**Last update: 2022/3/2**

**<Folder structure and some notes>**

* All Rmd and R files are directly put in the project folder.
* R project files are also directly put in the project folder.
* The “renv” folder is to restore the R-package environment.
* The “input” folder contains all the raw data used in preprocessing and analyses.
* The “output” folder contains all the files generated by the Rmd and do files.
* The “raw\_for\_reference” folder contains some raw data and documents that are modified and put into the “input” folder. We do not directly use them.
* The “archive” folder contains old documents.
* More detailed explanations are available in html files generated by Rmd files

**<Preprocess, 前処理>**

**Rmd files for preprocessing**

* preprocess\_main.Rmd: dataset preprocessing, データの前処理と統合

output: time\_series\_data.csv & df\_anaysis.csv

* treatment\_shock\_factors.Rmd: construct and examine covariates, 共変量の作成とチェック

(covariates used in the paper)

1. Population\_per\_1\_km\_2\_of\_inhabitable\_area
2. Secondary\_industry\_ratio
3. Tertiary\_industry\_ratio
4. Total\_population
5. Ratio\_of\_aged\_population

**Main (or minimal) dataset for analysis**

* “df\_anaysis.csv” in the “output” folder is our main (or minimal) dataset.

**R files used in Rmd**

* functions.R
* labor\_force\_quarterly\_panel.R

output：df\_emp\_shock2020Q2.csv

* koyo\_hoken\_excel\_csv.R：Convert the excel files of unemployment benefits to CSV file, 雇用保険excelデータからcsvへ変換
* hihogo\_excel\_csv.R：convert the excel files of public assistance to CSV files生活保護excelデータからcsvへ変換
* preprocess\_treatment.Rmd：Make treatment variables based on the quarterly data of Labour Fource Survey and "Full-time job seeker" data, 労働力調査の四半期処置変数の作成、有効求職者数の処置変数の作成

output: df\_emp\_shock2020Q2.csv

df\_emp\_shock2019Q2.csv

df\_emp\_shock2019Q4.csv

**<Main text in the paper>**

**Table**

* desc\_stats\_and\_graphs.Rmd：Descriptive statistics and graphs used in the paper, 記述統計の作成と可視化

2.1 Final version

table\_summary\_stat.tex

**Figuare1**

* time\_series\_graphs.Rmd：時系列グラフの作成

graphs\_time\_series.pdf

**Figuare2**

* desc\_stats\_and\_graphs.Rmd：Descriptive statistics and graphs used in the paper, 記述統計の作成と可視化
* graph\_unemp\_suicide\_YOY\_Jul.pdf

**Figuare3**

* unemploy\_diff2\_on\_suicide.Rmd

**Figuare4**

* unemploy\_diff2\_on\_UIbenefit.Rmd

**Figuare5**

* unemploy\_diff2\_on\_2nd\_safetynet.Rmd

**Figuare6**

* unemploy\_diff2\_on\_PAbenefit.Rmd

**<Supporting Information, Appendices>**

**S1 Fig., Figure A.1**

* covid-19\_jap\_2021Jan21.Rmd

**S2 Fig., Figure A.2**

* infection\_death\_mobility.Rmd

**S3 Fig, Figure B.1**

* unemploy\_diff2\_on\_suicide.Rmd

graph\_unemploy\_diff2\_on\_yoy\_suicide\_robust.pdf

**S4 Fig, Figure B.2**

* unemploy\_diff2\_on\_UIbenefit.Rmd

graph\_unemploy\_diff2\_on\_ yoy\_UIbenefit\_robust.pdf

**S5 Fig, Figure B.3**

* unemploy\_diff2\_on\_2nd\_safetynet.Rmd

graph\_unemploy\_diff2\_on\_ yoy\_2nd\_safetynet\_robust.pdf

**S6 Fig, Figure B.4**

* unemploy\_diff2\_on\_PAbenefit.Rmd

graph\_unemploy\_diff2\_on\_yoy\_PAbenefit\_robust.pdf

**S4 Table, Table C.1**

* unemploy\_diff2\_on\_suicide.Rmd

**S5 Table, Table C.2**

* unemploy\_diff2\_on\_suicide.Rmd

**S6 Table, Table C.3**

* unemploy\_diff2\_on\_UIbenefit.Rmd

**S7 Table, Table C.4**

* unemploy\_diff2\_on\_UIbenefit.Rmd

**S8 Table, Table C.5**

* unemploy\_diff2\_on\_2nd\_safetynet.Rmd

**S9 Table, Table C.6**

* unemploy\_diff2\_on\_2nd\_safetynet.Rmd

**S10 Table, Table C.7**

* unemploy\_diff2\_on\_PAbenefit.Rmd

**S11 Table, Table C.8**

* unemploy\_diff2\_on\_PAbenefit.Rmd

**S7 Fig, Figure D.1**

* job\_seeker\_on\_suicide.Rmd

**S8 Fig, Figure D.2**

* job\_seeker\_on\_UIbenefit.Rmd

**S9 Fig, Figure D.3**

* job\_seeker\_on\_2nd\_safetynet.Rmd

**S10 Fig, Figure D.4**

* job\_seeker\_on\_PAbenefit.Rmd

**S 11 Fig, Figure D.5**

* desc\_stats\_and\_graphs.Rmd