



Verkehrssystemplanung



The Effects of different non pharmaceutical Interventions on R

Sebastian Alexander Müller

Billy Charlton

Ricardo Ewert

Christian Rakow

Kai Nagel

<https://matsim-vsp.github.io/covid-sim/>

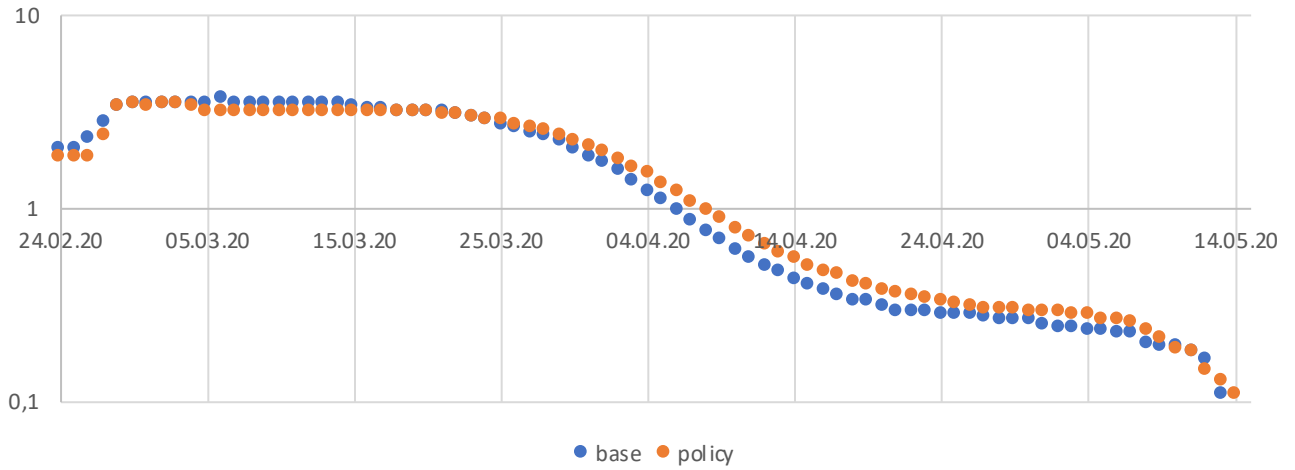
contact: covid19@vsp.tu-berlin.de

Here we calculate the influence of non pharmaceutical measure on R. Each page shows three plots:

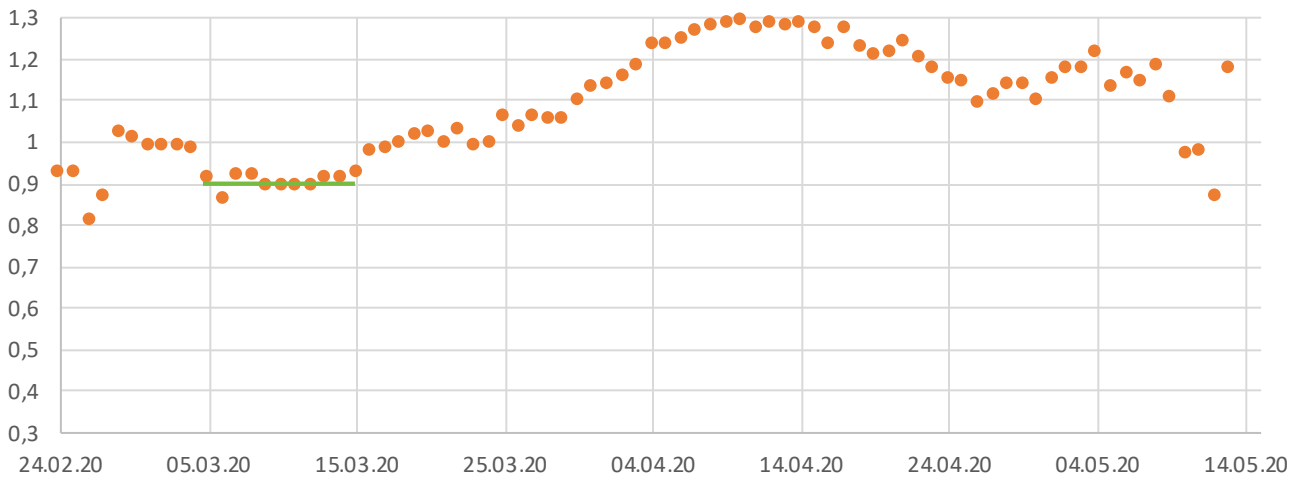
- R: smoothed R-Values (7-day median)
- R_base / R_policy: division of R-Values
- Infection events: Number of infections on a given day

kindergarten and educational activities reduced to 0%

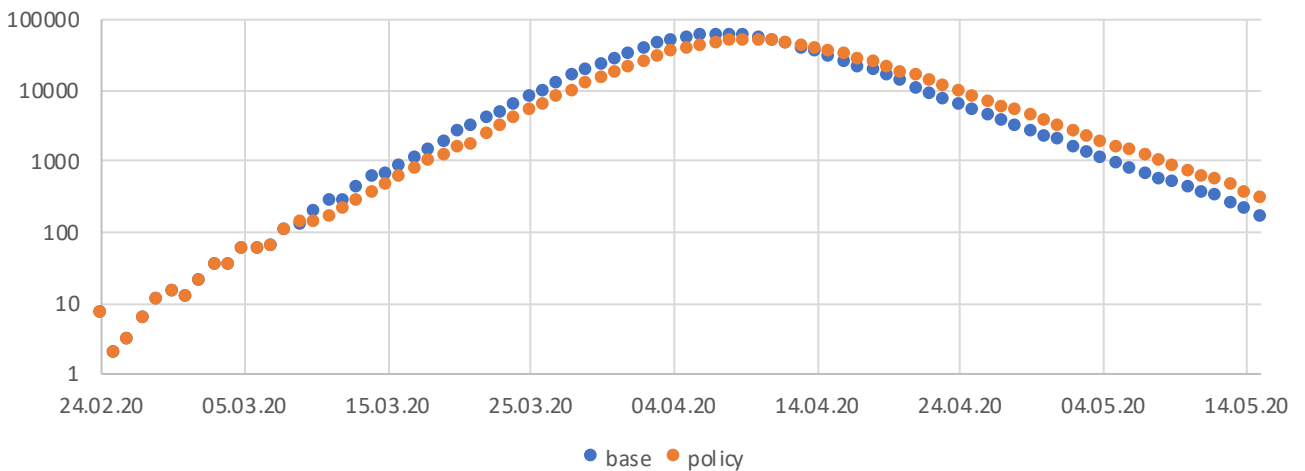
R



$r_{\text{base}} / r_{\text{policy}}$

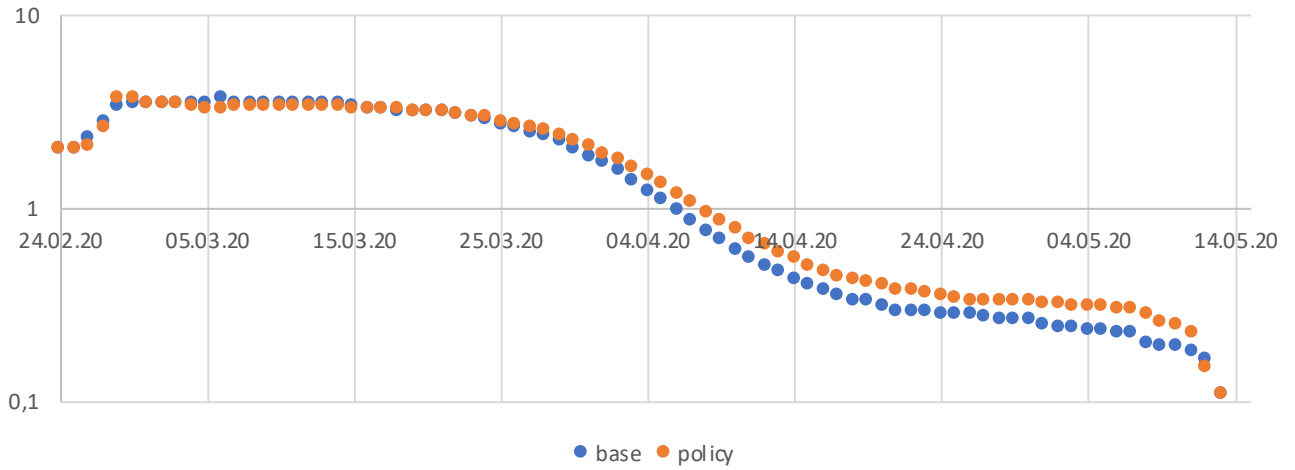


infection events

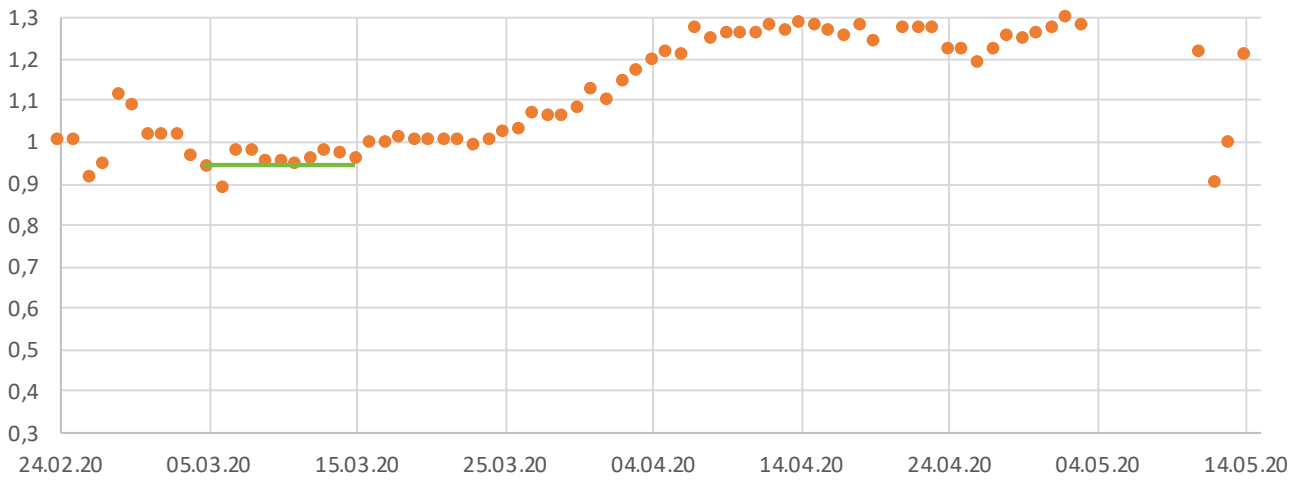


kindergarten and educational activities reduced to 50%

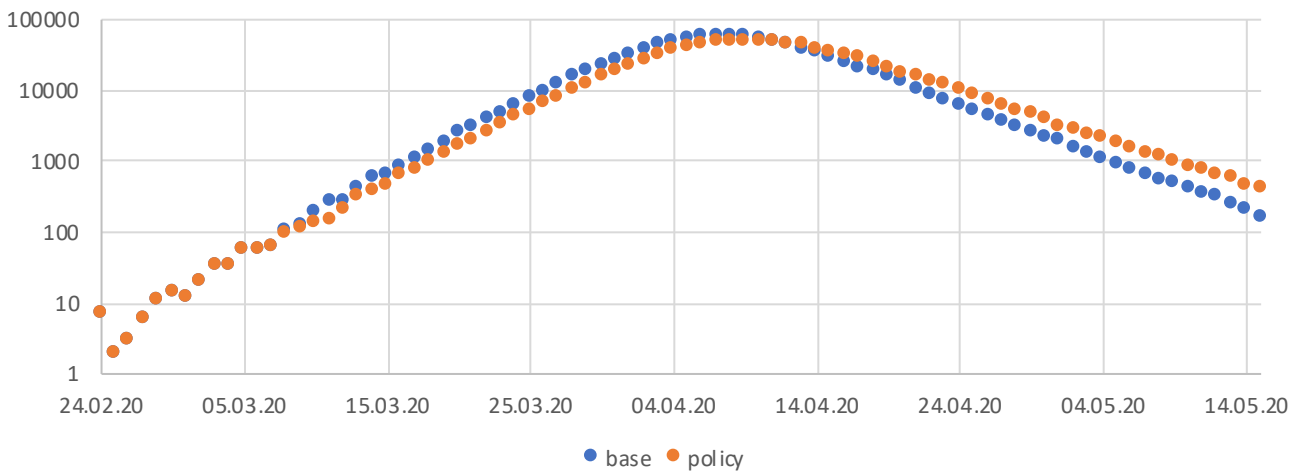
R



$r_{\text{base}} / r_{\text{policy}}$

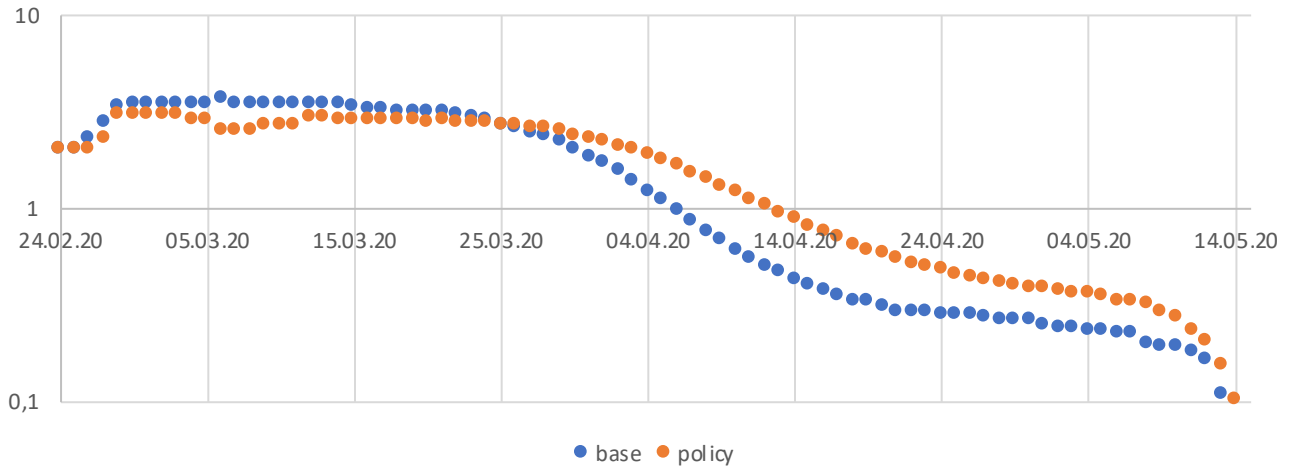


infetction events

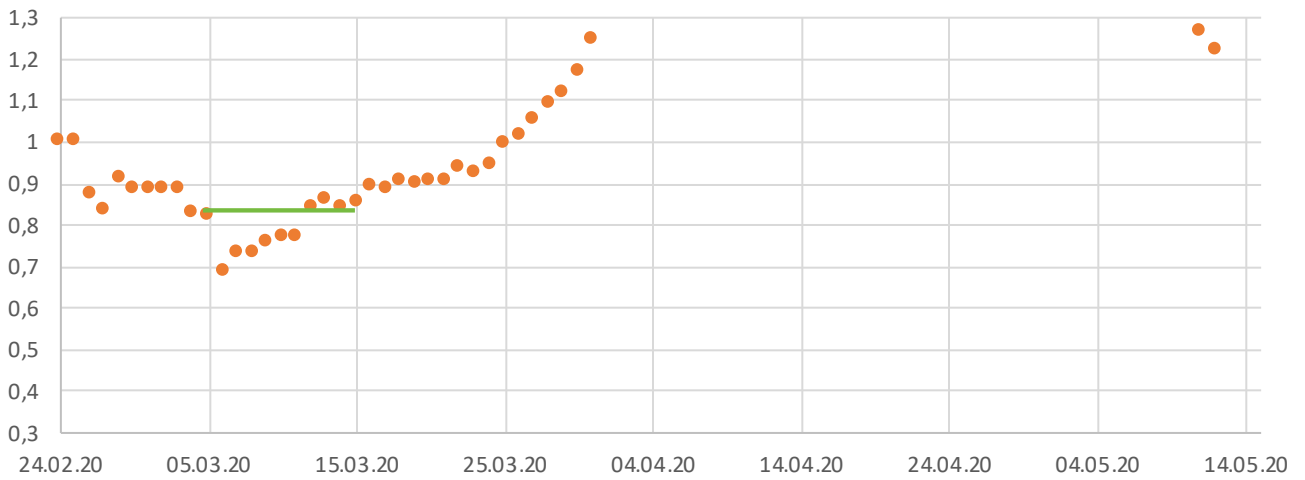


leisure activities reduced to 50%

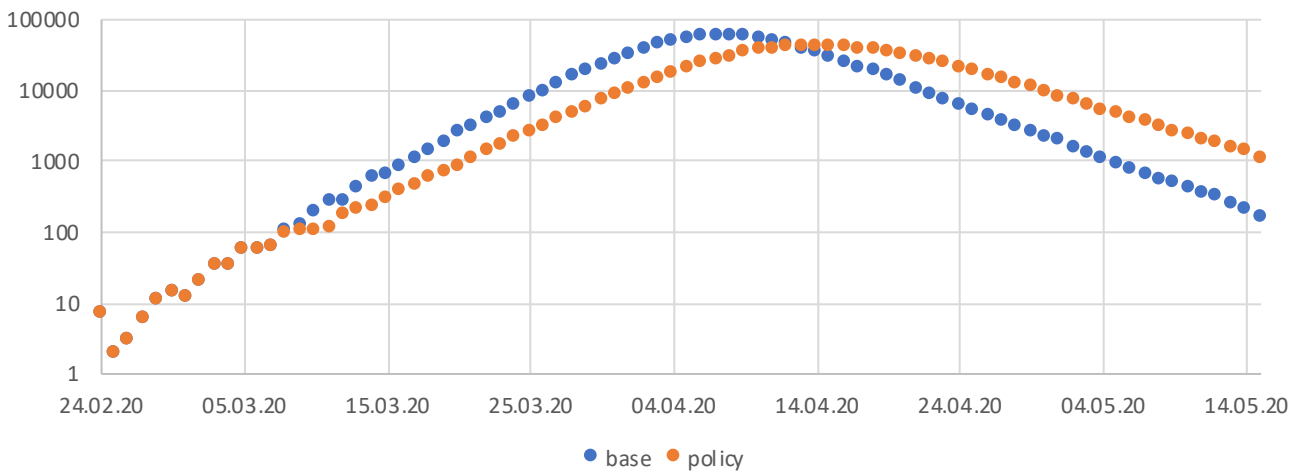
R



$r_{\text{base}} / r_{\text{policy}}$

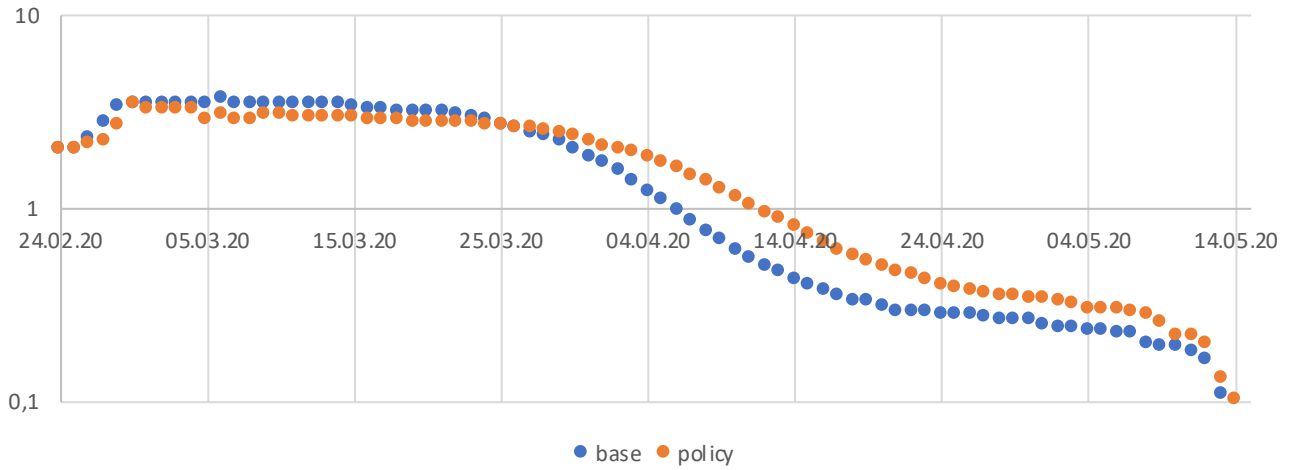


infection events

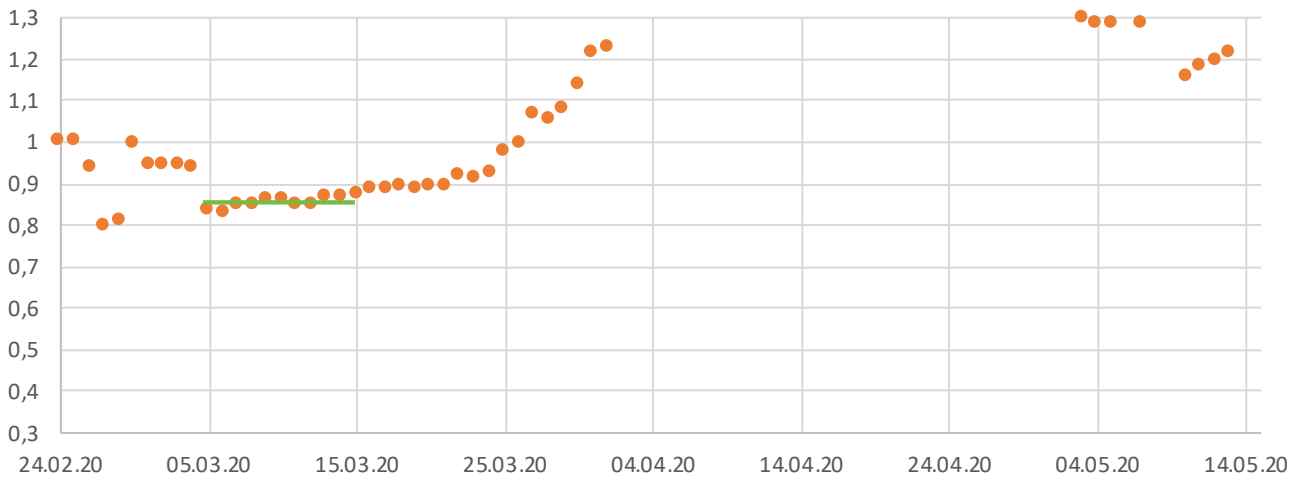


work activities reduced to 50%

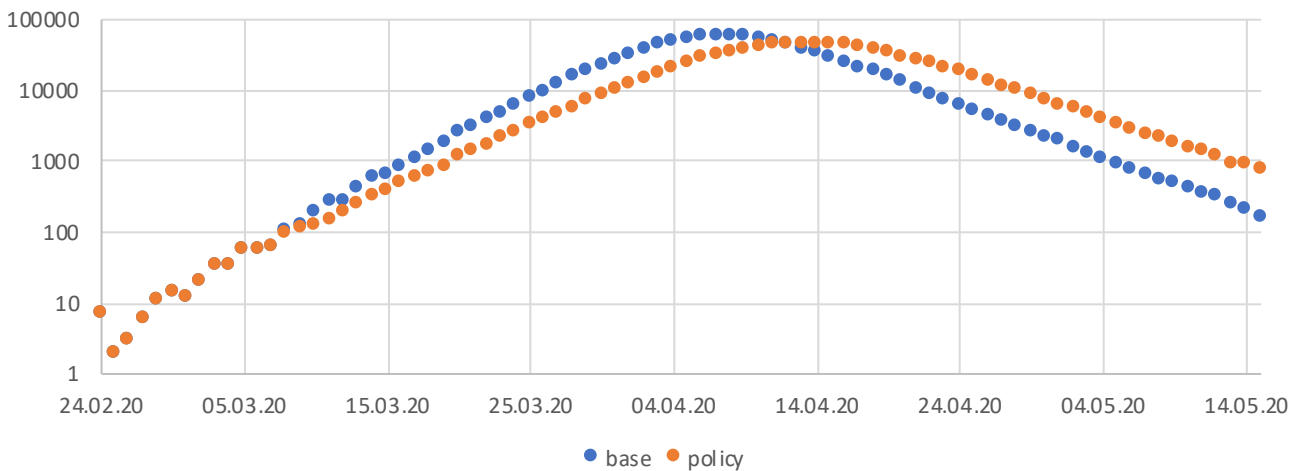
R



$r_{\text{base}} / r_{\text{policy}}$

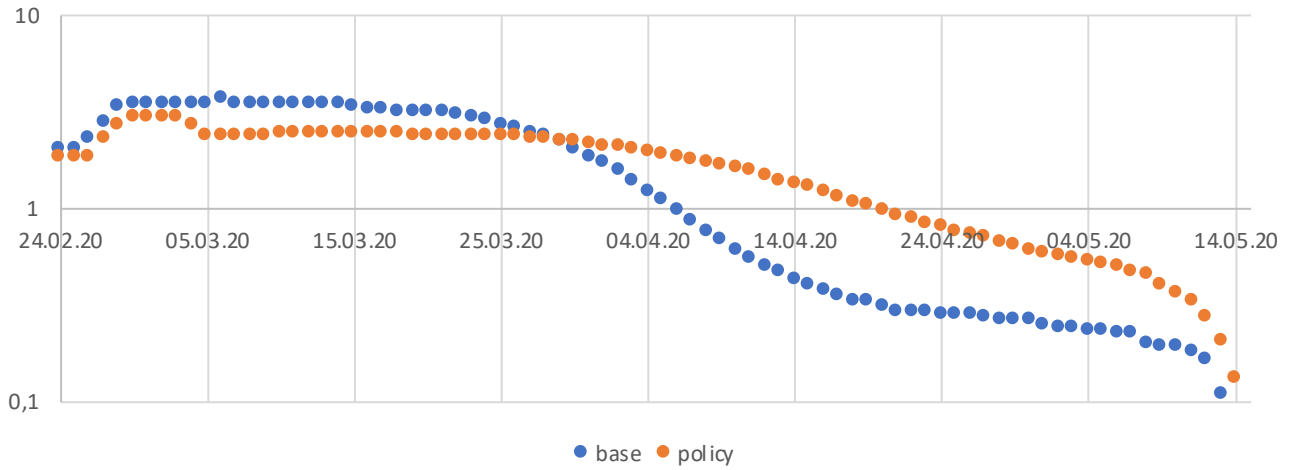


infection events

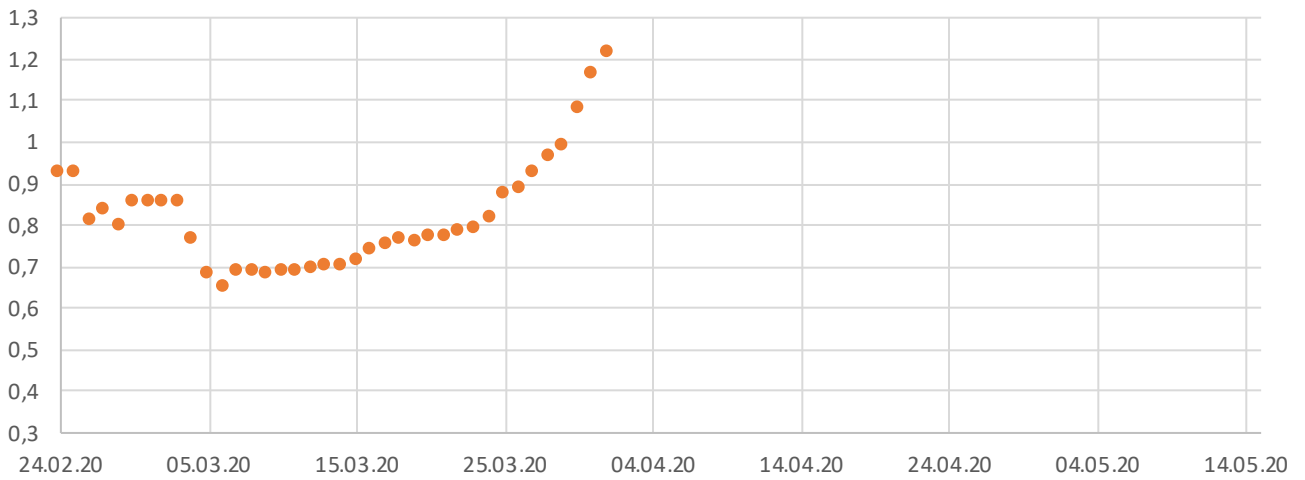


leisure and work activities reduced to 50%

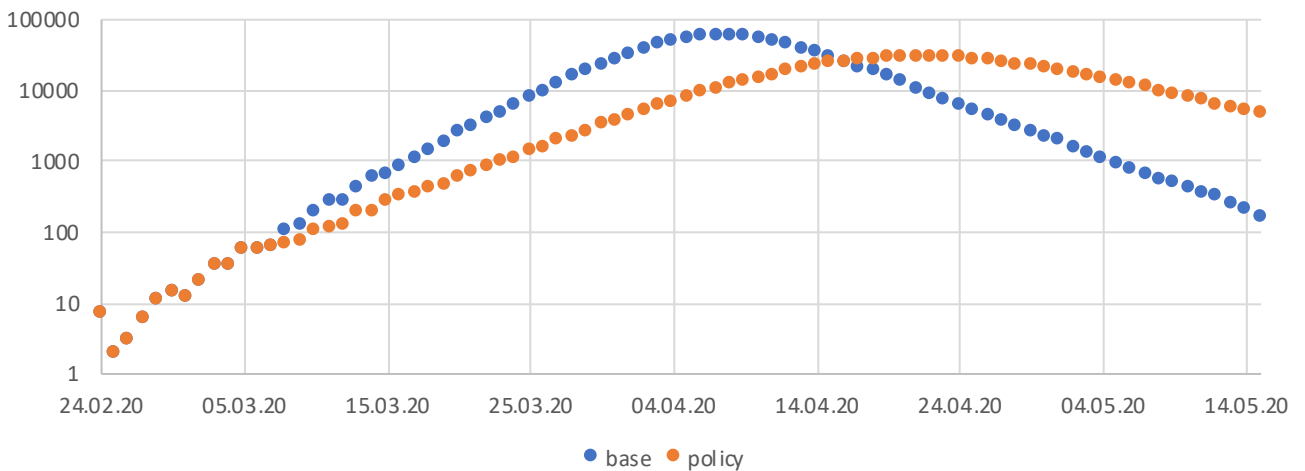
R



$r_{\text{base}} / r_{\text{policy}}$

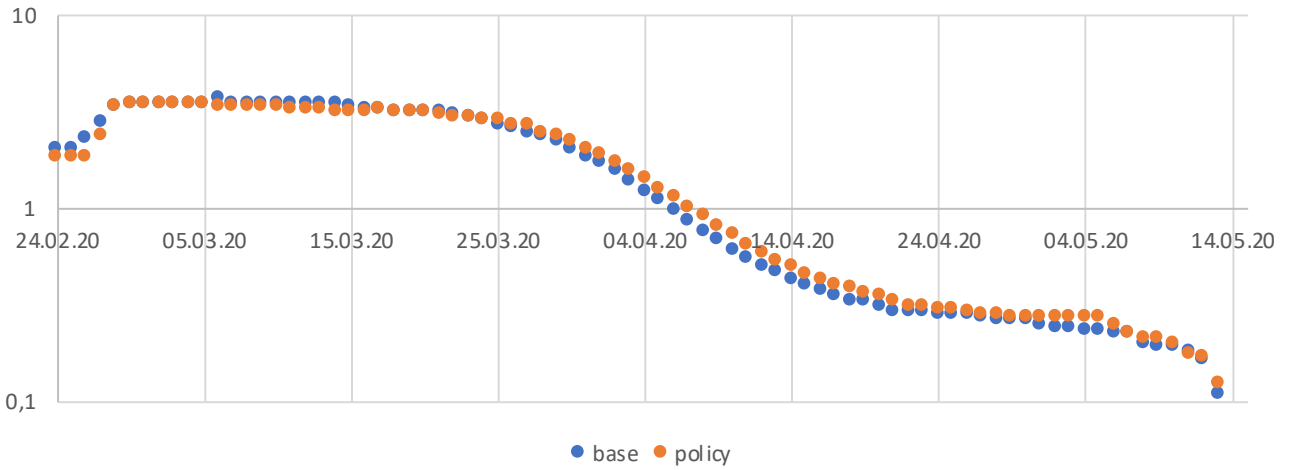


infection events

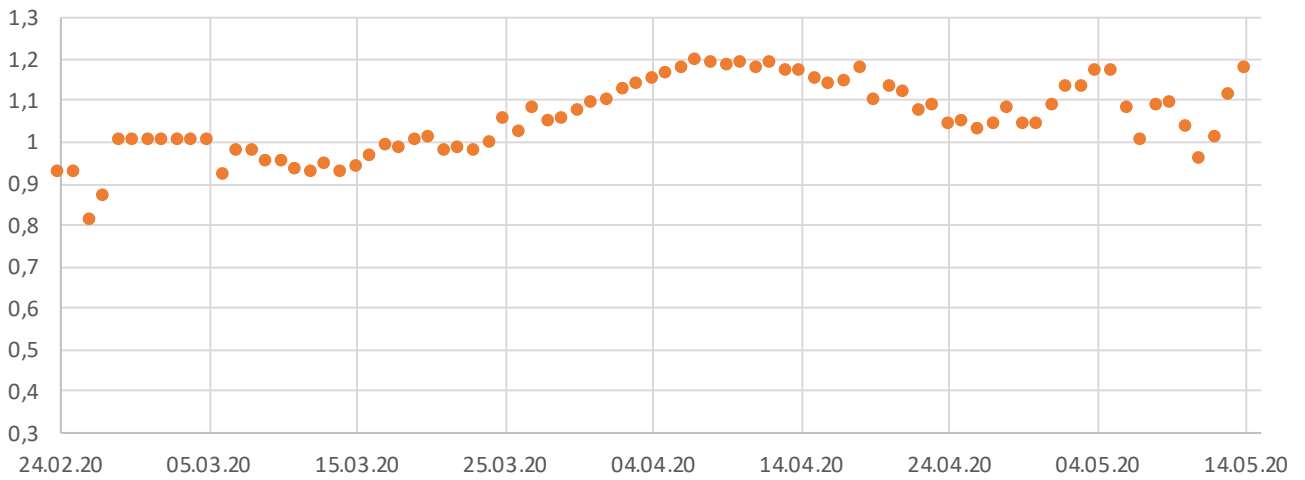


shopping activities reduced to 50%

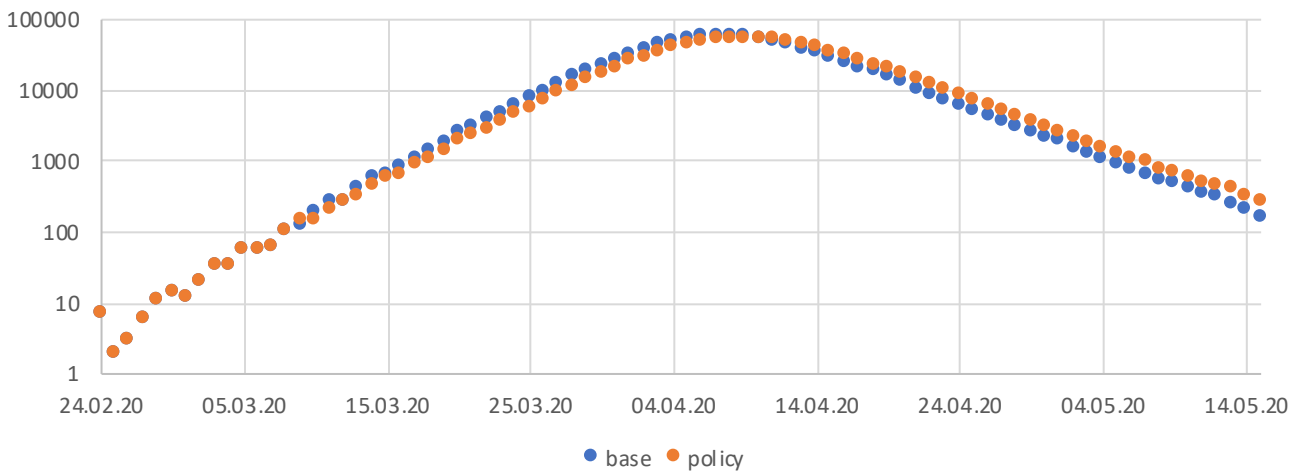
R



$r_{\text{base}} / r_{\text{policy}}$

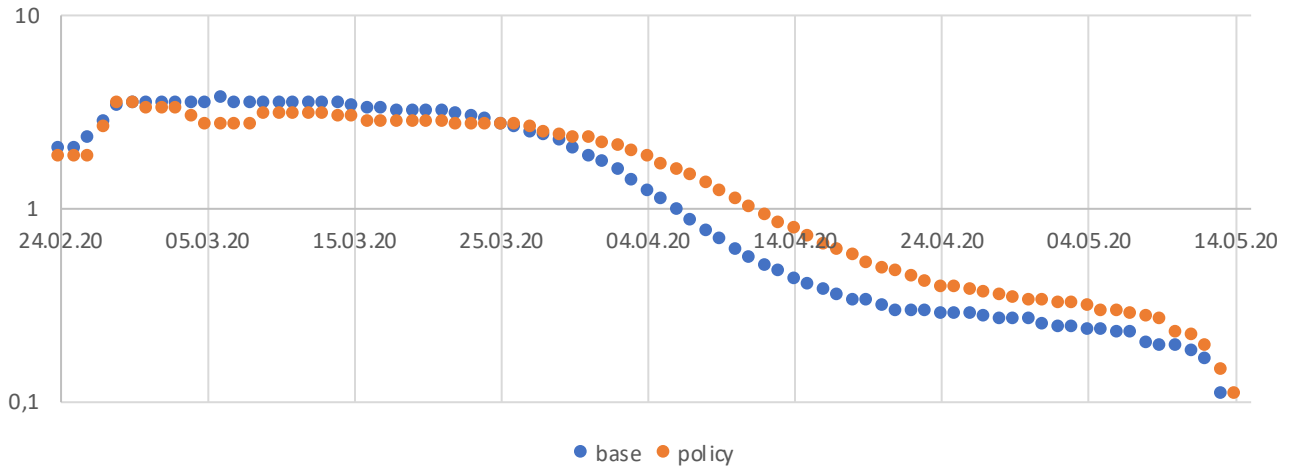


infection events

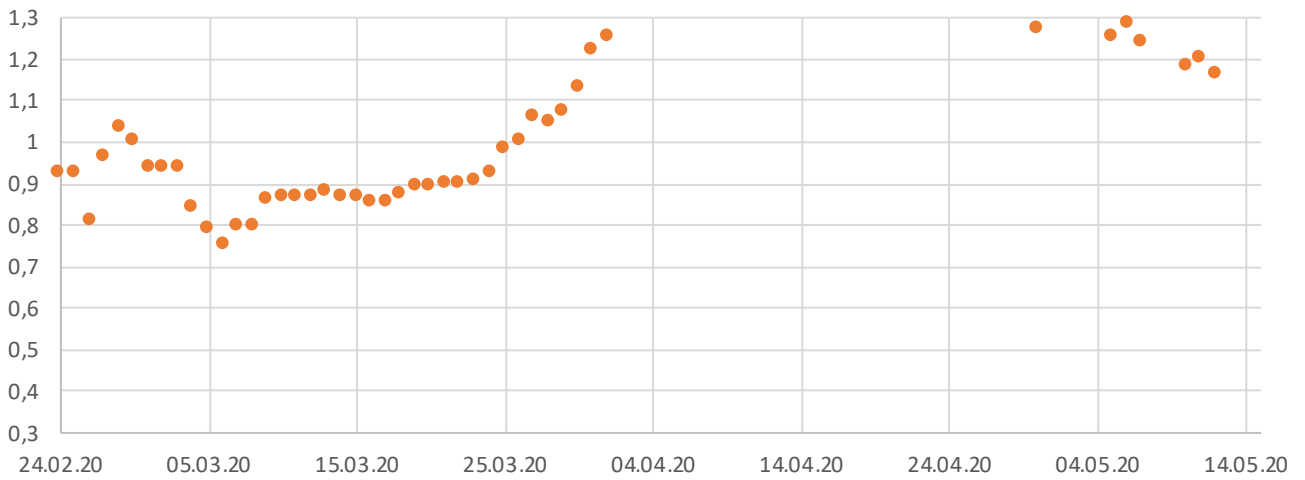


errands, business and visit activities reduced to 50%

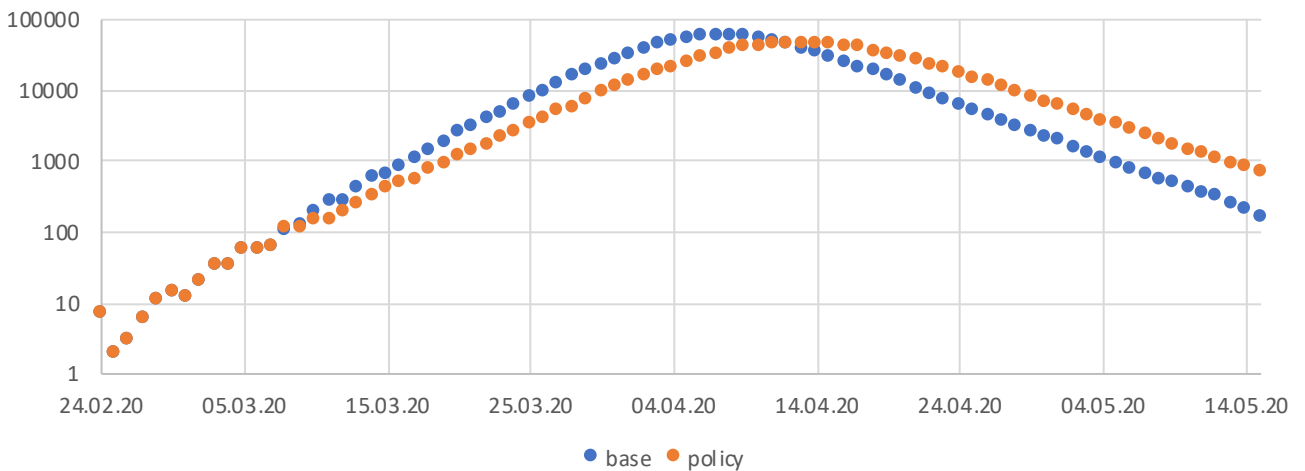
R



$r_{\text{base}} / r_{\text{policy}}$

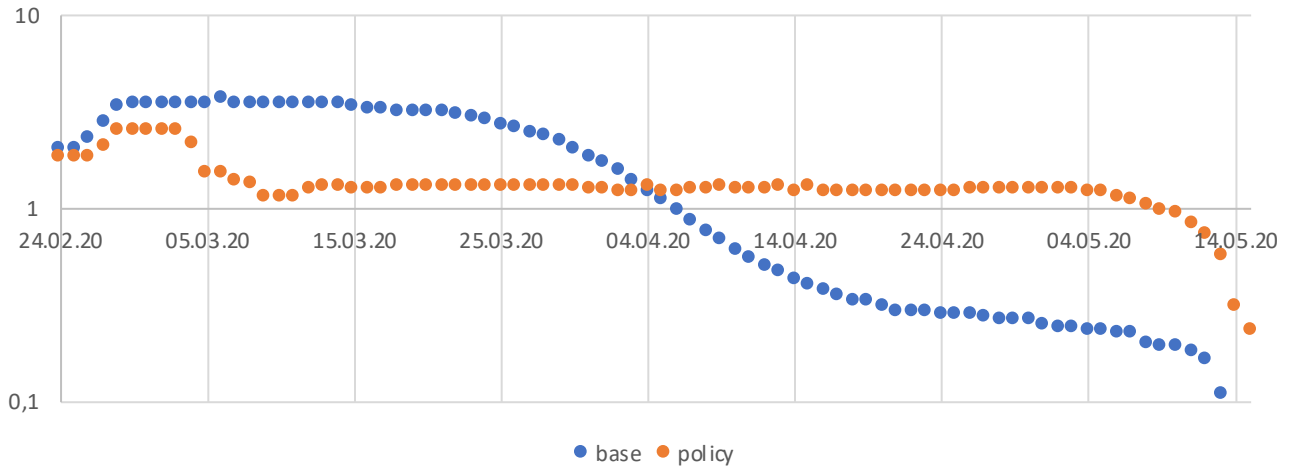


infection events

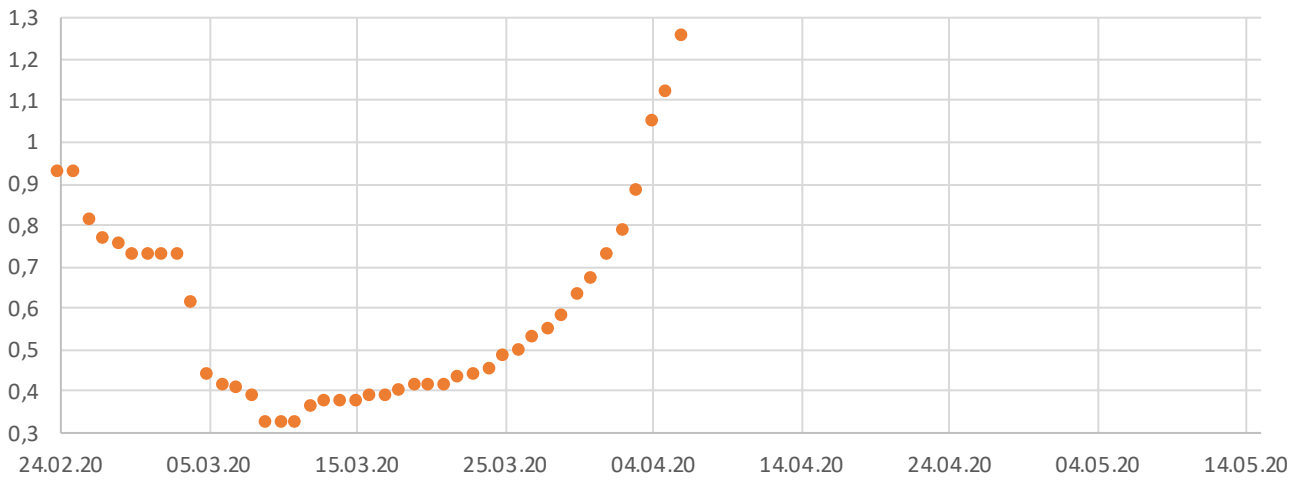


out of home activities reduced to 50%

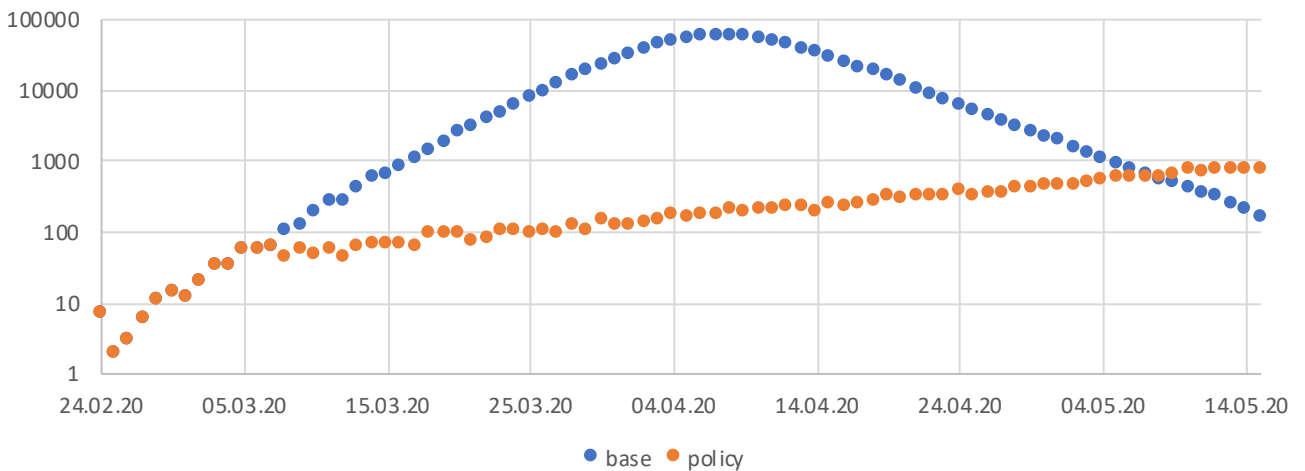
R



r_{base} / r_{policy}

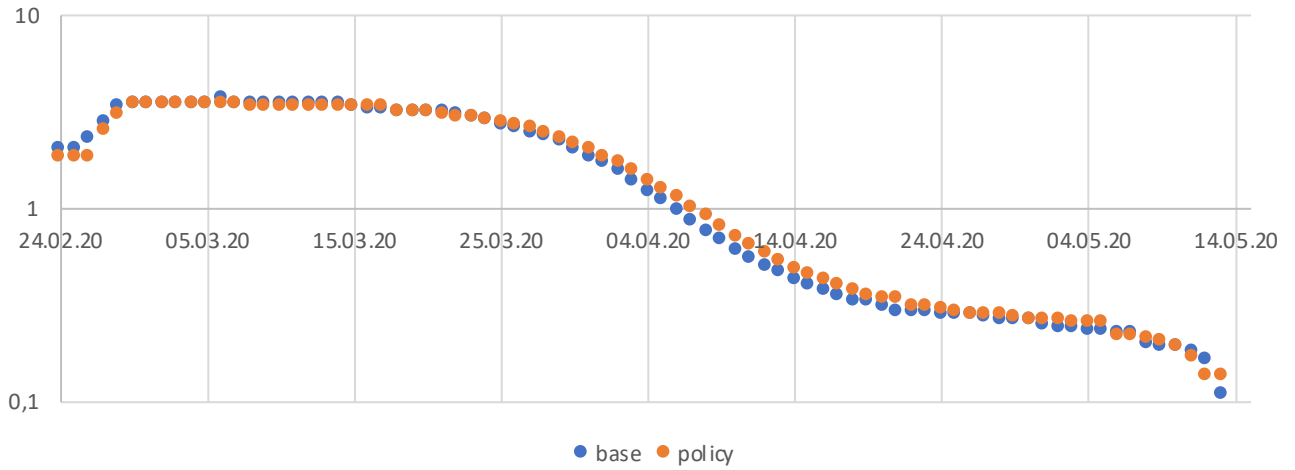


infection events

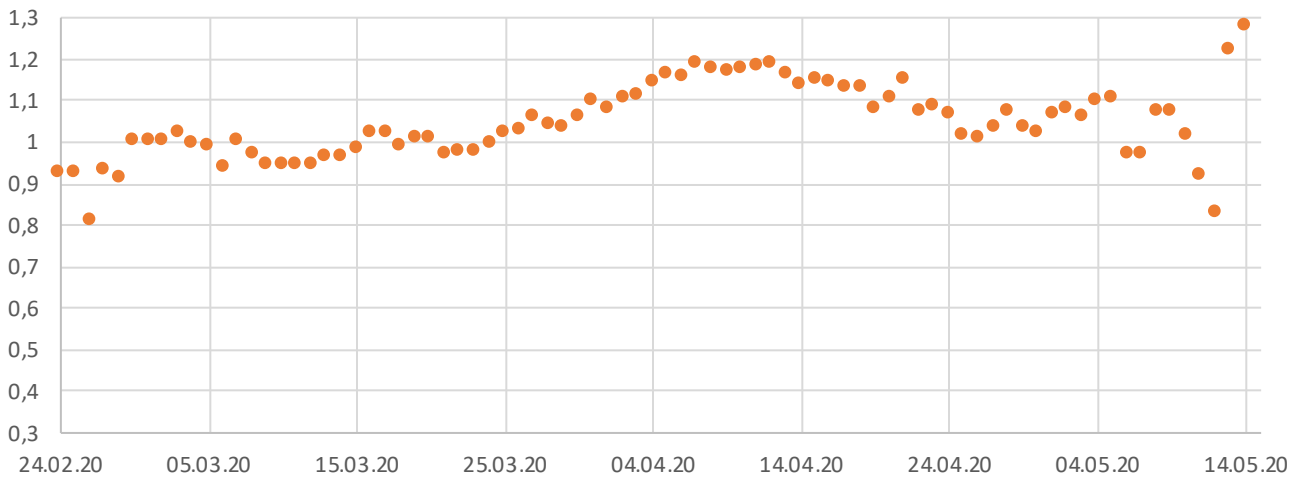


public transport reduced to 0%

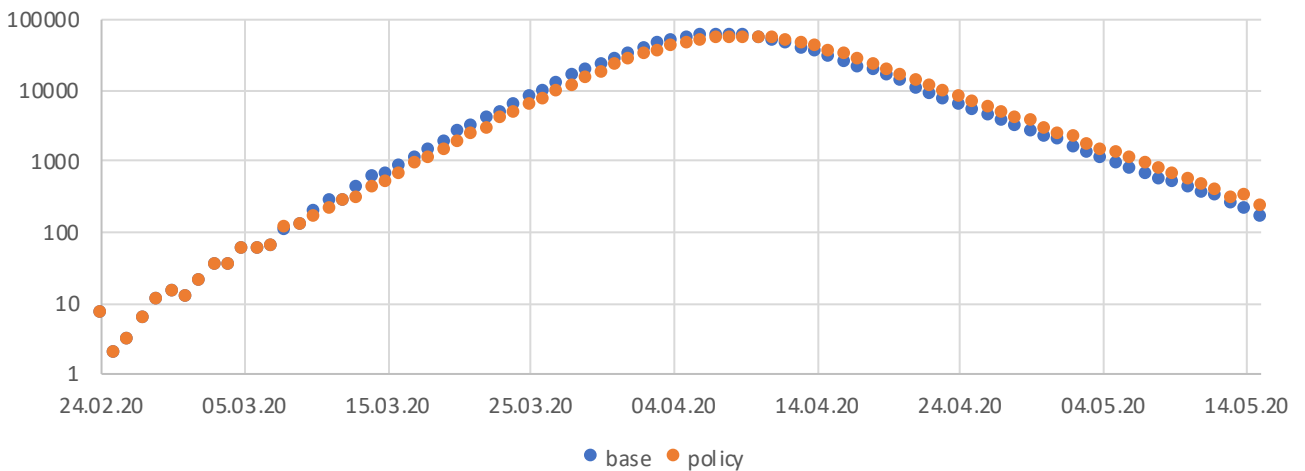
R



$r_{\text{base}} / r_{\text{policy}}$

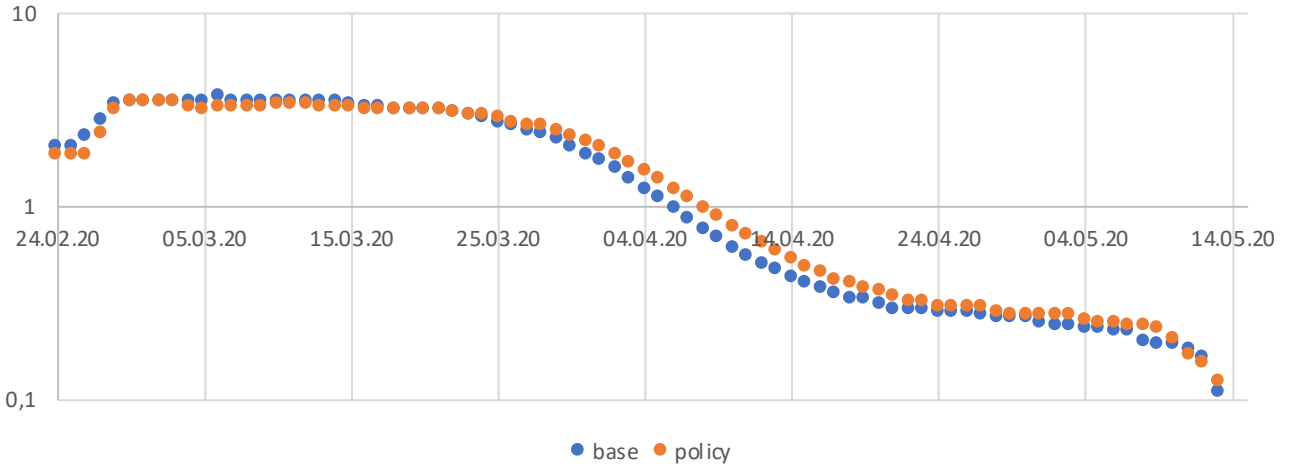


infection events

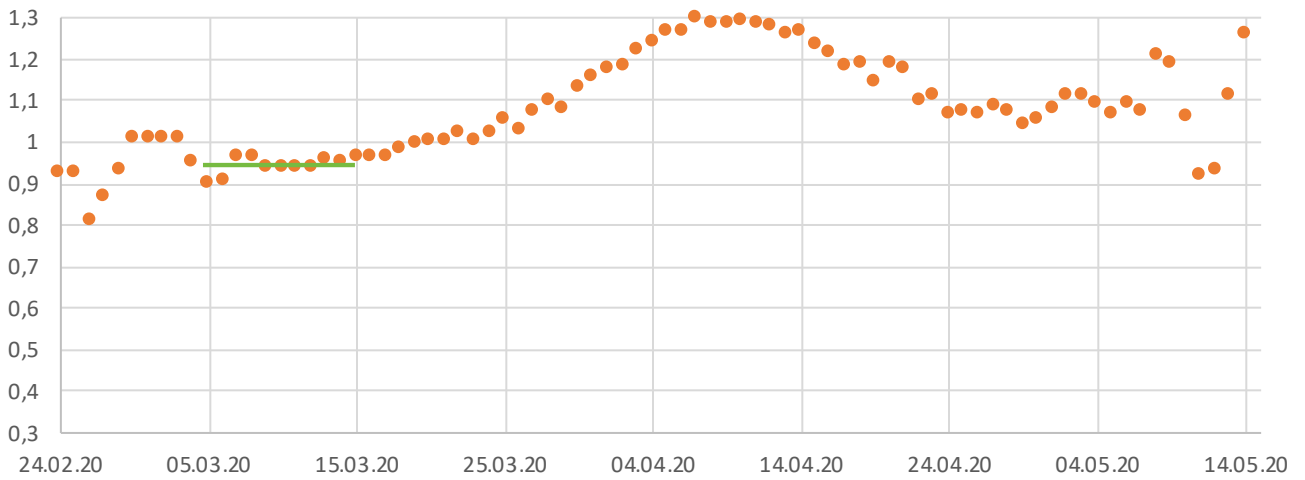


wearing masks in public transport and shops (60% compliance: 50% wearing cloth masks, 10% wearing surgical masks)

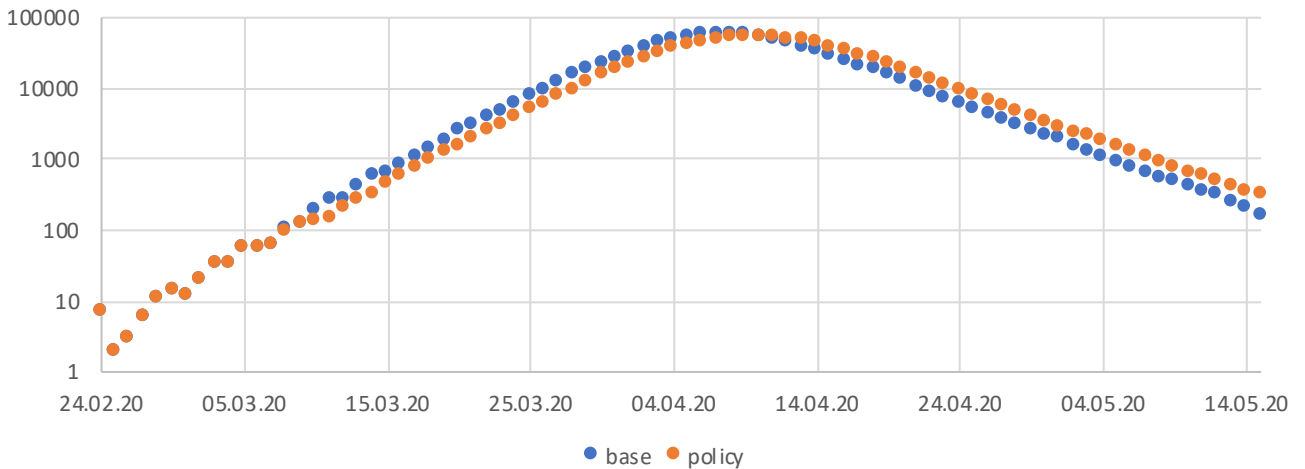
R



$r_{\text{base}} / r_{\text{policy}}$

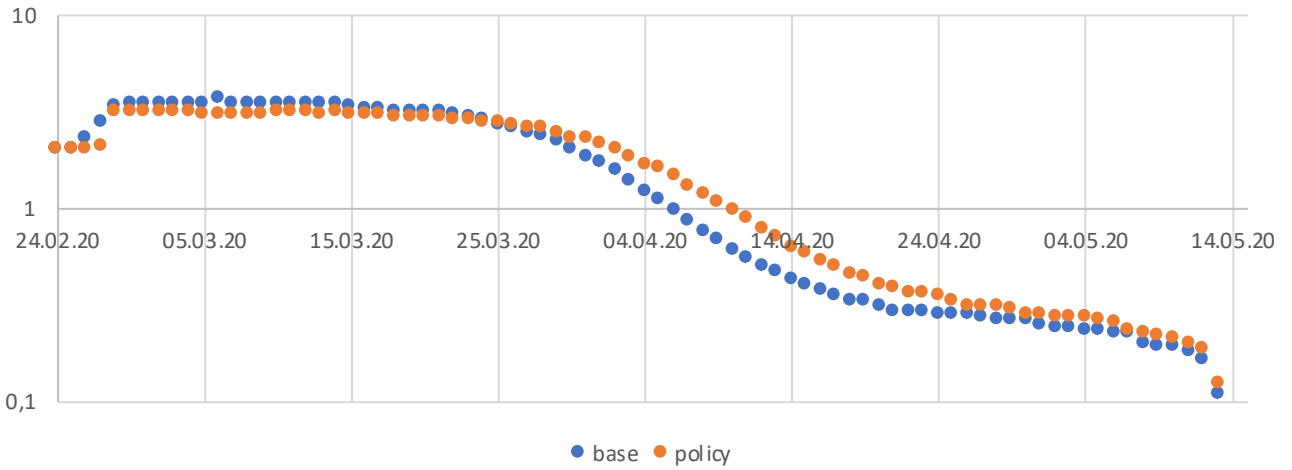


infection events

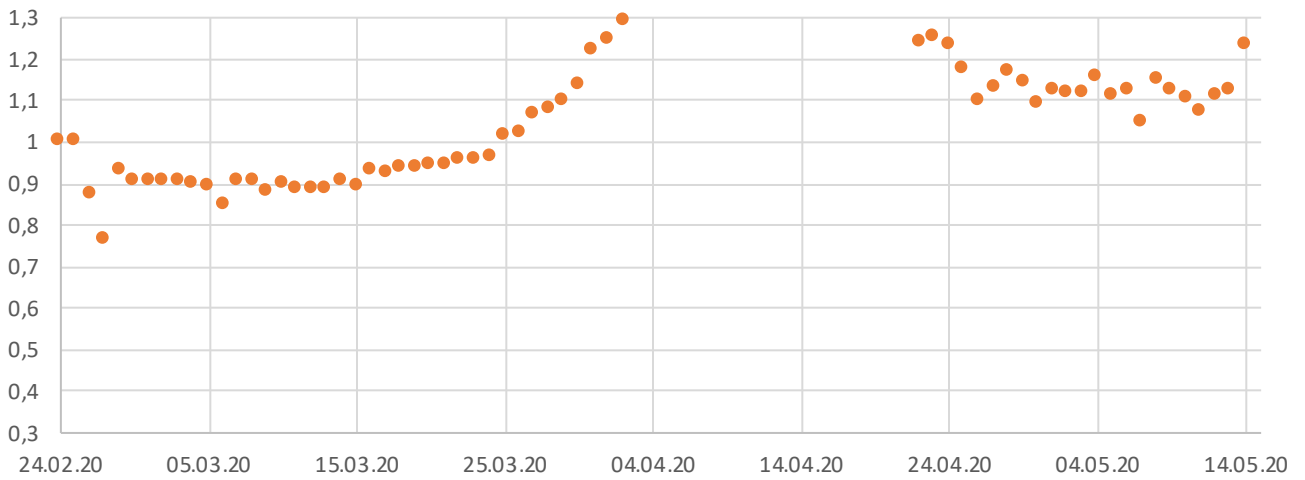


wearing masks at work (60% compliance: 50% wearing cloth masks, 10% wearing surgical masks)

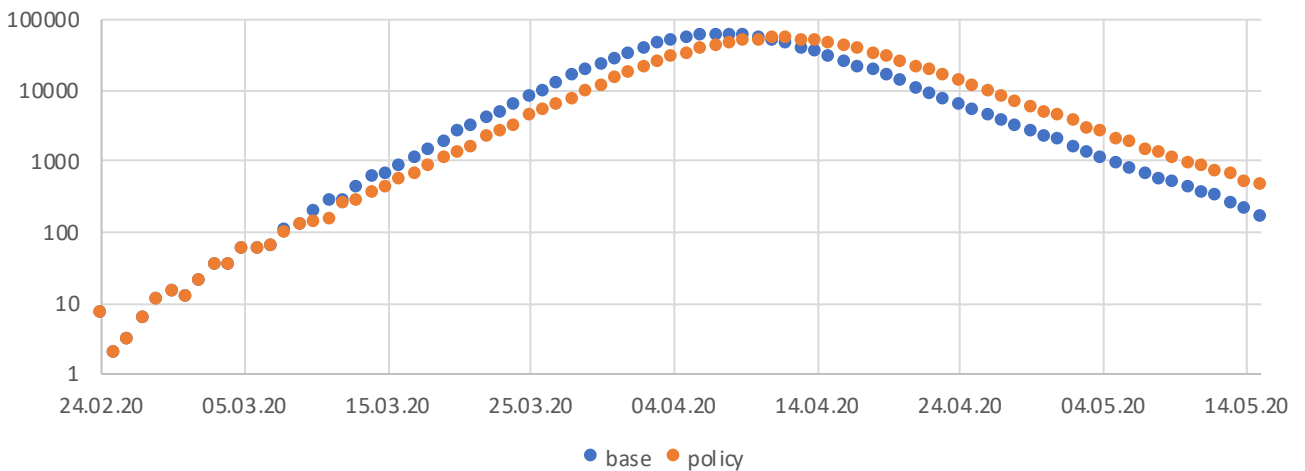
R



$r_{\text{base}} / r_{\text{policy}}$

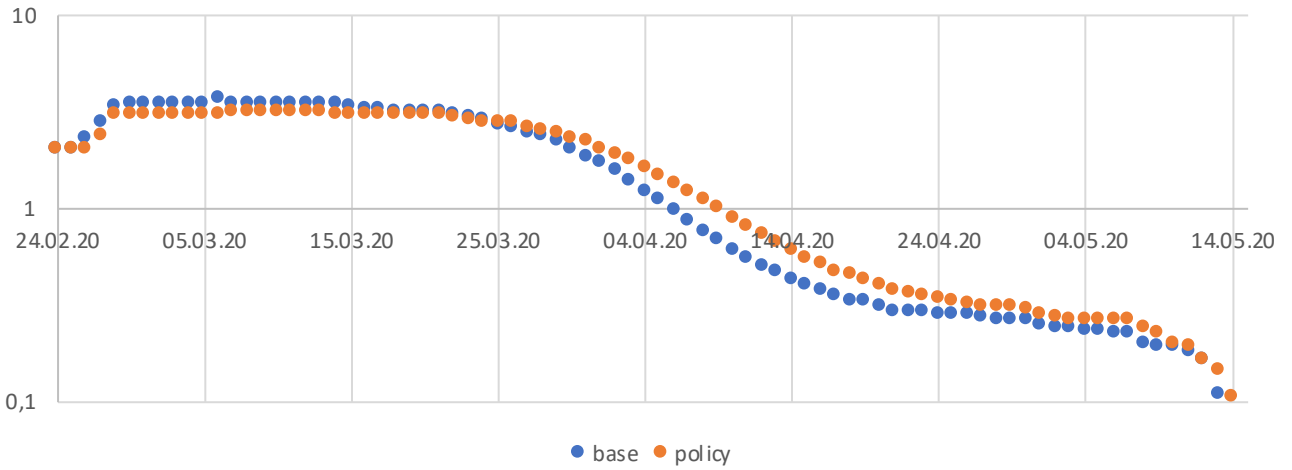


infetction events

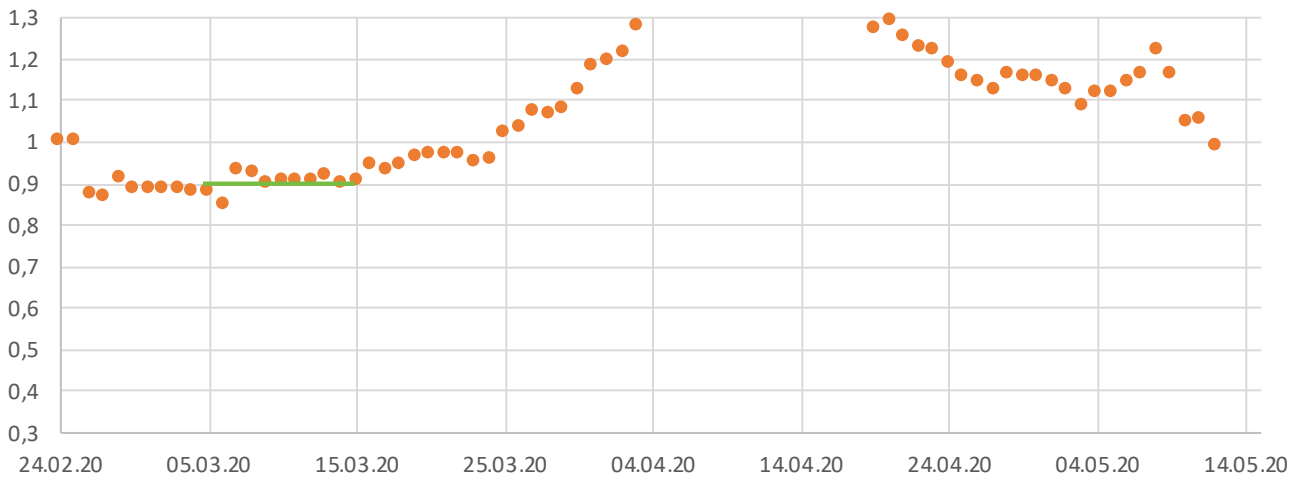


wearing masks in public transport and shops (90% compliance: 90% wearing N95 masks)

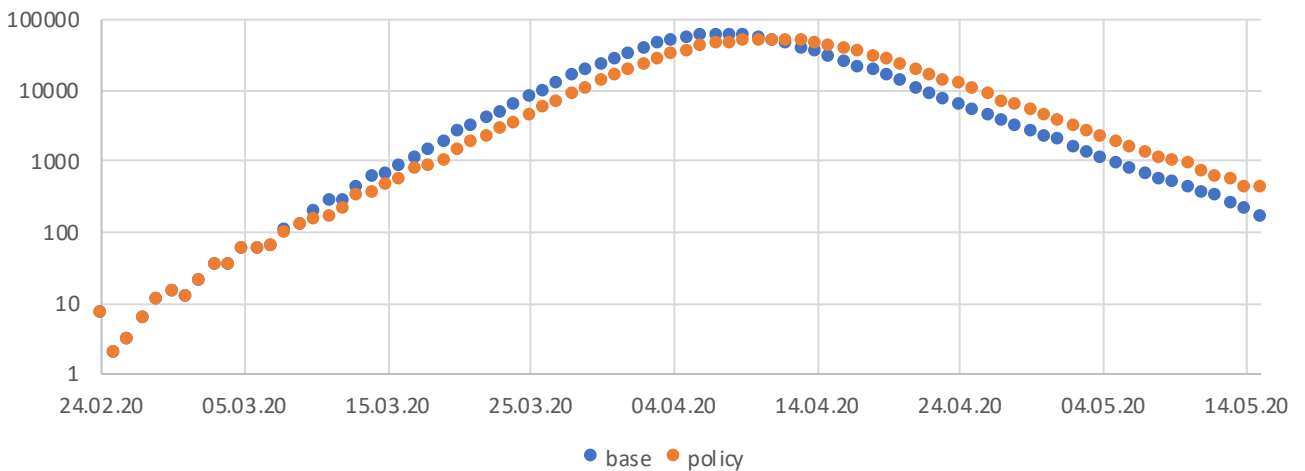
R



$r_{\text{base}} / r_{\text{policy}}$

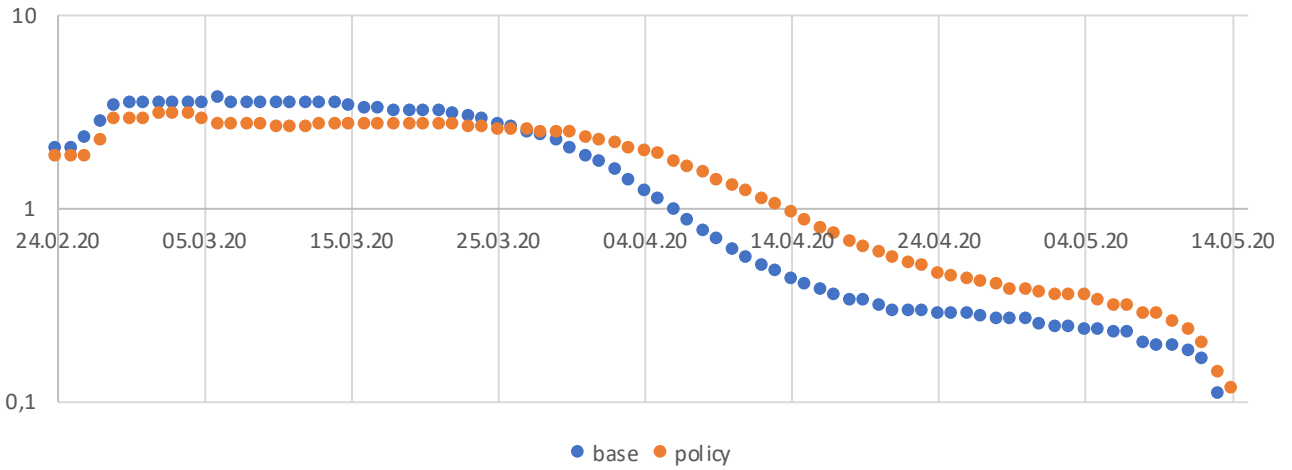


infection events

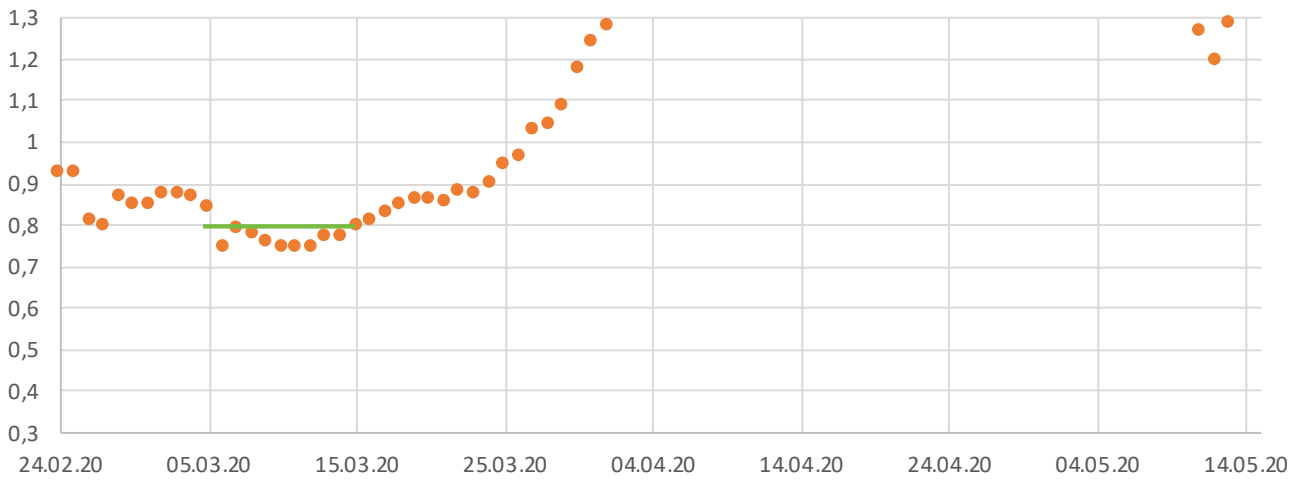


wearing masks at work (90% compliance: 90% wearing N95 masks)

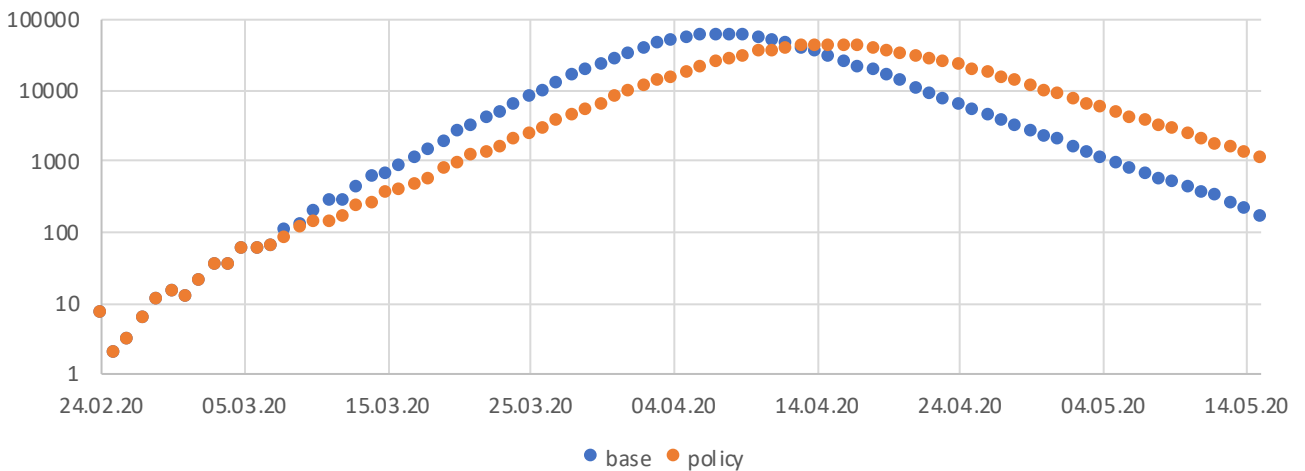
R



$r_{\text{base}} / r_{\text{policy}}$

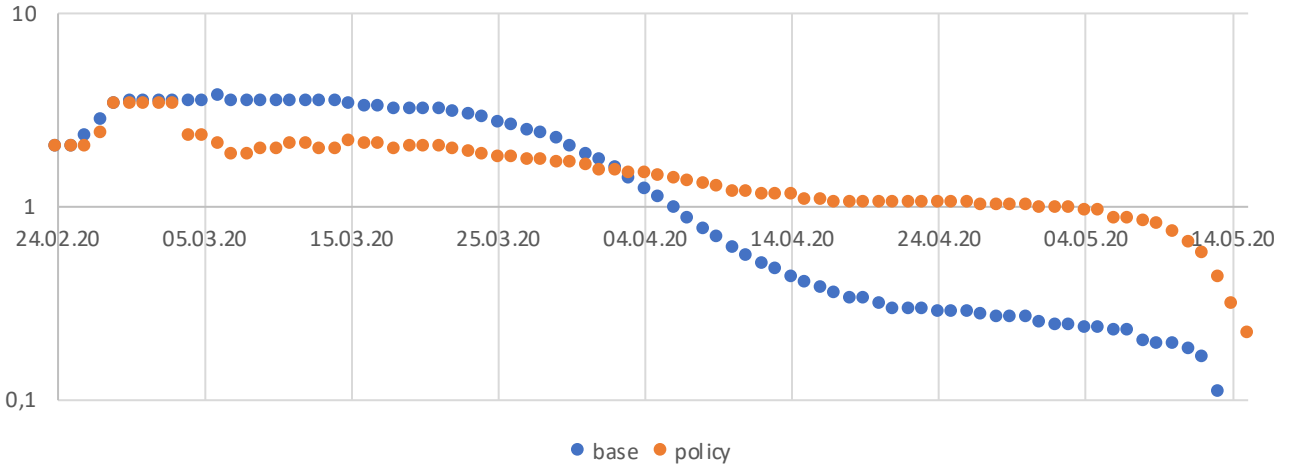


infection events

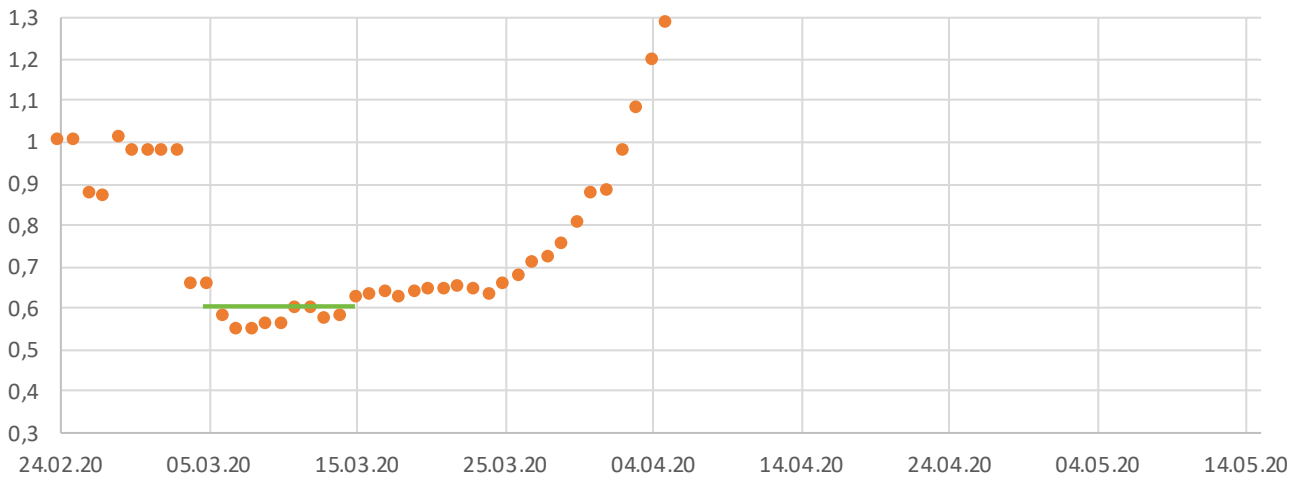


contact tracing

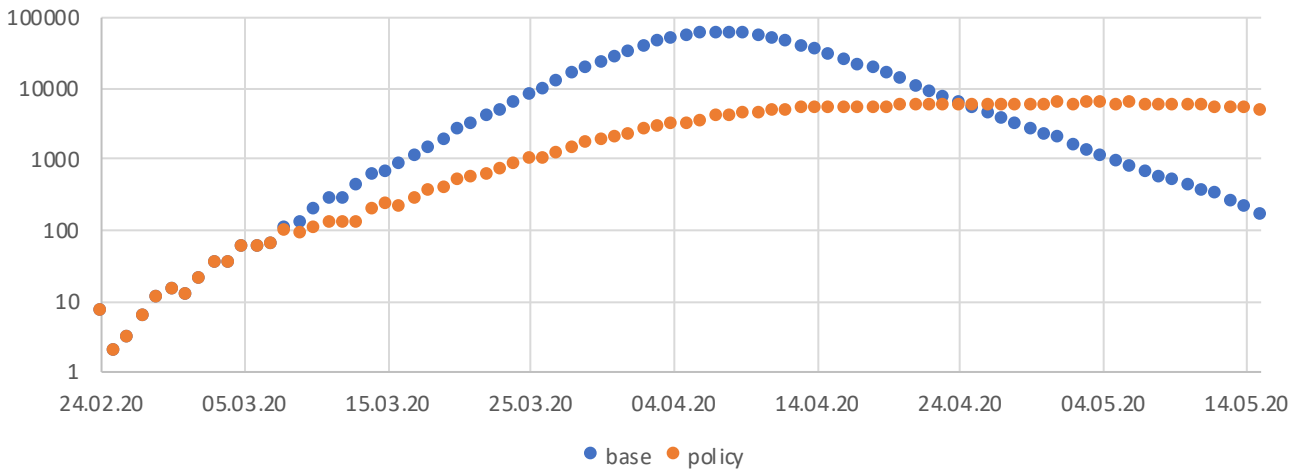
R



$r_{\text{base}} / r_{\text{policy}}$

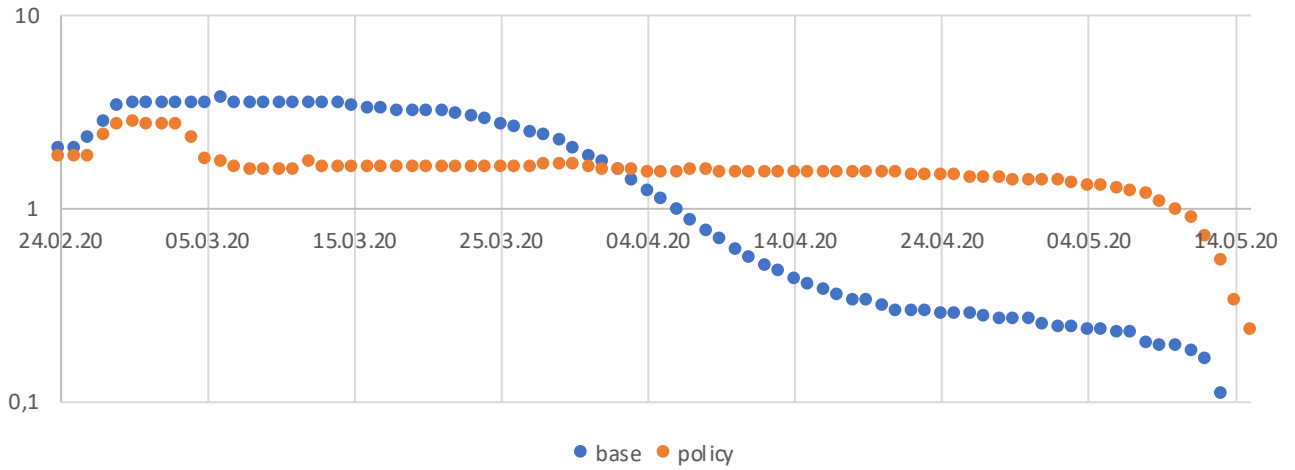


infection events

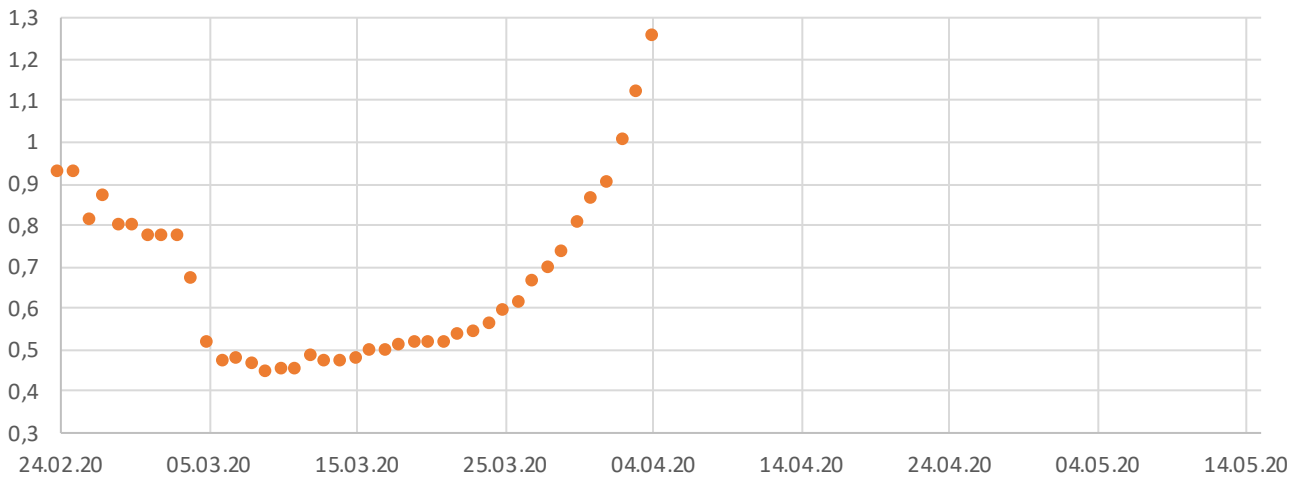


ci correction reduced to 0.32

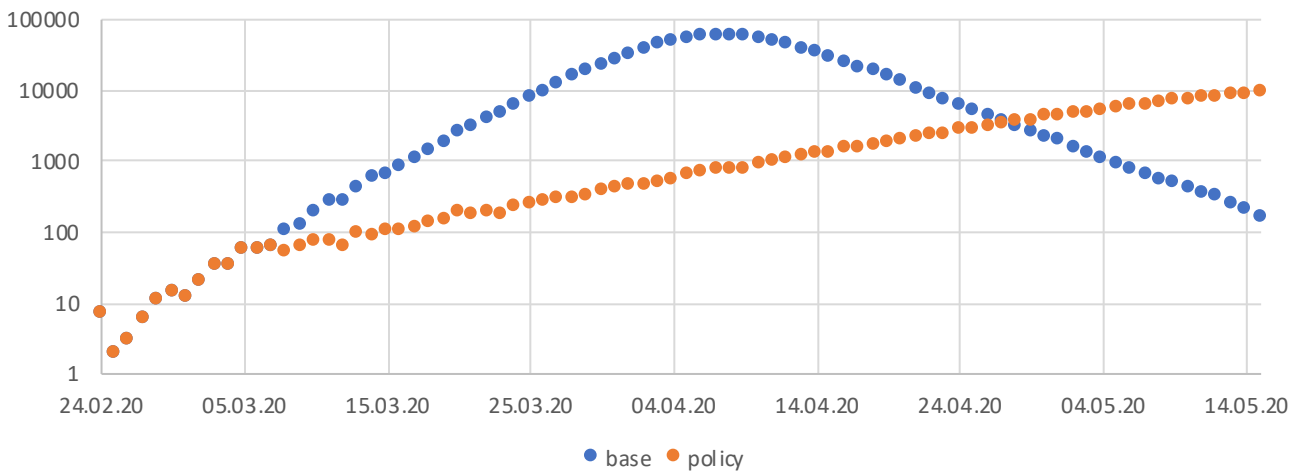
R



$r_{\text{base}} / r_{\text{policy}}$

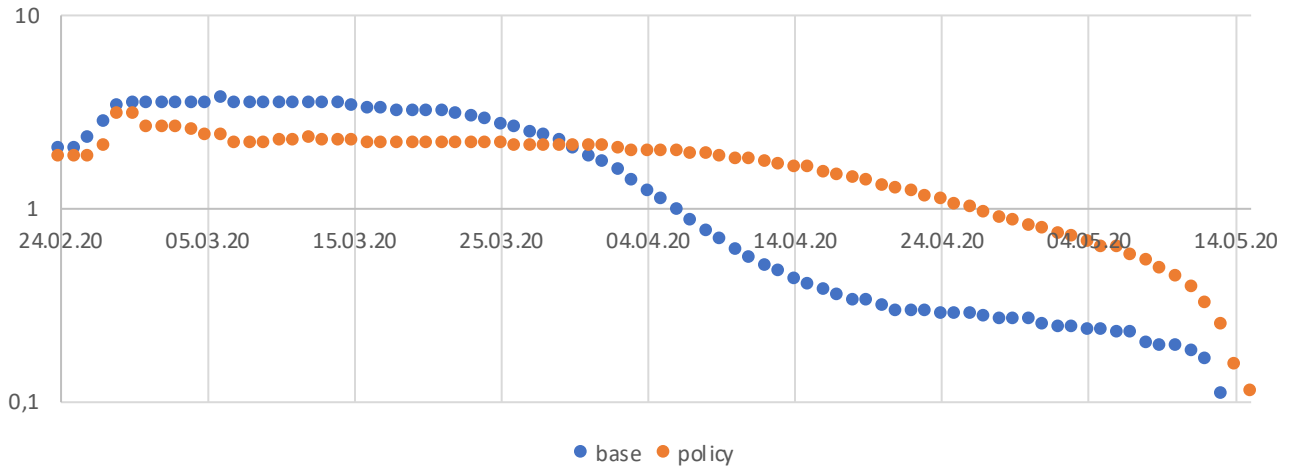


infection events

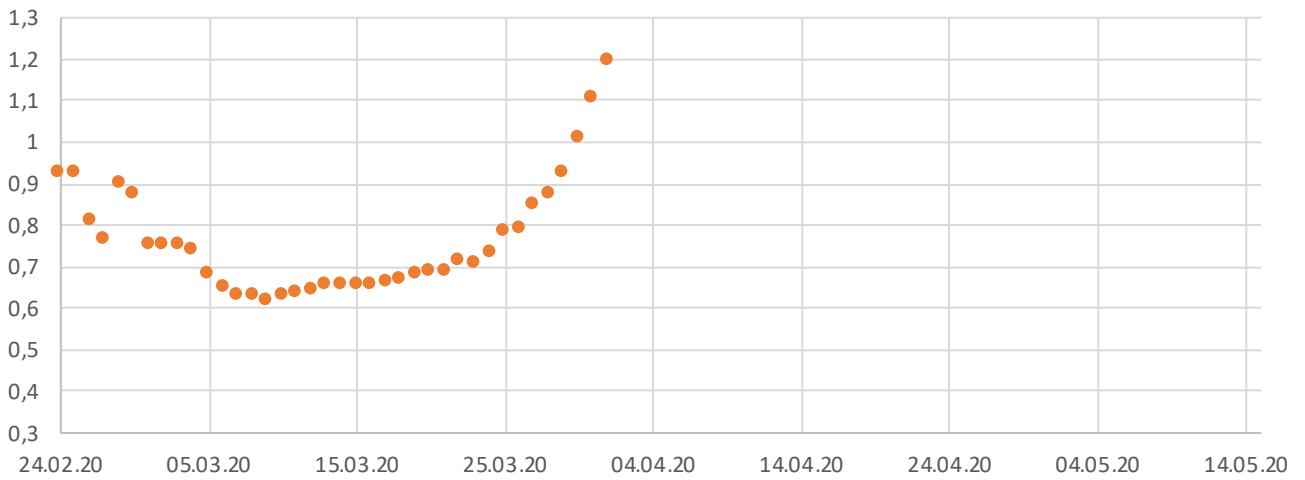


ci correction reduced to 0.5

R



$r_{\text{base}} / r_{\text{policy}}$



infection events

