appendix_balancetests.R

datalab

2023-06-16

```
########################################
######### Balancing Tables  ############
########   October 10, 2018 ######
######## Rerun: December 16, 2022

rm(list=ls())
library(stargazer)
library(ggplot2)
library(foreign)
######GEO DATA####
# setwd("~/Dropbox/Personal Research 2017")


########################################
##### Create  Bandwidths ###############
geo2001=read.csv("~/Dropbox/Personal Research 2017/replications/geocensus2001_nov16.csv")

#Distance to Mysore-Bombay Border
rd10.mb=geo2001[which(geo2001$NEAR_DIST_border1<10000),] #20 km
table(rd10.mb$border1)
```

```
##
##   0   1
## 505 470
```

```
#Distance to Hyderabad-Bombay Border
rd10.hb=geo2001[which(geo2001$NEAR_DIST_border2<10000),] #20 km
table(rd10.hb$border2)
```

```
##
##   0   1
## 404 424
```

```
#Balancing and Different Borders
#Mysore- Bombay

#10 km Mysore-Bombay
t1=t.test(rd10.mb$TOT_POP[rd10.mb$border1==1], rd10.mb$TOT_POP[rd10.mb$border1==0])
t2=t.test(rd10.mb$TOT_SC[rd10.mb$border1==1], rd10.mb$TOT_SC[rd10.mb$border1==0])
t3=t.test(rd10.mb$TOT_ST[rd10.mb$border1==1], rd10.mb$TOT_ST[rd10.mb$border1==0])
t5=t.test(rd10.mb$Slope[rd10.mb$border1==1], rd10.mb$Slope[rd10.mb$border1==0])
t6=t.test(rd10.mb$TerrainRug[rd10.mb$border1==1], rd10.mb$TerrainRug[rd10.mb$border1==0])
est=rbind(t1$estimate, t2$estimate, t3$estimate, t5$estimate, t6$estimate)
pval=rbind(t1$p.value, t2$p.value, t3$p.value,  t5$p.value, t6$p.value)
```

```r
mb.10=cbind(est, pval)
rownames(mb.10)=c("Total Population",
                  "Total Scheduled Castes Pop",
                  "Total Scheduled Tribes Pop",
                  "Slope", "Terrain Rugness")
colnames(mb.10)=c("Mean Tr", "Mean Cont", "T-Test P.Value")
stargazer(mb.10, digits = 3)
```

```
##
## % Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harva
## % Date and time: Fri, Jun 16, 2023 - 14:39:42
## \begin{table}[!htbp] \centering
##   \caption{}
##   \label{}
## \begin{tabular}{@{\extracolsep{5pt}} cccc}
## \\[-1.8ex]\hline
## \hline \\[-1.8ex]
##  & Mean Tr & Mean Cont & T-Test P.Value \\
## \hline \\[-1.8ex]
## Total Population & $844.766$ & $1,445.905$ & $0$ \\
## Total Scheduled Castes Pop & $278.085$ & $282.091$ & $0.827$ \\
## Total Scheduled Tribes Pop & $160.096$ & $206.048$ & $0.002$ \\
## Slope & $88.837$ & $88.740$ & $0.883$ \\
## Terrain Rugness & $2.312$ & $2.755$ & $0.002$ \\
## \hline \\[-1.8ex]
## \end{tabular}
## \end{table}
```

```r
################################################
######Hyderabad-Bombay Border

#10 km Hyderabad-Bombay
t1=t.test(rd10.hb$TOT_POP[rd10.hb$border2==1], rd10.hb$TOT_POP[rd10.hb$border2==0])
t2=t.test(rd10.hb$TOT_SC[rd10.hb$border2==1], rd10.hb$TOT_SC[rd10.hb$border2==0])
t3=t.test(rd10.hb$TOT_ST[rd10.hb$border2==1], rd10.hb$TOT_ST[rd10.hb$border2==0])
t5=t.test(rd10.hb$Slope[rd10.hb$border2==1], rd10.hb$Slope[rd10.hb$border2==0])
t6=t.test(rd10.hb$TerrainRug[rd10.hb$border2==1], rd10.hb$TerrainRug[rd10.hb$border2==0])
est=rbind(t1$estimate, t2$estimate, t3$estimate, t5$estimate, t6$estimate)
pval=rbind(t1$p.value, t2$p.value, t3$p.value, t5$p.value, t6$p.value)
hb.10=cbind(est, pval)
rownames(hb.10)=c("Total Population",
                  "Total Scheduled Castes Pop",
                  "Total Scheduled Tribes Pop",
                  "Slope", "Terrain Rugness")
colnames(hb.10)=c("Mean Tr", "Mean Cont", "T-Test P.Value")
stargazer(hb.10, digits = 3)
```

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##   \label{}
## \begin{tabular}{@{\extracolsep{5pt}} cccc}
```

```
## \\[-1.8ex]\hline
## \hline \\[-1.8ex]
##  & Mean Tr & Mean Cont & T-Test P.Value \\
## \hline \\[-1.8ex]
## Total Population & $1,385.179$ & $1,669.790$ & $0.00002$ \\
## Total Scheduled Castes Pop & $354.623$ & $423.661$ & $0.003$ \\
## Total Scheduled Tribes Pop & $248.146$ & $210.045$ & $0.027$ \\
## Slope & $88.702$ & $87.302$ & $0.129$ \\
## Terrain Rugness & $1.130$ & $1.206$ & $0.199$ \\
## \hline \\[-1.8ex]
## \end{tabular}
## \end{table}
```