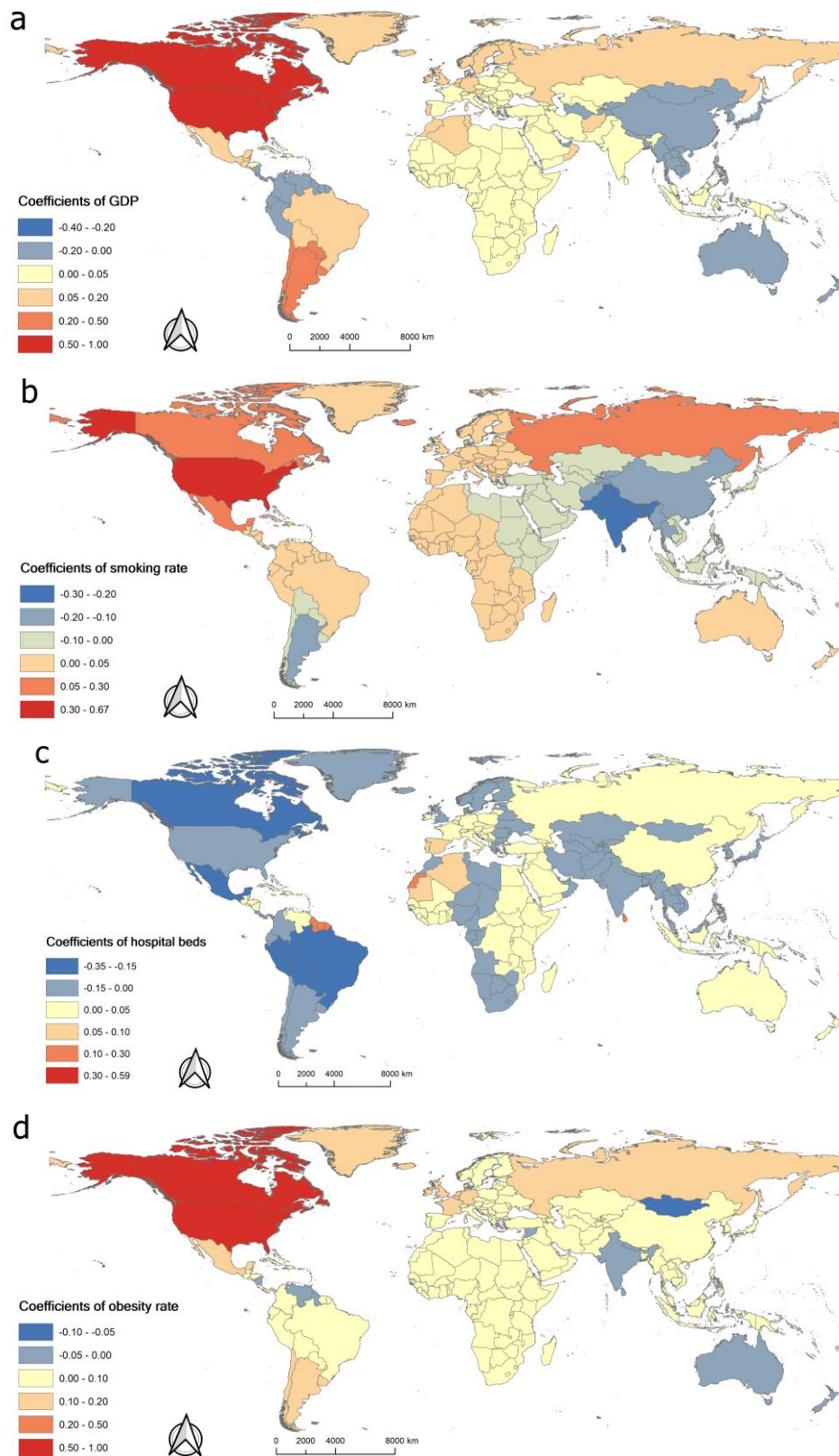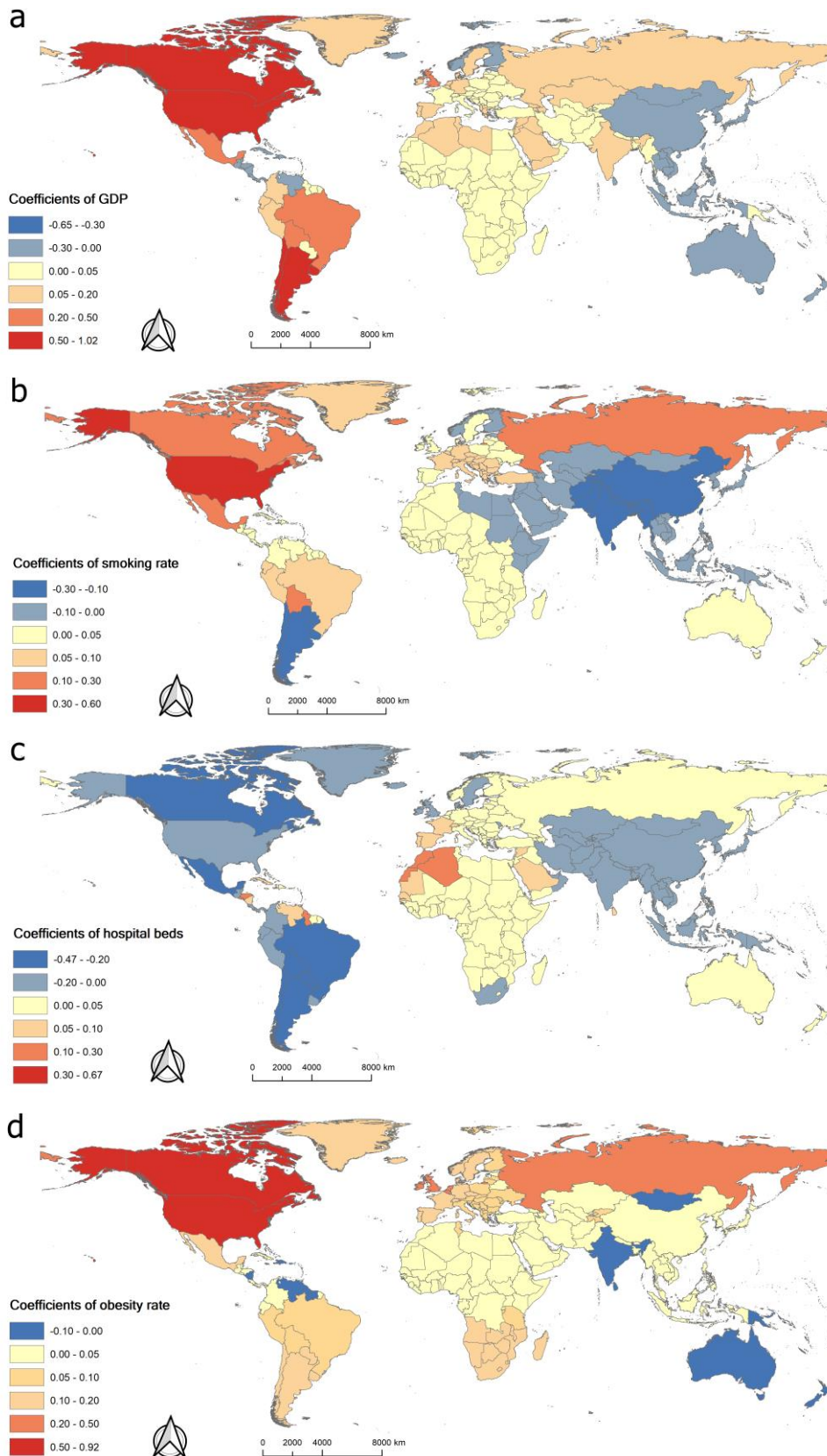**Supplementary materials**

Figure 1S. The spatial distribution of the impact of **(a)** GDP per capita on confirmed cases per million population; **(b)** smoking rate on confirmed cases per million population; **(c)** hospital beds on confirmed cases per million population; **(d)** obesity rate on confirmed cases per million population.

Figure 2S. The spatial distribution of the impact of **(a)** GDP per capita on deaths per million population; **(b)** smoking rate on deaths per million population; **(c)** hospital beds on deaths per million population; **(d)** obesity rate on deaths per million population.