```
clear all
set more off
cap log close

log using "longitudinalTD_analysis.log", replace

use "longitudinal_td", clear


// 1. Inspecting and managing the datafile (using Stata)

describe
summarize

sort pidp wave
list pidp wave sex_dv ethn_dv doby_dv jbstat mstat_dv ///
in 1/25, sepby(pidp)

count if fihhmngrs_dv<0

replace fihhmngrs_dv=1 if fihhmngrs_dv<0

xtile hhgrinc4=fihhmngrs_dv, nq(4)

su fihhmngrs_dv, d
generate veryhighinc=1 if fihhmngrs_dv>r(p99) & fihhmngrs_dv<.
replace  veryhighinc=0 if fihhmngrs_dv<r(p99)
tab veryhighinc

tabstat _all, by(wave)

xtset pidp wave

xtdescribe, patterns(50)

xtsum

g l_mstat_dv=L1.mstat_dv
g n_mstat_dv=F1.mstat_dv

bys pidp: egen bmi_dv_fixed=mean(bmi_dv)
tabstat bmi_dv_fixed, by(wave) s(mean)
xtsum bmi_dv_fixed


// 2. Analysing the data (using Stata) – Part 1
xttrans mstat_dv
xttrans mstat_dv if sex_dv==1 & age_dv>=30 & age_dv<=39
xttrans mstat_dv if sex_dv==2 & age_dv>=30 & age_dv<=39


mean scghq1_dv, over(wave)
test [scghq1_dv]1=[scghq1_dv]2=[scghq1_dv]3=[scghq1_dv]4=[scghq1_dv]5=[scghq1_dv]6=[
scghq1_dv]7=[scghq1_dv]8=[scghq1_dv]9

regress scghq1_dv i.sex_dv i.ethn_dv c.age_dv##c.age_dv ///
        i.sf1_dv c.fihhmngrs_dv c.hhsize c.ndepchl i.jbhas_dv i.intdaty_dv

g l_ghq=L1.scghq1_dv
regress scghq1_dv i.sex_dv i.ethn_dv c.age_dv##c.age_dv ///
        i.sf1_dv c.fihhmngrs_dv c.hhsize c.ndepchl i.jbhas_dv i.intdaty_dv ///
        c.l_ghq

xtreg scghq1_dv i.sex_dv c.age_dv##c.age_dv i.sf1_dv ///
c.fihhmngrs_dv c.hhsize c.ndepchl i.jbhas_dv i.intdaty_dv, fe

xtreg scghq1_dv i.sex_dv c.age_dv##c.age_dv i.sf1_dv ///
c.fihhmngrs_dv c.hhsize c.ndepchl i.jbhas_dv i.intdaty_dv, re


// 3.3 Analysis using weights and accounting for sample design
```

```
 71
 72   svyset psu [pweight = indscus_lw_9], strata(strata)
 73
 74   svy: mean scghq1_dv, over(wave)
 75   test [scghq1_dv]1=[scghq1_dv]2=[scghq1_dv]3=[scghq1_dv]4=[scghq1_dv]5=[scghq1_dv]6=[
      scghq1_dv]7=[scghq1_dv]8=[scghq1_dv]9
 76
 77   svy: regress scghq1_dv i.sex_dv i.ethn_dv c.age_dv##c.age_dv ///
 78                i.sf1_dv c.fihhmngrs_dv c.hhsize c.ndepchl i.jbhas_dv i.intdaty_dv ///
 79                c.l_ghq
 80
 81
 82   svyset psu [pweight = indscus_lw_9], strata(strata) singleunit(scaled)
 83
 84   svy: mean scghq1_dv, over(wave)
 85   test [scghq1_dv]1=[scghq1_dv]2=[scghq1_dv]3=[scghq1_dv]4=[scghq1_dv]5=[scghq1_dv]6=[
      scghq1_dv]7=[scghq1_dv]8=[scghq1_dv]9
 86
 87   svy: regress scghq1_dv i.sex_dv i.ethn_dv c.age_dv##c.age_dv ///
 88                i.sf1_dv c.fihhmngrs_dv c.hhsize c.ndepchl i.jbhas_dv i.intdaty_dv ///
 89                c.l_ghq
 90
 91
 92   xtset pidp wave
 93   xtreg scghq1_dv c.age_dv##c.age_dv i.sf1_dv c.fihhmngrs_dv ///
 94                   c.hhsize c.ndepchl i.jbhas_dv i.intdaty_dv ///
 95                   [pw = indscus_lw_9], fe vce(cluster psu)
 96
 97   foreach i in 1 4 9 10 11 14 15 {
 98       xtreg scghq1_dv c.age_dv##c.age_dv i.sf1_dv c.fihhmngrs_dv ///
 99       c.hhsize c.ndepchl i.jbhas_dv i.intdaty_dv ///
100       if sex_dv==2 & ethn_dv==`i' ///
101       [pw = indscus_lw_9], fe vce(cluster psu)
102   }
103
104
105   log close
106   exit
107
```