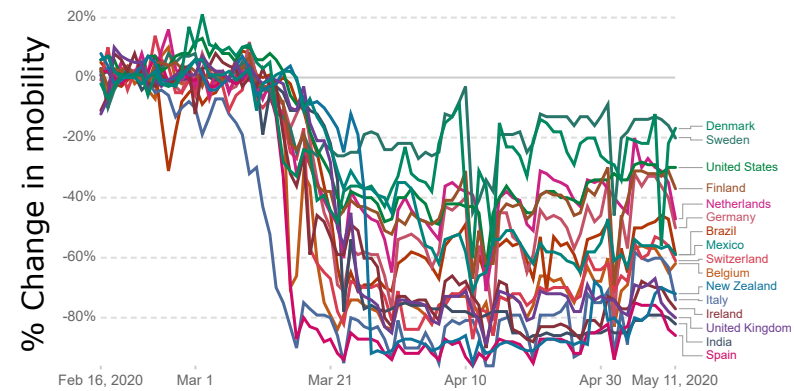
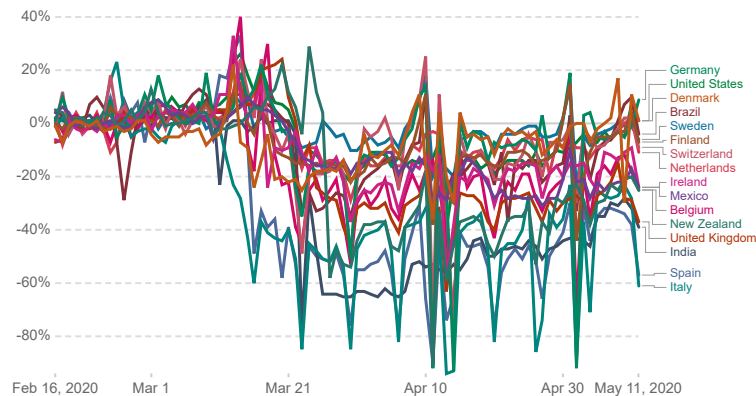


Fig. S1 Spatial distribution of CO ($\mu\text{mol}/\text{m}^2$) in the selected cities in 2019 and 2020 (from 1 February to 11 May).

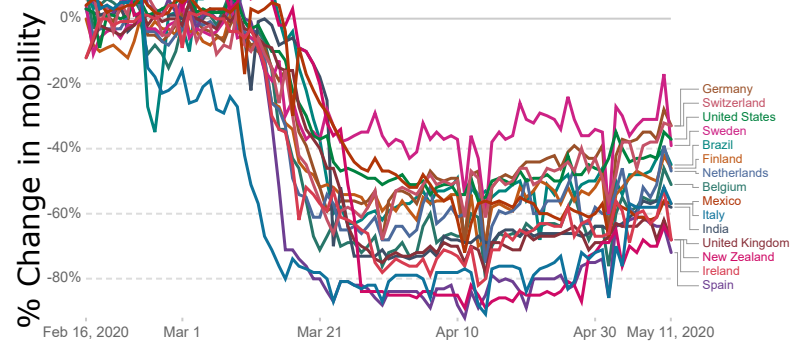
Retail and recreation



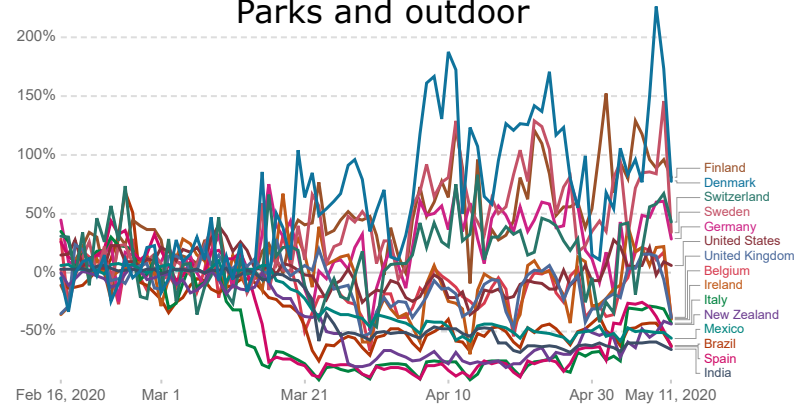
Grocery and pharmacy stores



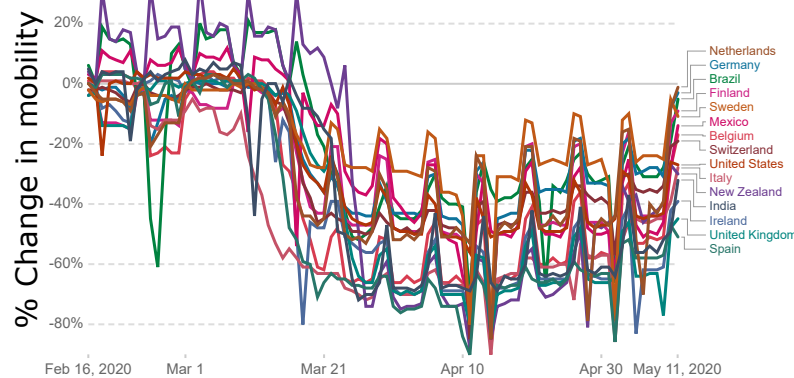
Transit



Parks and outdoor



Workplace visitors



Time spent at home

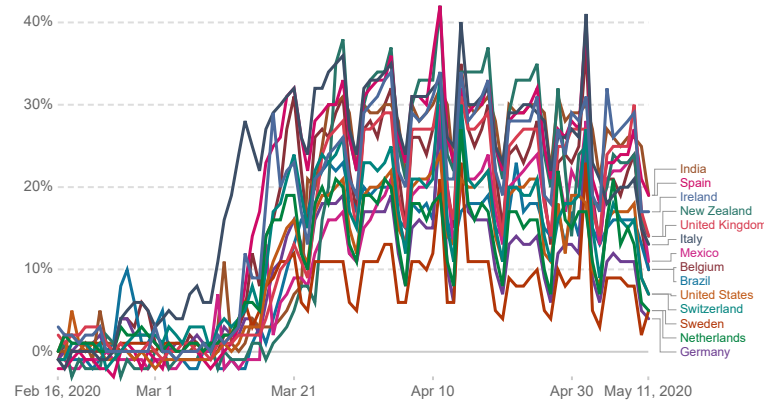
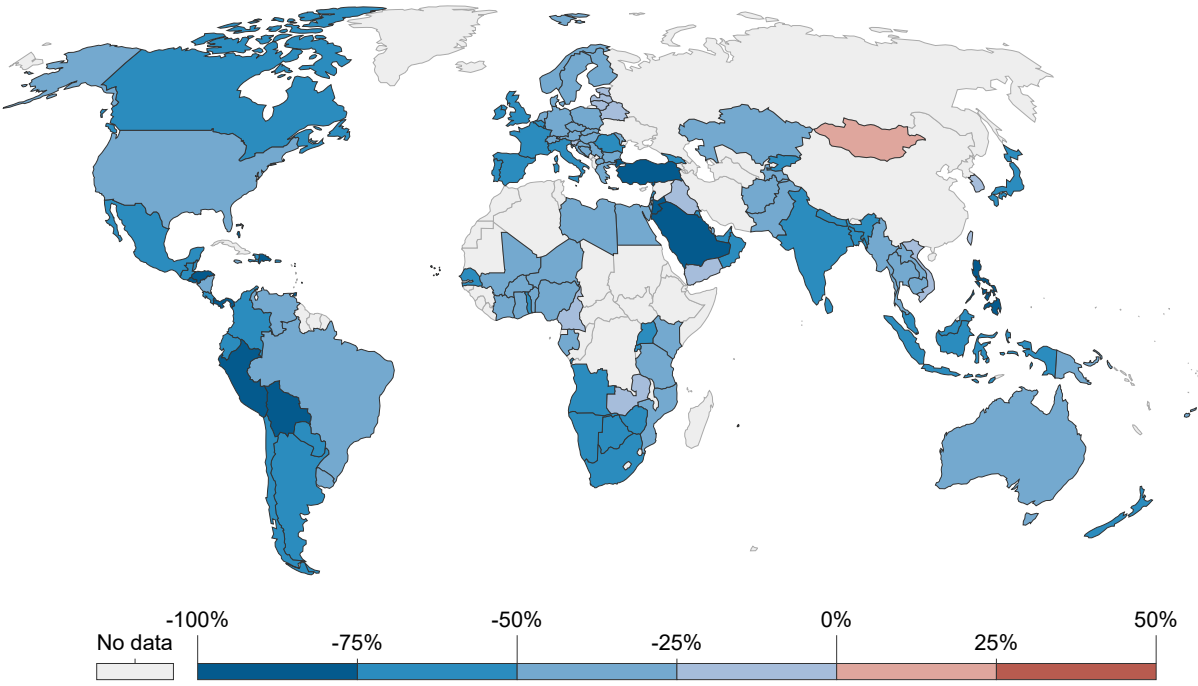


Fig. S2 Changes in human mobility observed during the lock down period in different countries. Six mobility components, i.e. retail and recreation, grocery and pharmacy, transit, parks and outdoor, workplace visitors, and time spent at home were considered and evaluated in this study.

Public transport stations



Parks and outdoor spaces

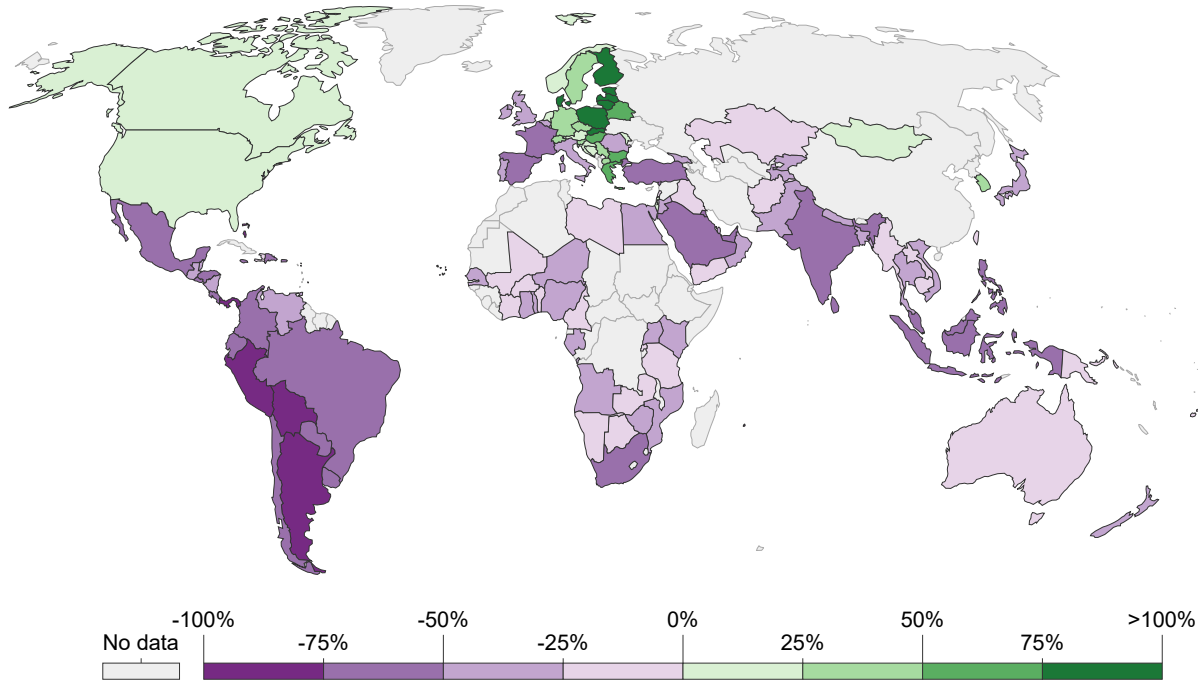
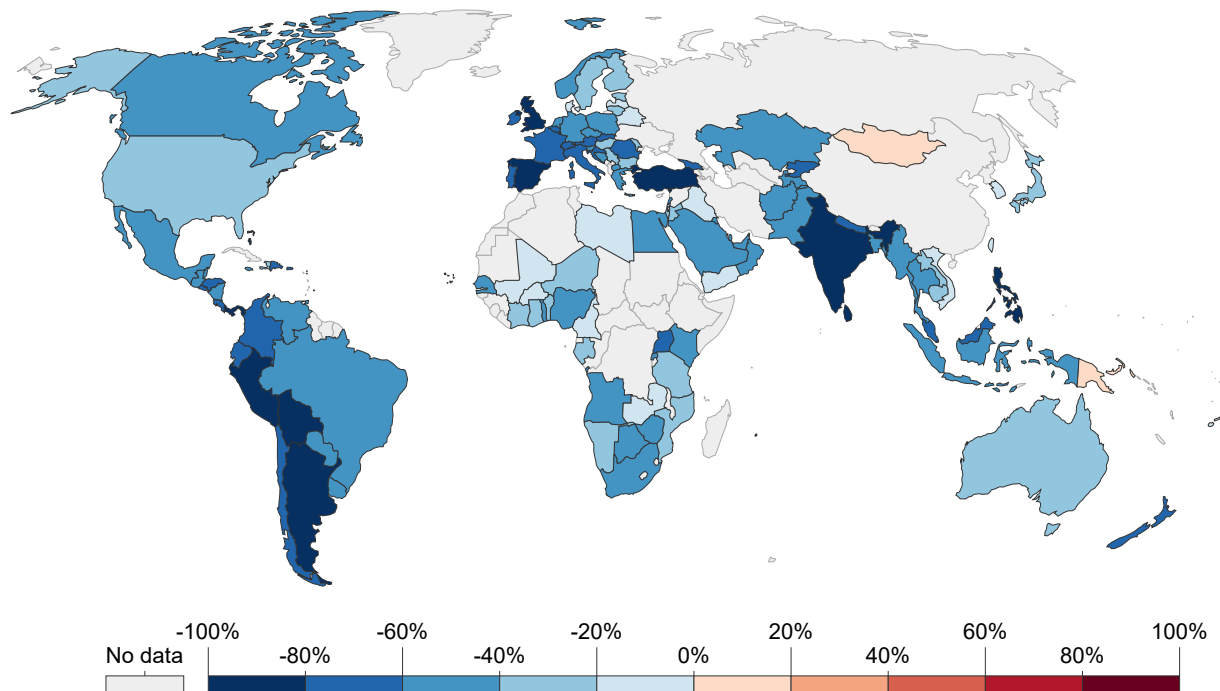


Fig. S3 Spatial variability of public transport and parks/outdoor mobility during the lock down period.

Retail and recreation



Grocery and pharmacy stores

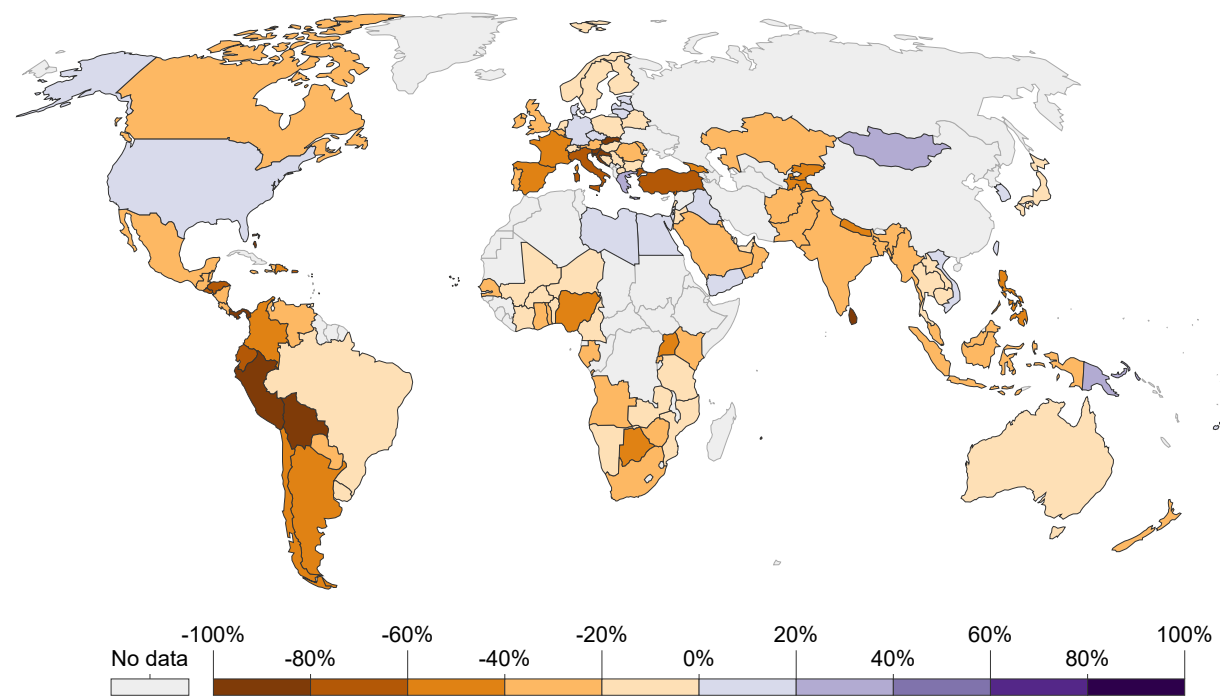
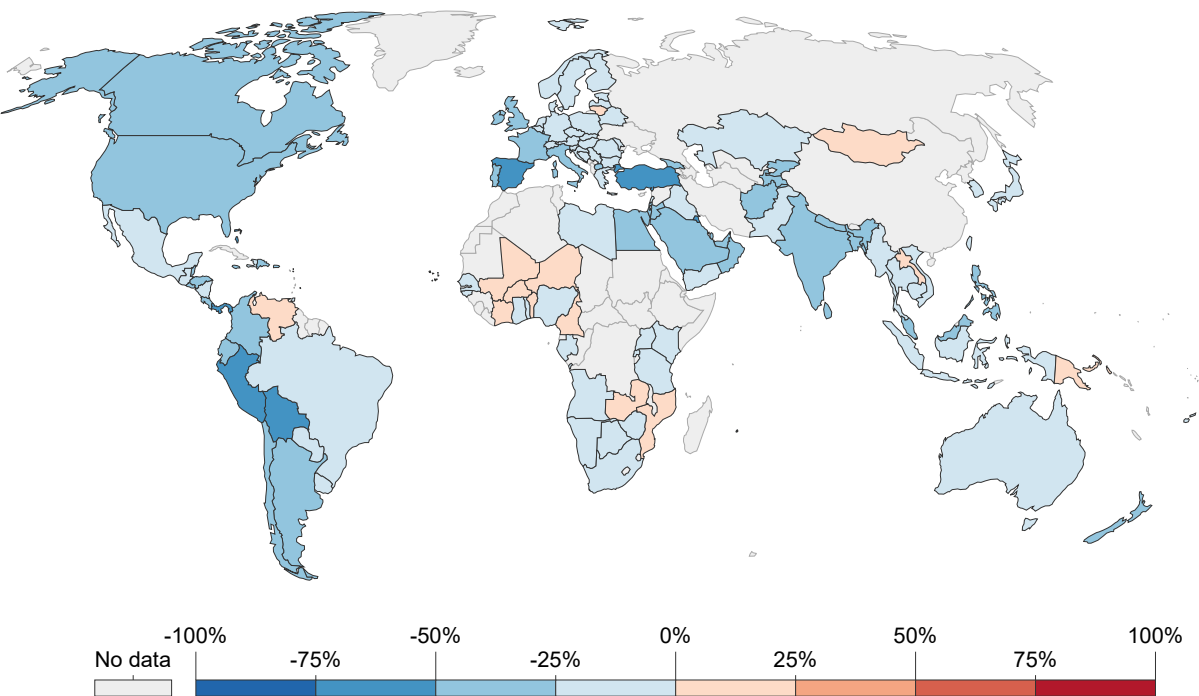


Fig. S4 Spatial variability of retail/recreation and grocery/pharmacy mobility during the lock-down period.

Workplace visitors



Time spent at home

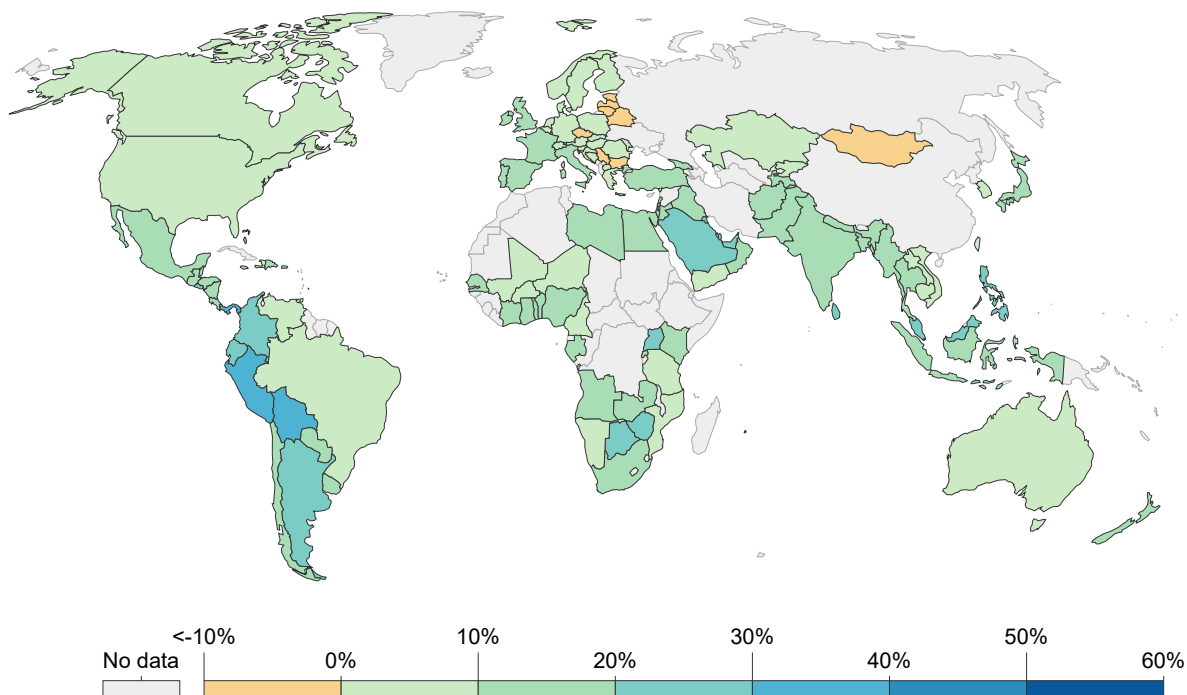


Fig. S5 Spatial variability of workplace and residential mobility during the lock down period.