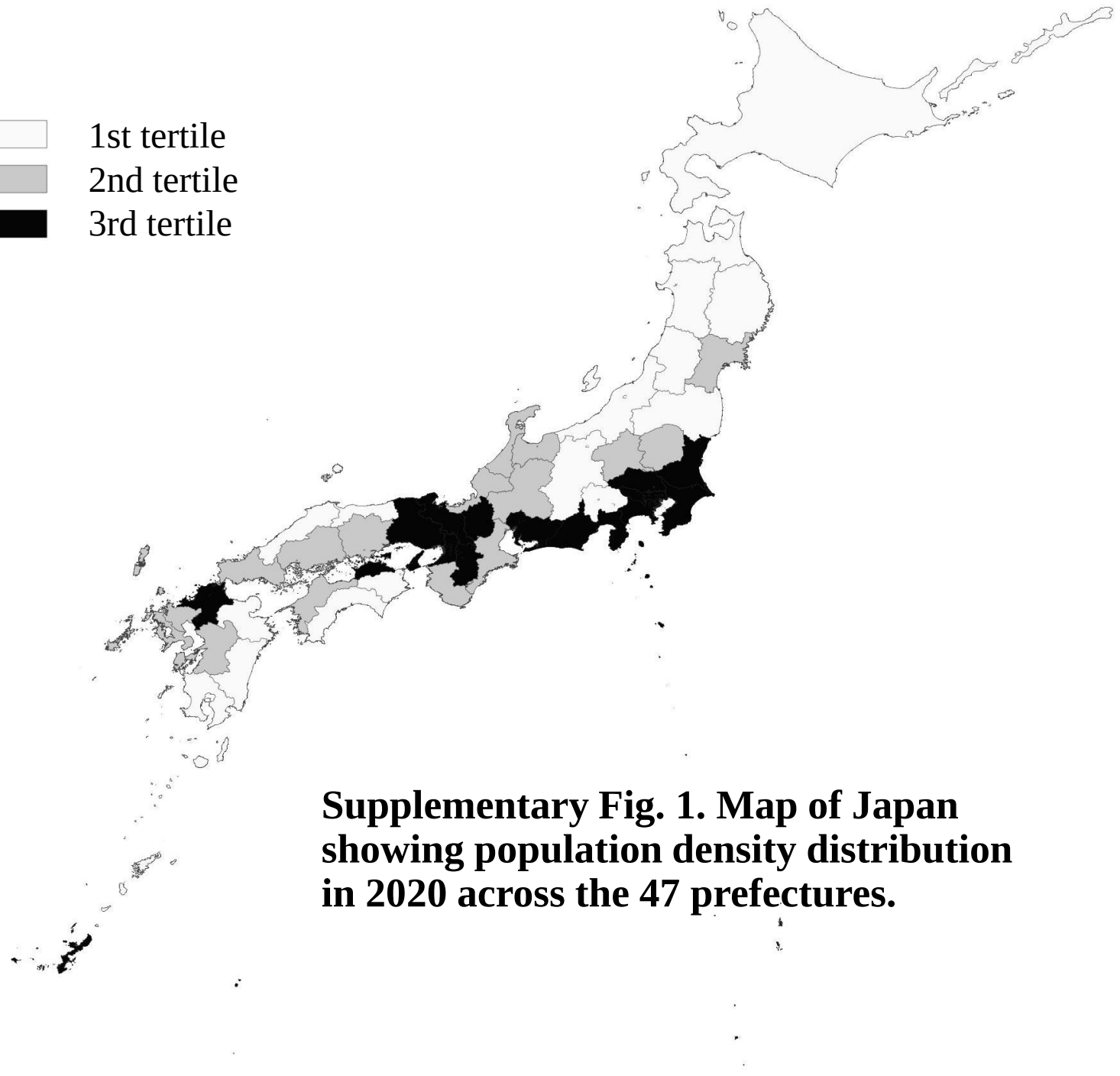
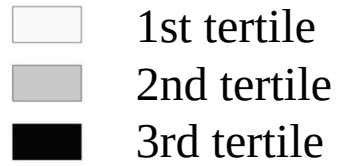
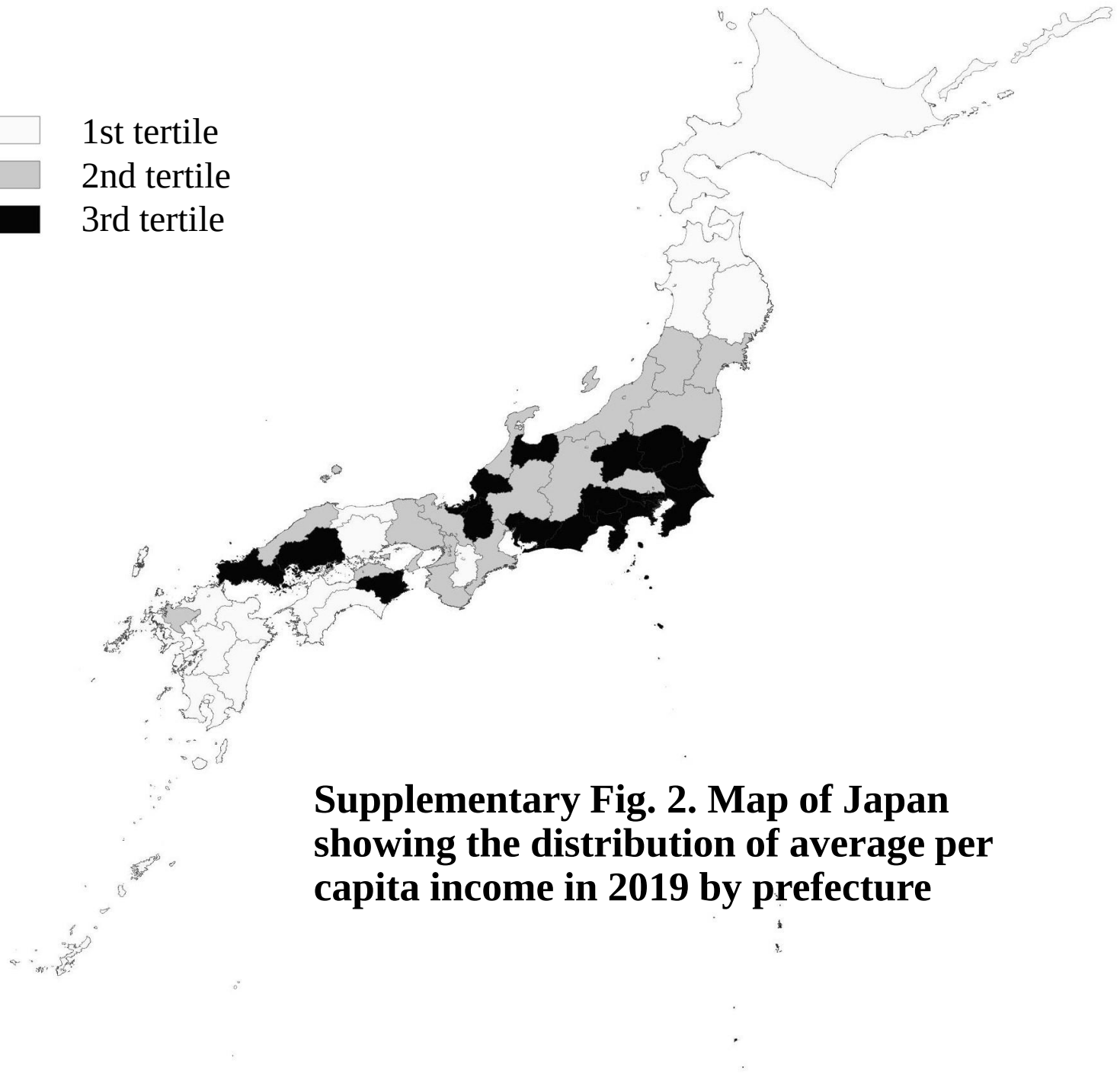
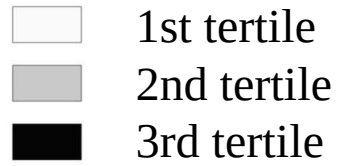
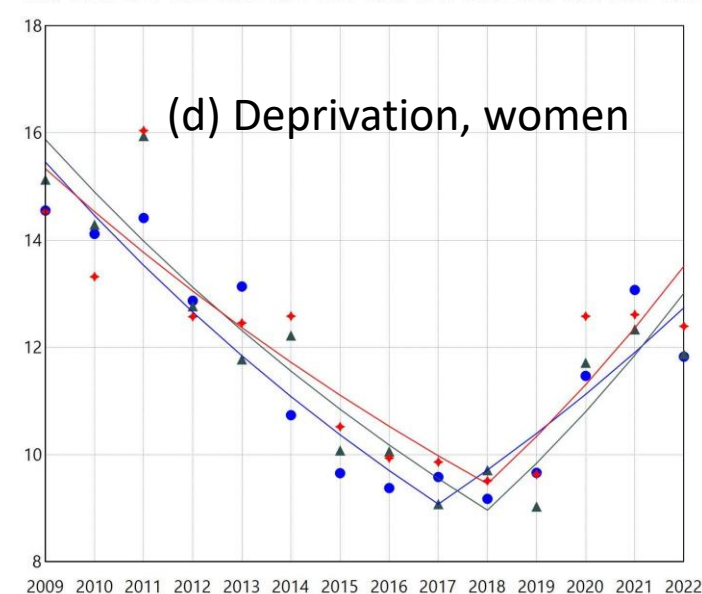
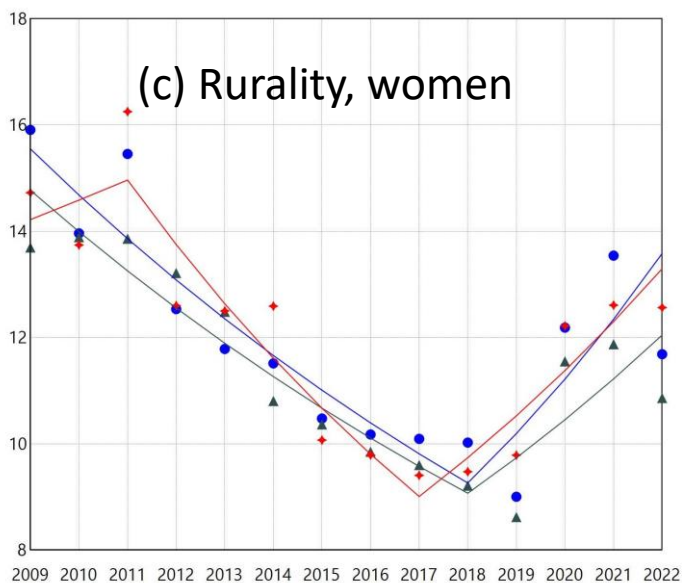
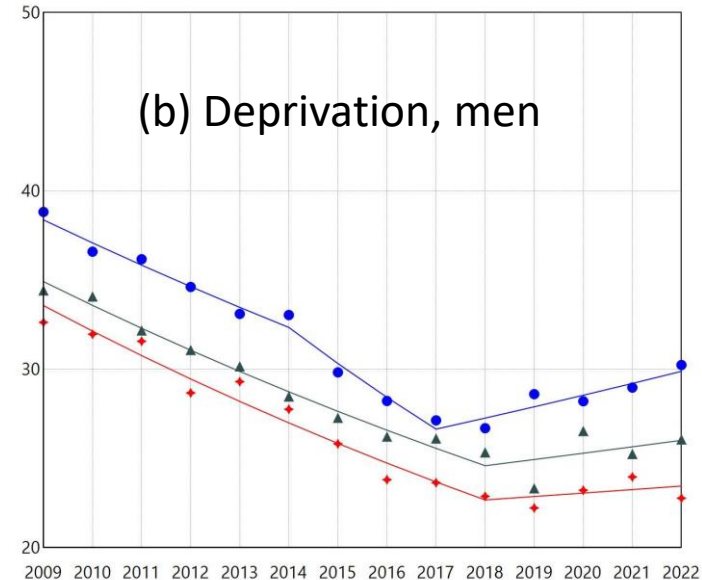
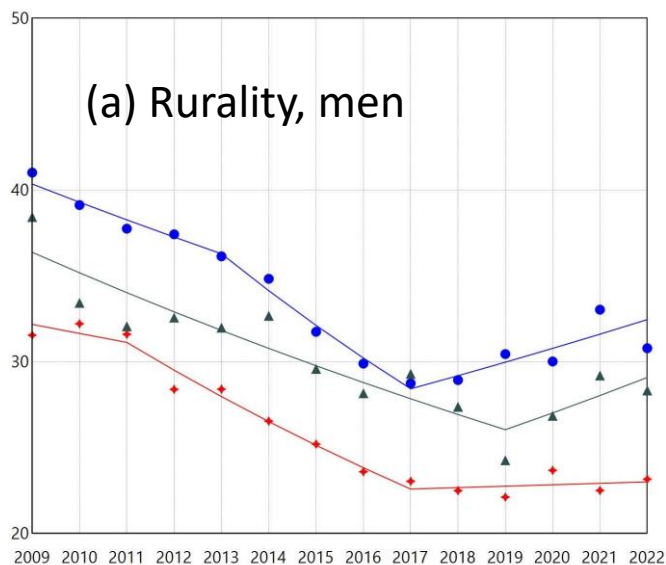




Supplementary Fig. 1. Map of Japan showing population density distribution in 2020 across the 47 prefectures.

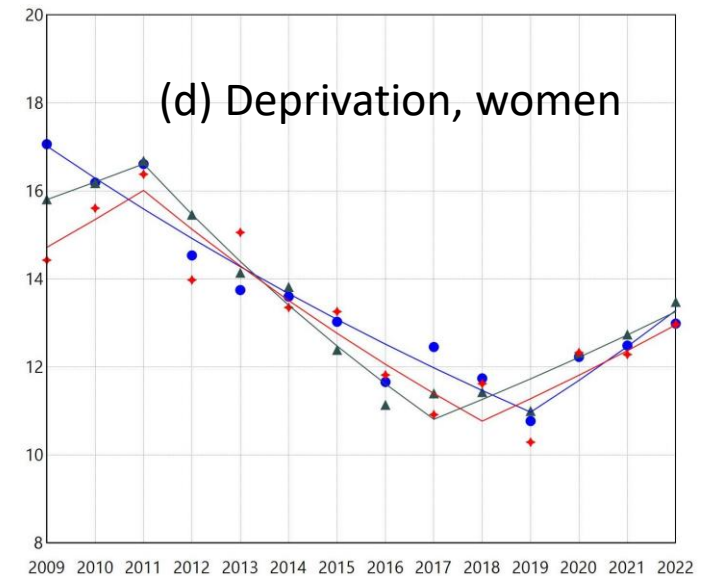
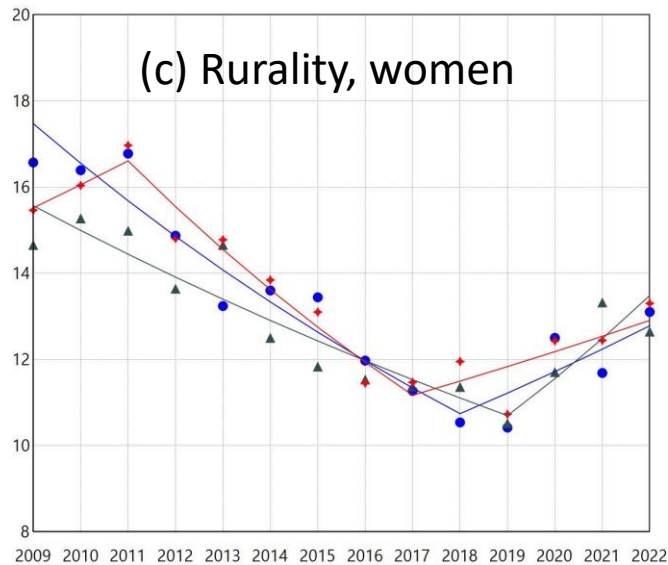
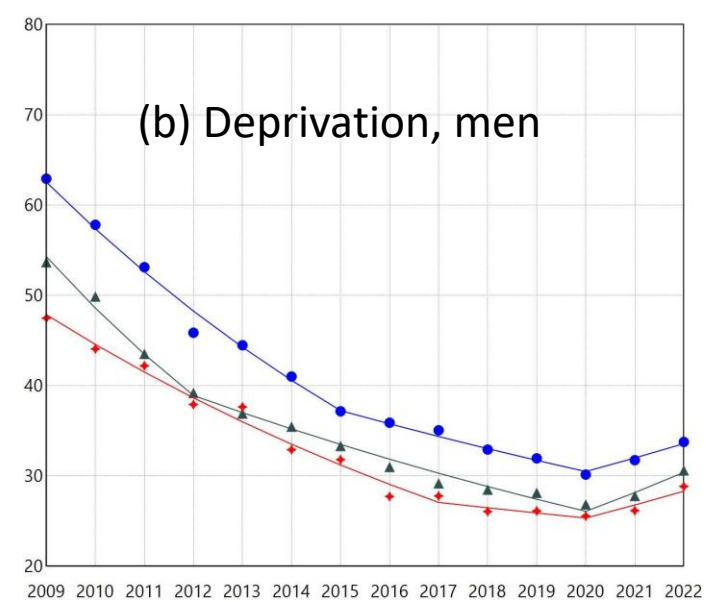
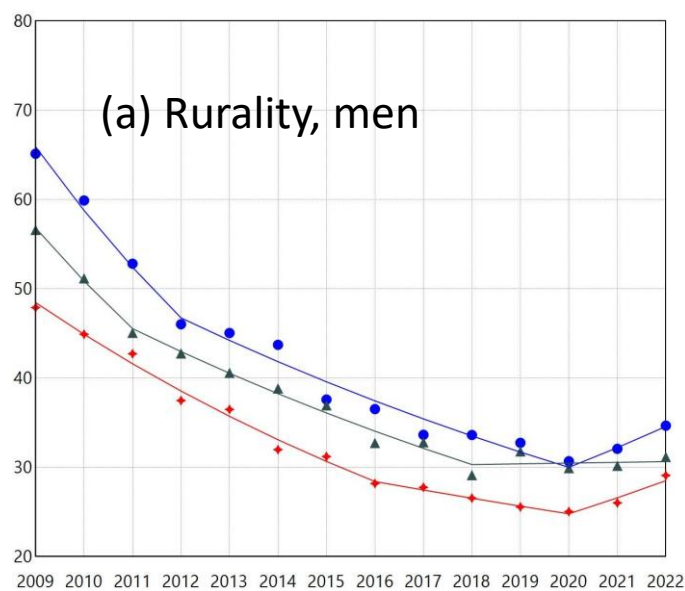


Supplementary Fig. 2. Map of Japan showing the distribution of average per capita income in 2019 by prefecture



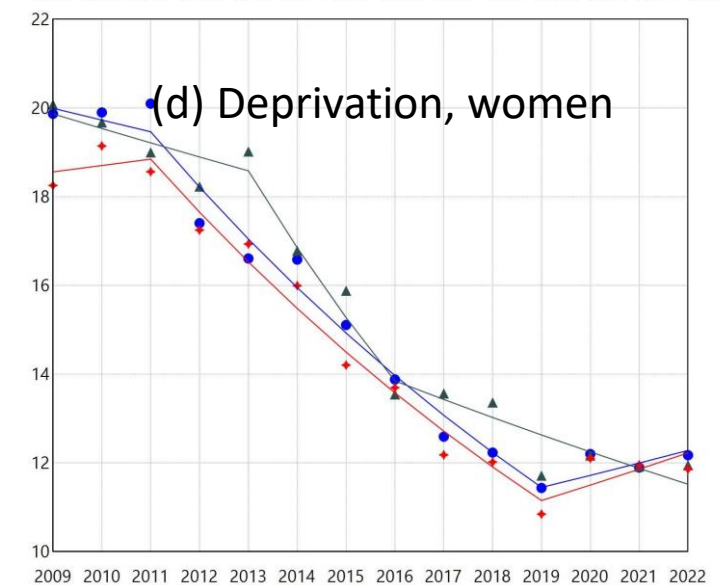
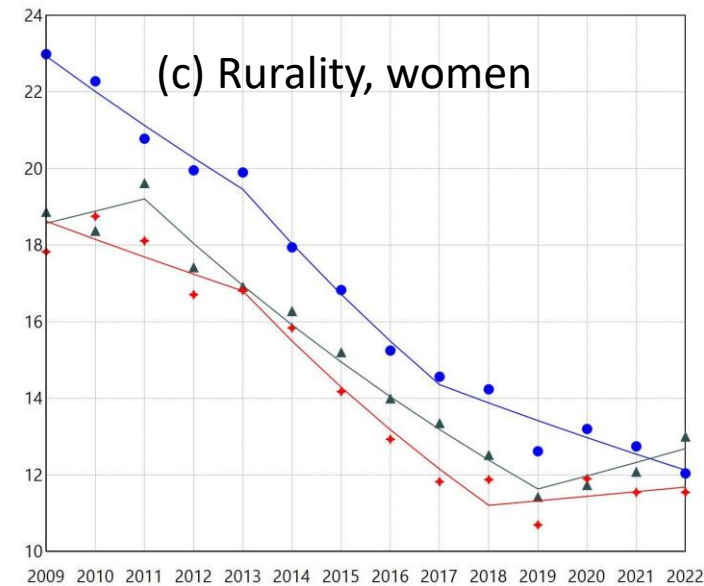
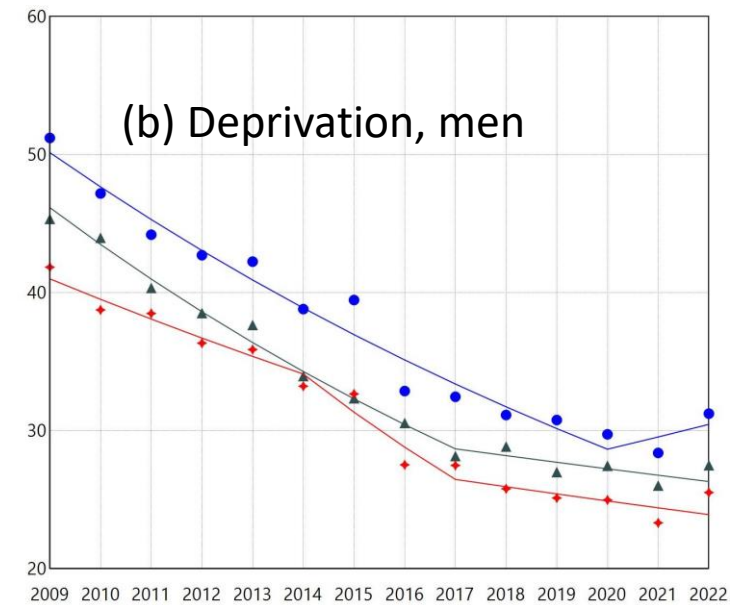
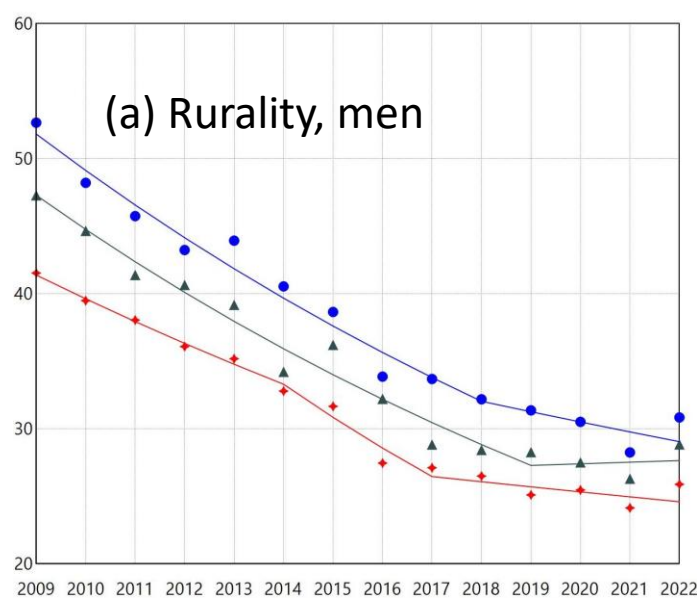
● High level ▲ Middle level ◆ Low level

Supplementary Fig. 3. Age-standardized suicide rate per 100,000 population for Japanese men and women aged 20-39 years by levels of rurality and deprivation, 2009–2022, with line segments from joinpoint regression models.



● High level ▲ Middle level ◆ Low level

Supplementary Fig. 4. Age-standardized suicide rate per 100,000 population for Japanese men and women aged 40-59 years by levels of rurality and deprivation, 2009–2022, with line segments from joinpoint regression models.



● Low level ▲ Middle level ◆ High level

Supplementary Fig. 5. Age-standardized suicide rate per 100,000 population for Japanese men and women aged 60+ years by levels of rurality and deprivation, 2009–2022, with line segments from joinpoint regression models.