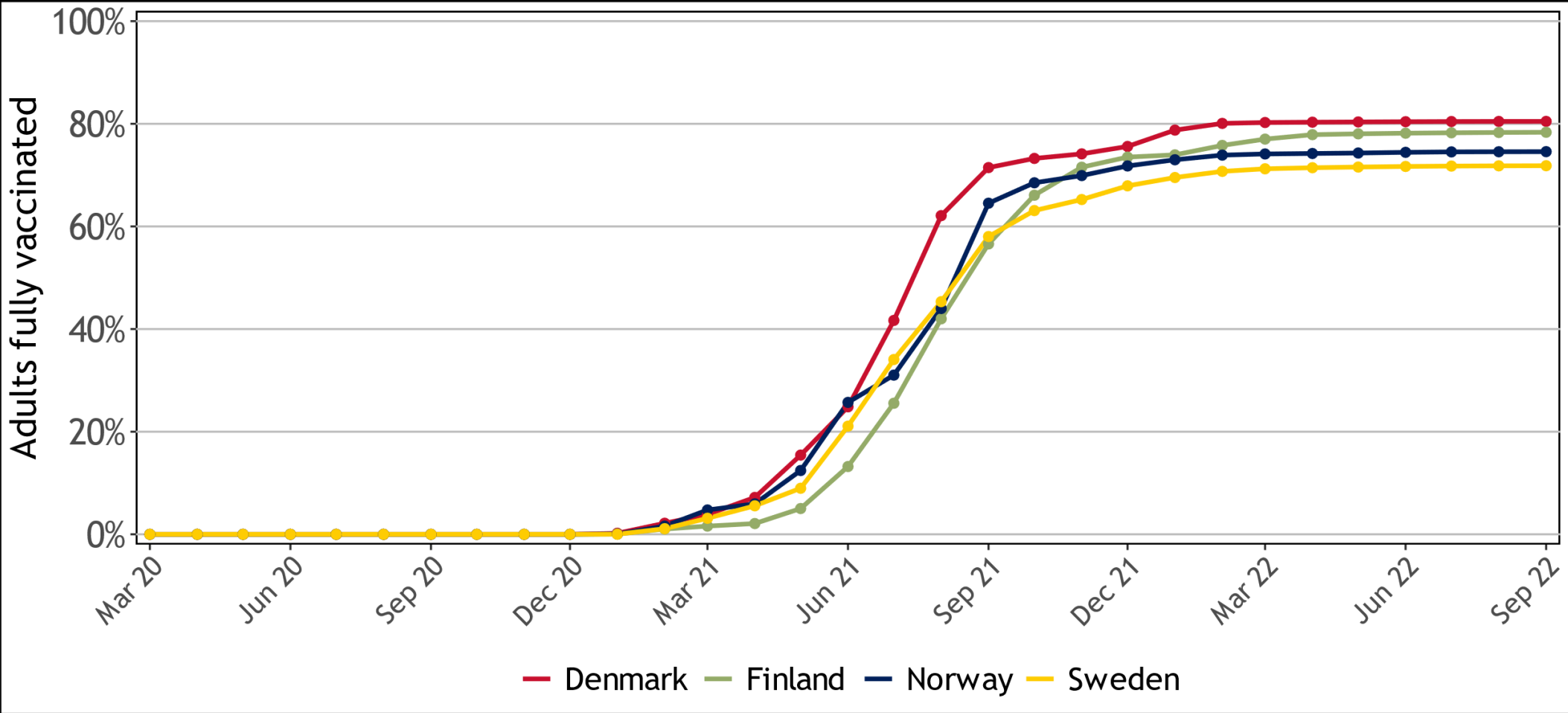
2021



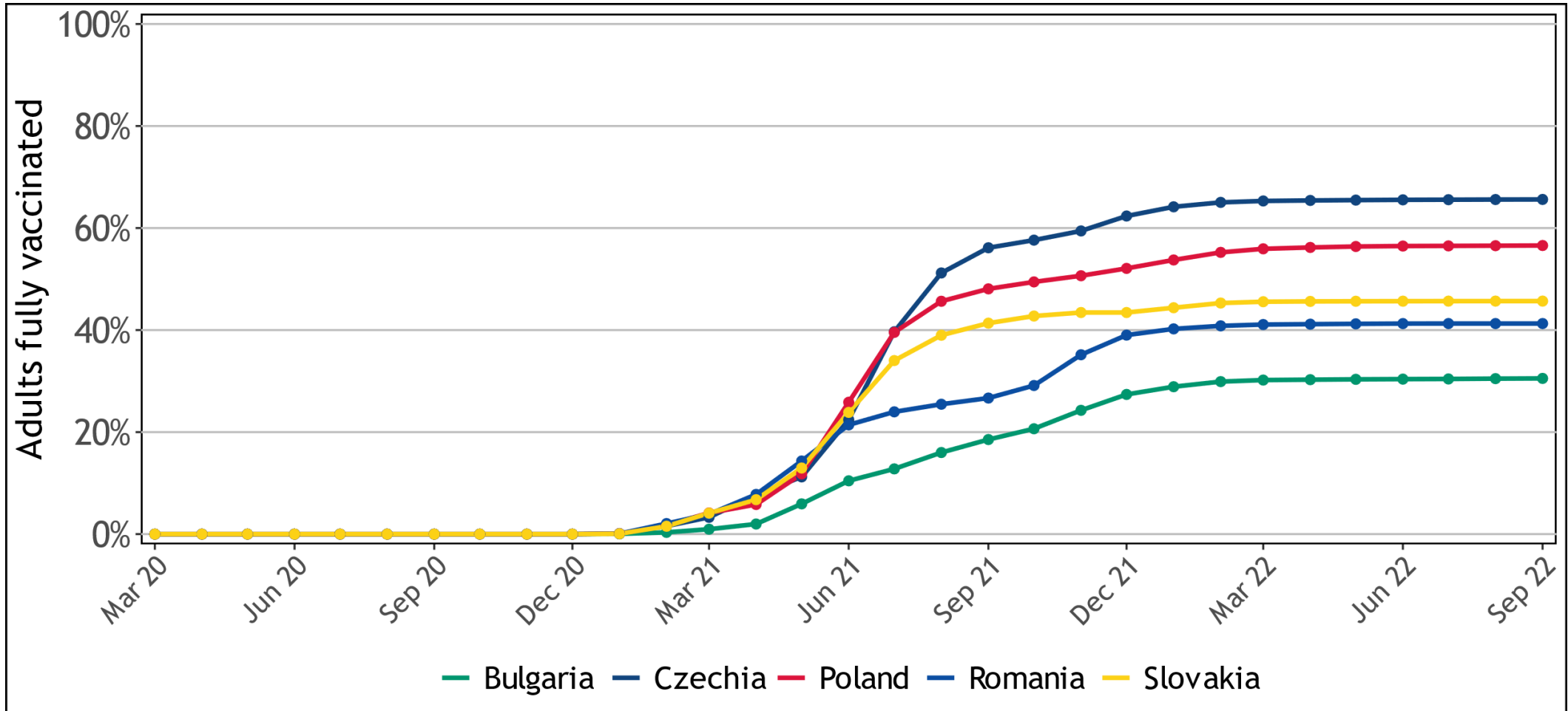
2022



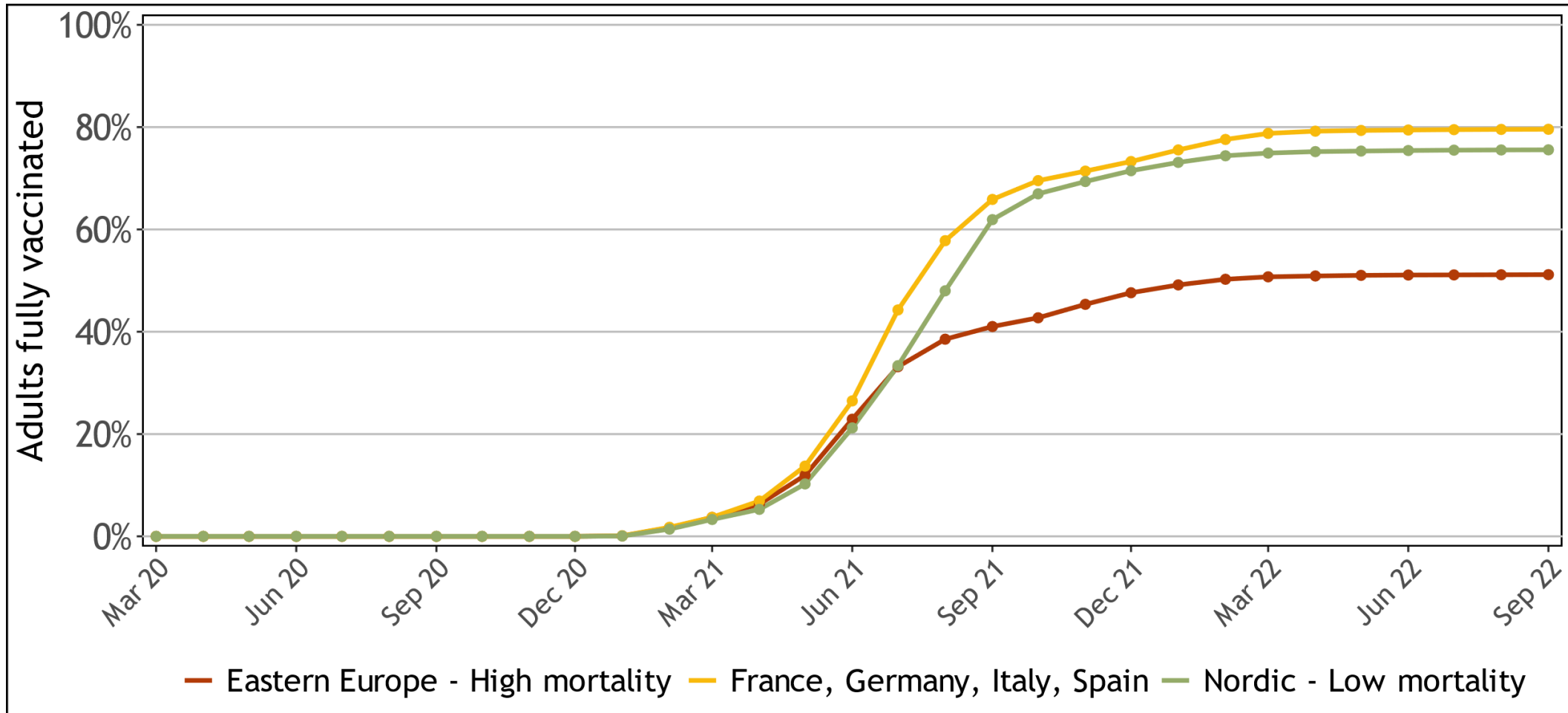
Vaccination figure low mortality - Nordic countries



Vaccination figure high mortality - Eastern Europe



Population vaccinated in the groups



Five eastern European countries vs. four Nordic countries

- Eastern European countries are relatively poor compared to the four Nordic countries
- NPI (stringency index) was higher in the eastern European countries
- Physical activity (mean go out) was higher in the eastern European countries, indicated less compliance to NPI, especially for the period during the second and third wave of Covid-19
- Vaccine uptake was high in the Nordics but low in the five eastern European countries
- Interpretation:
 - *Vaccine works for protecting excess mortality*
 - *NPI does not work if compliance is not good*
 - *In relatively poor countries population does not afford to stay isolated and thus compliance is not very good*