HW2_Microeconometrics_Zhesheng Zheng_15220162202530

I use CGSS2012 data to do an analysis about effect of self-confidence on the income. I choose the difference between "Which tier do you think you will be in 10 years?" and "Which tier do you think you are now?" to measure the self-confidence. And I choose the total personal income in 2011 to measure the income.

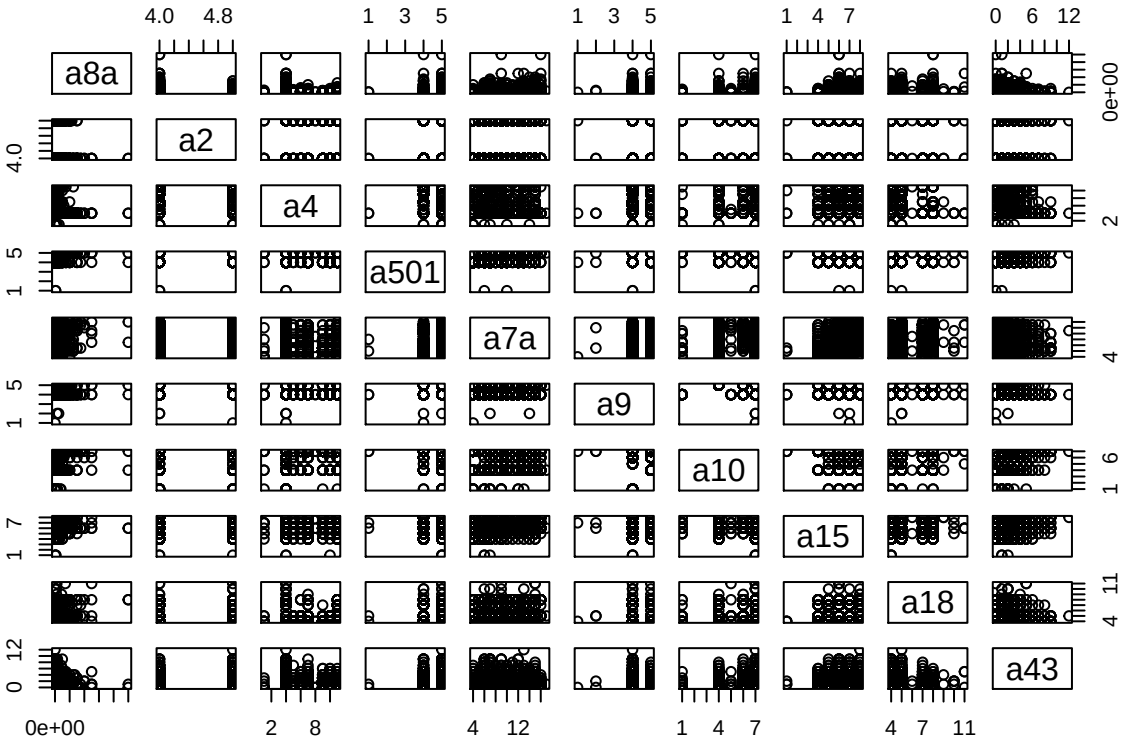
```
library(readstata13)
library(lmtest)
```

```
## Loading required package: zoo

##
## Attaching package: 'zoo'

## The following objects are masked from 'package:base':
##
##     as.Date, as.Date.numeric
```

```
data<-read.dta13('cgss2012_14.dta', nonint.factor=T)
attach(data)
a43<-a43c-a43a
sgss<-cbind(a8a,a2,a4,a501,a7a,a9,a10,a15,a18,a43)
detach(data)
sgss[sgss<0]<-NA
sgss[sgss>9999990]<-NA
sgss<-na.omit(sgss)
sgss<-as.data.frame(sgss)
pairs(sgss)
```




```r
attach(sgss)
```

```
## The following object is masked _by_ .GlobalEnv:
##
##     a43
```

```r
fit<-lm(a8a~a2+a4+a501+a7a+a9+a10+a15+a18+sgss$a43)

coeftest(fit)
```

```
##
## t test of coefficients:
##
##              Estimate Std. Error  t value  Pr(>|t|)
## (Intercept) 15943.49    9867.53   1.6158    0.1062
## a2          -7826.70     603.96 -12.9590 < 2.2e-16 ***
## a4           -923.90     193.15  -4.7834 1.748e-06 ***
## a501        -3564.63     857.45  -4.1572 3.248e-05 ***
## a7a          3661.08     117.32  31.2047 < 2.2e-16 ***
## a9            937.80    1308.98   0.7164    0.4737
## a10           423.75     474.11   0.8938    0.3715
## a15          1511.82     286.80   5.2714 1.382e-07 ***
## a18          3433.66     290.89  11.8039 < 2.2e-16 ***
## sgss$a43     -151.44     232.18  -0.6522    0.5143
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

In my linear regression model, Y is the total personal income in 2011, a2 is sex type, a4 is whether you are

han ethnic, a501 is whether you have religion, a7a is the education level, a9 is whether you submit a party menbership application, a10 is politics status, a15 is the status of your health, a18 is the hukou type, and a43 is the interest variable, self-confidence.

The linear regression's result shows that the self-confidence have not effect on the personal income.