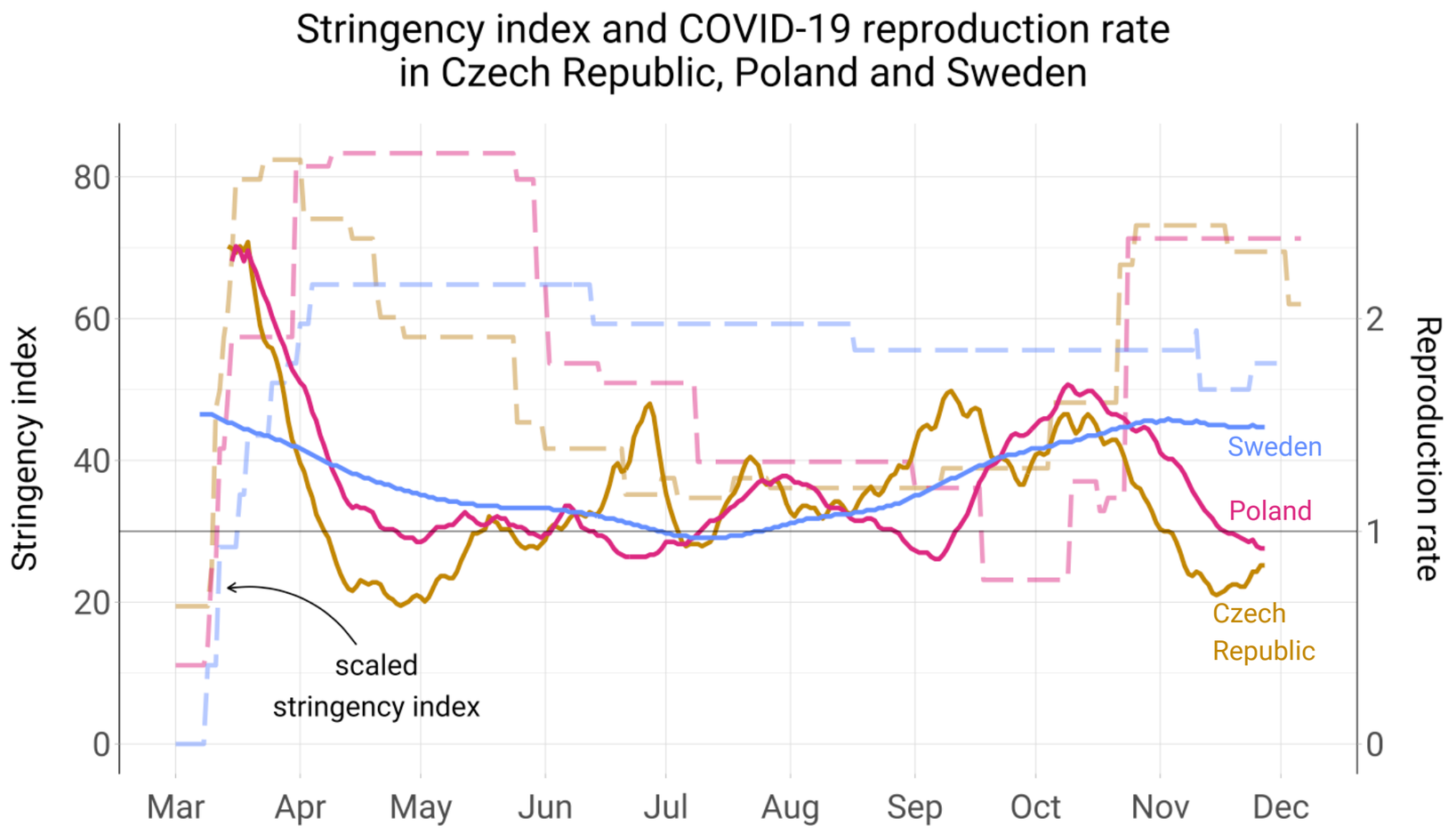
Restrictions impact on COVID-19 pandemic spread

Introduction

Stringency index indicates the level of introduced restrictions in a particular country.

Reproduction rate measures the expected number of cases directly generated by one case. Generally, pandemic is spreading in society if reproduction rate is greater than one.

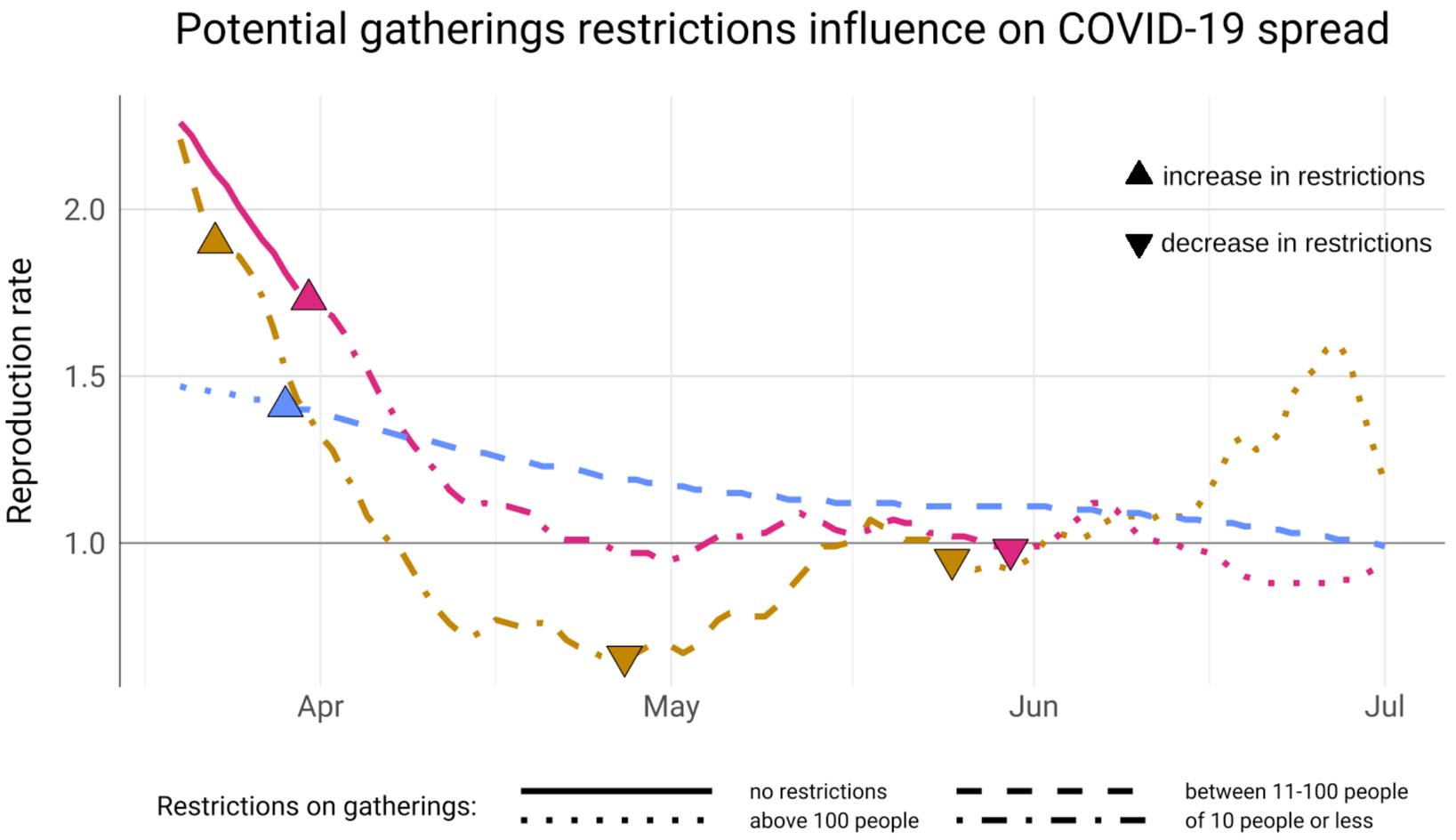
In this poster, we will compare how both of these affected pandemic spread in **Czech Republic**, **Poland** and **Sweden** as each of them had different restriction policies.



Restriction on gatherings vs. reproduction rate

On following chart we can see that **Poland** and **Czech Republic** quickly introduced restriction on gatherings of maximum 10 people and in result, the reproducition rate has rapidly decreased and has fallen below 1 (pandemic was slowing down). Allowing gatherings of more people in those countries has changed this trend especially in **Czech Republic**.

Sweden had an different politic about gatherings. After introducing limitation in gatherings to 11-100 people, they haven't changed their policy and as we can see, the reproduction rate have been slowly decreasing and at the end of June was around 1.

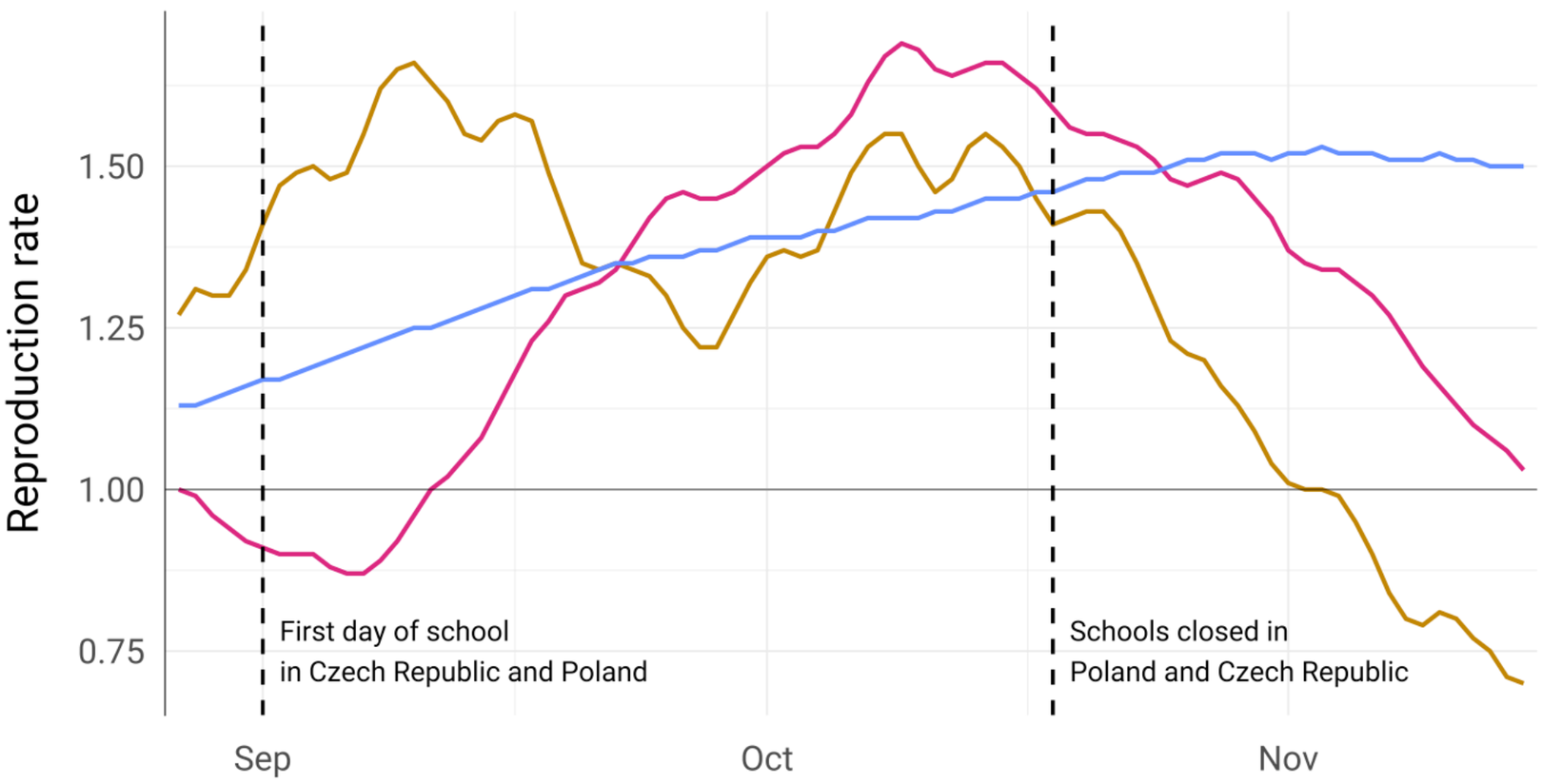


School closing vs. reproduction rate

On this chart we can see that timeline is divided into two parts. First shows time when schools were opened in these three countries and second time after their closure in **Poland** and **Czech Republic**.

We can see that opening schools made huge impact on spreading of COVID-19 in **Poland**. On the other hand, the closure of schools have completely changed situation in **Poland** and **Czech Republic**. Reproduction rate started to decrease and eventually reached 1 or even less.

Keeping schools open in **Sweden** have not stopped the steady increase in the spread of pandemic.



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Data sources

https://covid.ourworldindata.org
https://www.bsg.ox.ac.uk/covidtracker