#analysis of FIES Panel

#f2k3 analysis

#run f2k3vars code

#remove labels?

library(dplyr)

setwd("D:/Users/Erwin/OneDrive - University of the Philippines/CSWCD/SD/SD 400/Data Analysis/FIES")

vars03 <- ls(f2k3vars)

sink(file = "vars2k3.txt", split = TRUE, append = FALSE)

print(sort=TRUE,digits=3, cut=0,vars03)

sink()

#sample table, labels removed

table(f2k3vars$z2011\_h\_sex)

ls(f2k3vars)

class(f2k3vars)

#rename f2k3

f2k3vars %>% rename(bldgtype = b4011\_bldg\_type)

names(f2k3vars)[names(f2k3vars)=="acrnt"] <- "acrnt03"

names(f2k3vars)[names(f2k3vars)=="b4011\_bldg\_type"] <- "bldgtype03"

names(f2k3vars)[names(f2k3vars)=="b4031\_walls"] <- "walls03"

names(f2k3vars)[names(f2k3vars)=="b4042\_tenure\_ind"] <- "tenure\_ind03"

names(f2k3vars)[names(f2k3vars)=="b4053\_lot\_rent"] <- "lotrent03"

names(f2k3vars)[names(f2k3vars)=="b5031\_electric"] <- "elec03"

names(f2k3vars)[names(f2k3vars)=="b5052\_n\_radio"] <- "radio03"

names(f2k3vars)[names(f2k3vars)=="b5092\_n\_ref"] <- "ref03"

names(f2k3vars)[names(f2k3vars)=="b5112\_n\_aircon"] <- "aircon03"

names(f2k3vars)[names(f2k3vars)=="b5132\_n\_dining"] <- "dining03"

names(f2k3vars)[names(f2k3vars)=="b5152\_n\_phone"] <- "phone03"

names(f2k3vars)[names(f2k3vars)=="b5172\_n\_oven"] <- "oven03"

names(f2k3vars)[names(f2k3vars)=="cloth"] <- "cloth03"

names(f2k3vars)[names(f2k3vars)=="ea\_loss"] <- "ealoss03"

names(f2k3vars)[names(f2k3vars)=="educ"] <- "educ03"

names(f2k3vars)[names(f2k3vars)=="food"] <- "food03"

names(f2k3vars)[names(f2k3vars)=="fwgt"] <- "fwgt03"

names(f2k3vars)[names(f2k3vars)=="knfood"] <- "knfood03"

names(f2k3vars)[names(f2k3vars)=="natdc"] <- "natdc03"

names(f2k3vars)[names(f2k3vars)=="pnsns"] <- "pnsns03"

names(f2k3vars)[names(f2k3vars)=="regdc"] <- "regdc03"

names(f2k3vars)[names(f2k3vars)=="regpc"] <- "regpc03"

names(f2k3vars)[names(f2k3vars)=="stratum"] <- "stratum03"

names(f2k3vars)[names(f2k3vars)=="toinc"] <- "toinc03"

names(f2k3vars)[names(f2k3vars)=="trcom"] <- "trcom03"

names(f2k3vars)[names(f2k3vars)=="z2011\_h\_sex"] <- "sex03"

names(f2k3vars)[names(f2k3vars)=="z2031\_h\_ms"] <- "ms03"

names(f2k3vars)[names(f2k3vars)=="z2051\_h\_has\_job"] <- "hasjob03"

names(f2k3vars)[names(f2k3vars)=="z2071\_h\_kb\_2"] <- "kb03"

names(f2k3vars)[names(f2k3vars)=="z2091\_hhld\_type"] <- "hhldtype03"

names(f2k3vars)[names(f2k3vars)=="z2161\_m\_tot\_nrel"] <- "totnonrel03"

names(f2k3vars)[names(f2k3vars)=="z2181\_wife\_emp"] <- "wifeemp03"

names(f2k3vars)[names(f2k3vars)=="albev"] <- "albev03"

names(f2k3vars)[names(f2k3vars)=="b4021\_roof"] <- "roof03"

names(f2k3vars)[names(f2k3vars)=="b4041\_tenure"] <- "tenure03"

names(f2k3vars)[names(f2k3vars)=="b4043\_house\_rent"] <- "houserent03"

names(f2k3vars)[names(f2k3vars)=="b5021\_toilet"] <- "toilet03"

names(f2k3vars)[names(f2k3vars)=="b5041\_water"] <- "water03"

names(f2k3vars)[names(f2k3vars)=="b5062\_n\_tv"] <- "tv03"

names(f2k3vars)[names(f2k3vars)=="b5102\_n\_wash"] <- "wash03"

names(f2k3vars)[names(f2k3vars)=="b5122\_n\_salaset"] <- "salaset03"

names(f2k3vars)[names(f2k3vars)=="b5142\_n\_car"] <- "car03"

names(f2k3vars)[names(f2k3vars)=="b5162\_n\_pc"] <- "pc03"

names(f2k3vars)[names(f2k3vars)=="b5182\_n\_motor"] <- "motor03"

names(f2k3vars)[names(f2k3vars)=="dvdnd"] <- "dvdnd03"

names(f2k3vars)[names(f2k3vars)=="eainc"] <- "eainc03"

names(f2k3vars)[names(f2k3vars)=="fhome"] <- "fhome03"

names(f2k3vars)[names(f2k3vars)=="fsize"] <- "fsize03"

names(f2k3vars)[names(f2k3vars)=="ifams"] <- "ifams03"

names(f2k3vars)[names(f2k3vars)=="medic"] <- "medic03"

names(f2k3vars)[names(f2k3vars)=="natpc"] <- "natpc03"

names(f2k3vars)[names(f2k3vars)=="rcrtn"] <- "rcrtn03"

names(f2k3vars)[names(f2k3vars)=="regn"] <- "regn03"

names(f2k3vars)[names(f2k3vars)=="rlineno"] <- "rlineno03"

names(f2k3vars)[names(f2k3vars)=="tbcco"] <- "tbcco03"

names(f2k3vars)[names(f2k3vars)=="totex"] <- "totex03"

names(f2k3vars)[names(f2k3vars)=="w\_id"] <- "wid03"

names(f2k3vars)[names(f2k3vars)=="z2021\_h\_age"] <- "age03"

names(f2k3vars)[names(f2k3vars)=="z2041\_h\_educ"] <- "heduc03"

names(f2k3vars)[names(f2k3vars)=="z2061\_h\_occup\_1"] <- "occup03"

names(f2k3vars)[names(f2k3vars)=="z2081\_h\_cw"] <- "cw03"

names(f2k3vars)[names(f2k3vars)=="z2101\_tot\_mem"] <- "totmem03"

names(f2k3vars)[names(f2k3vars)=="z2171\_m\_tot\_emp"] <- "totemp03"

colnames(f2k3vars)

#test variables

table(f2k3vars$knfood03)

table(f2k3vars$fhome03)

##real prices

#https://faculty.fgcu.edu/bhobbs/Nominal%20Real%20Price%20Index.htm

f2k3vars$toinc03adj <- f2k3vars$toinc03 \* 115.4295 / 70.45

f2k3vars$acrnt03adj <- f2k3vars$acrnt03 \* 115.4295 / 70.45

f2k3vars$cloth03adj <- f2k3vars$cloth03 \* 115.4295 / 70.45

f2k3vars$ealoss03adj <- f2k3vars$ealoss03 \* 115.4295 / 70.45

f2k3vars$educ03adj <- f2k3vars$educ03 \* 115.4295 / 70.45

f2k3vars$food03adj <- f2k3vars$food03 \* 115.4295 / 70.45

f2k3vars$knfood03adj <- f2k3vars$knfood03 \* 115.4295 / 70.45

f2k3vars$trcom03adj <- f2k3vars$trcom03 \* 115.4295 / 70.45

f2k3vars$eainc03adj <- f2k3vars$eainc03 \* 115.4295 / 70.45

f2k3vars$medic03adj <- f2k3vars$medic03 \* 115.4295 / 70.45

f2k3vars$rcrtn03adj <- f2k3vars$rcrtn03 \* 115.4295 / 70.45

f2k3vars$tbcco03adj <- f2k3vars$tbcco03 \* 115.4295 / 70.45

f2k3vars$totex03adj <- f2k3vars$totex03 \* 115.4295 / 70.45

f2k3vars$houserent03adj <- f2k3vars$houserent03 \* 115.4295 / 70.45

f2k3vars$albev03adj <- f2k3vars$albev03 \* 115.4295 / 70.45

#per capita income

f2k3vars$pcinc03 <- f2k3vars$toinc03adj/f2k3vars$fsize03

#SES indicator

f2k3vars$ses03[f2k3vars$pcinc03 < 9999.99] <- 1

f2k3vars$ses03[9999.99<= f2k3vars$pcinc03 & f2k3vars$pcinc03 < 19999.97] <- 2

f2k3vars$ses03[19999.97<= f2k3vars$pcinc03 & f2k3vars$pcinc03 < 39999.94] <- 3

f2k3vars$ses03[39999.94<= f2k3vars$pcinc03 & f2k3vars$pcinc03 < 699999.04] <- 4

f2k3vars$ses03[699999.04<= f2k3vars$pcinc03 & f2k3vars$pcinc03 < 119999.82] <- 5

f2k3vars$ses03[119999.82<= f2k3vars$pcinc03 & f2k3vars$pcinc03 < 199999.70] <- 6

f2k3vars$ses03[199999.70<= f2k3vars$pcinc03] <- 7

f2k3vars$ses03b[f2k3vars$ses03 < 3] <- 1

f2k3vars$ses03b[2 < f2k3vars$ses03 & f2k3vars$ses03 < 6] <- 2

f2k3vars$ses03b[5 < f2k3vars$ses03] <- 3

#########

current\_file$sal\_cat[Salary<60.5] <- 1

current\_file$sal\_cat[60.5<Salary & Salary<69.0] <- 2

current\_file$sal\_cat[69.0<Salary & Salary<72.0] <- 3

current\_file$sal\_cat[Salary>72.0] <- 4

#########

#f2k6 analysis

vars06 <- ls(f2k6vars)

sink(file = "vars2k6.txt", split = TRUE, append = FALSE)

print(sort=TRUE,digits=3, cut=0,vars03)

sink()

#rename f2k6

names(f2k6vars)[names(f2k6vars)=="acrnt"] <- "acrnt06"

names(f2k6vars)[names(f2k6vars)=="b4011\_bldg\_type"] <- "bldgtype06"

names(f2k6vars)[names(f2k6vars)=="b4031\_walls"] <- "walls06"

names(f2k6vars)[names(f2k6vars)=="b4042\_tenure\_ind"] <-"tenure\_ind06"

names(f2k6vars)[names(f2k6vars)=="b4053\_lot\_rent"] <- "lotrent06"

names(f2k6vars)[names(f2k6vars)=="b5031\_electric"] <- "elec06"

names(f2k6vars)[names(f2k6vars)=="b5052\_n\_radio"] <- "radio06"

names(f2k6vars)[names(f2k6vars)=="b5092\_n\_ref"] <- "ref06"

names(f2k6vars)[names(f2k6vars)=="b5112\_n\_aircon"] <- "aircon06"

names(f2k6vars)[names(f2k6vars)=="b5132\_n\_dining"] <- "dining06"

names(f2k6vars)[names(f2k6vars)=="b5152\_n\_phone"] <- "phone06"

names(f2k6vars)[names(f2k6vars)=="b5172\_n\_oven"] <- "oven06"

names(f2k6vars)[names(f2k6vars)=="b5042\_distance"] <- "distance06" # not in f2k3

names(f2k6vars)[names(f2k6vars)=="cloth"] <- "cloth06"

names(f2k6vars)[names(f2k6vars)=="ea\_loss"] <- "ealoss06"

names(f2k6vars)[names(f2k6vars)=="ceduc"] <- "educ06"

names(f2k6vars)[names(f2k6vars)=="food"] <- "food06"

names(f2k6vars)[names(f2k6vars)=="fwgt"] <- "fwgt06"

names(f2k6vars)[names(f2k6vars)=="knfood"] <- "knfood06"

names(f2k6vars)[names(f2k6vars)=="natdc"] <- "natdc06"

names(f2k6vars)[names(f2k6vars)=="pnsns"] <- "pnsns06"

names(f2k6vars)[names(f2k6vars)=="regdc"] <- "regdc06"

names(f2k6vars)[names(f2k6vars)=="regpc"] <- "regpc06"

names(f2k6vars)[names(f2k6vars)=="stratum"] <- "stratum06"

names(f2k6vars)[names(f2k6vars)=="toinc"] <- "toinc06"

names(f2k6vars)[names(f2k6vars)=="trcom"] <- "trcom06"

names(f2k6vars)[names(f2k6vars)=="z2011\_h\_sex"] <- "sex06"

names(f2k6vars)[names(f2k6vars)=="z2031\_h\_ms"] <- "ms06"

names(f2k6vars)[names(f2k6vars)=="z2051\_h\_has\_job"] <- "hasjob06"

names(f2k6vars)[names(f2k6vars)=="z2071\_h\_kb"] <- "kb06" #not in fk26

names(f2k6vars)[names(f2k6vars)=="z2091\_hhld\_type"] <- "hhldtype06"

names(f2k6vars)[names(f2k6vars)=="z2161\_m\_tot\_nrel"] <- "totnonrel06"

names(f2k6vars)[names(f2k6vars)=="z2181\_wife\_emp"] <- "wifeemp06"

names(f2k6vars)[names(f2k6vars)=="albev"] <- "albev06"

names(f2k6vars)[names(f2k6vars)=="b4021\_roof"] <- "roof06"

names(f2k6vars)[names(f2k6vars)=="b4041\_tenure"] <- "tenure06"

names(f2k6vars)[names(f2k6vars)=="b4043\_house\_rent"] <- "houserent06"

names(f2k6vars)[names(f2k6vars)=="b5021\_toilet"] <- "toilet06"

names(f2k6vars)[names(f2k6vars)=="b5041\_water"] <- "water06"

names(f2k6vars)[names(f2k6vars)=="b5062\_n\_tv"] <- "tv06"

names(f2k6vars)[names(f2k6vars)=="b5102\_n\_wash"] <- "wash06"

names(f2k6vars)[names(f2k6vars)=="b5122\_n\_salaset"] <- "salaset06"

names(f2k6vars)[names(f2k6vars)=="b5142\_n\_car"] <- "car06"

names(f2k6vars)[names(f2k6vars)=="b5162\_n\_pc"] <- "pc06"

names(f2k6vars)[names(f2k6vars)=="b5182\_n\_motor"] <- "motor06"

names(f2k6vars)[names(f2k6vars)=="dvdnd"] <- "dvdnd06"

names(f2k6vars)[names(f2k6vars)=="eainc"] <- "eainc06"

names(f2k6vars)[names(f2k6vars)=="fhome"] <- "fhome06"

names(f2k6vars)[names(f2k6vars)=="fsize"] <- "fsize06"

names(f2k6vars)[names(f2k6vars)=="ifams"] <- "ifams06"

names(f2k6vars)[names(f2k6vars)=="medic"] <- "medic06"

names(f2k6vars)[names(f2k6vars)=="natpc"] <- "natpc06"

names(f2k6vars)[names(f2k6vars)=="rcrtn"] <- "rcrtn06"

names(f2k6vars)[names(f2k6vars)=="regn"] <- "regn06"

names(f2k6vars)[names(f2k6vars)=="rlineno"] <- "rlineno06"

names(f2k6vars)[names(f2k6vars)=="tbcco"] <- "tbcco06"

names(f2k6vars)[names(f2k6vars)=="totex"] <- "totex06"

names(f2k6vars)[names(f2k6vars)=="w\_oid"] <- "wid06"

names(f2k6vars)[names(f2k6vars)=="z2021\_h\_age"] <- "age06"

names(f2k6vars)[names(f2k6vars)=="z2041\_h\_educ"] <- "heduc06"

names(f2k6vars)[names(f2k6vars)=="z2061\_h\_occup"] <- "occup06" #not in fk26

names(f2k6vars)[names(f2k6vars)=="z2081\_h\_cw"] <- "cw06"

names(f2k6vars)[names(f2k6vars)=="z2101\_tot\_mem"] <- "totmem06"

names(f2k6vars)[names(f2k6vars)=="z2171\_m\_tot\_emp"] <- "totemp06"

colnames(f2k6vars)

#real prices

f2k6vars$toinc06adj <- f2k6vars$toinc06 \* 115.4295 / 82.98755187

f2k6vars$acrnt06adj <- f2k6vars$acrnt06 \* 115.4295 / 82.98755187

f2k6vars$cloth06adj <- f2k6vars$cloth06 \* 115.4295 / 82.98755187

f2k6vars$ealoss06adj <- f2k6vars$ealoss06 \* 115.4295 / 82.98755187

f2k6vars$educ06adj <- f2k6vars$educ06 \* 115.4295 / 82.98755187

f2k6vars$food06adj <- f2k6vars$food06 \* 115.4295 / 82.98755187

f2k6vars$knfood06adj <- f2k6vars$knfood06 \* 115.4295 / 82.98755187

f2k6vars$trcom06adj <- f2k6vars$trcom06 \* 115.4295 / 82.98755187

f2k6vars$eainc06adj <- f2k6vars$eainc06 \* 115.4295 / 82.98755187

f2k6vars$medic06adj <- f2k6vars$medic06 \* 115.4295 / 82.98755187

f2k6vars$rcrtn06adj <- f2k6vars$rcrtn06 \* 115.4295 / 82.98755187

f2k6vars$tbcco06adj <- f2k6vars$tbcco06 \* 115.4295 / 82.98755187

f2k6vars$albev06adj <- f2k6vars$albev06 \* 115.4295 / 82.98755187

f2k6vars$totex06adj <- f2k6vars$totex06 \* 115.4295 / 82.98755187

f2k6vars$houserent06adj <- f2k6vars$houserent06 \* 115.4295 / 82.98755187

#per capita income

f2k6vars$pcinc06 <- f2k6vars$toinc06adj/f2k6vars$fsize06

#SES indicator

f2k6vars$ses06[f2k6vars$pcinc06 < 9999.99] <- 1

f2k6vars$ses06[9999.99<= f2k6vars$pcinc06 & f2k6vars$pcinc06 < 19999.97] <- 2

f2k6vars$ses06[19999.97<= f2k6vars$pcinc06 & f2k6vars$pcinc06 < 39999.94] <- 3

f2k6vars$ses06[39999.94<= f2k6vars$pcinc06 & f2k6vars$pcinc06 < 699999.04] <- 4

f2k6vars$ses06[699999.04<= f2k6vars$pcinc06 & f2k6vars$pcinc06 < 119999.82] <- 5

f2k6vars$ses06[119999.82<= f2k6vars$pcinc06 & f2k6vars$pcinc06 < 199999.70] <- 6

f2k6vars$ses06[199999.70<= f2k6vars$pcinc06] <- 7

f2k6vars$ses06b[f2k6vars$ses06 < 3] <- 1

f2k6vars$ses06b[2 < f2k6vars$ses06 & f2k6vars$ses06 < 6] <- 2

f2k6vars$ses06b[5 < f2k6vars$ses06] <- 3

#f2k9 analysis

vars09 <- ls(f2k9vars)

sink(file = "vars2k9.txt", split = TRUE, append = FALSE)

print(sort=TRUE,digits=3, cut=0,vars09)

sink()

#rename f2k9

names(f2k9vars)[names(f2k9vars)=="acrnt"] <- "acrnt09"

names(f2k9vars)[names(f2k9vars)=="b4011\_bldg\_type"] <- "bldgtype09"

names(f2k9vars)[names(f2k9vars)=="b4031\_walls"] <- "walls09"

names(f2k9vars)[names(f2k9vars)=="b4042\_tenure\_ind"] <- "tenure\_ind09"

names(f2k9vars)[names(f2k9vars)=="b4053\_lot\_rent"] <- "lotrent09"

names(f2k9vars)[names(f2k9vars)=="b5021\_toilet"] <- "toilet09"

names(f2k9vars)[names(f2k9vars)=="b5041\_water"] <- "water09"

names(f2k9vars)[names(f2k9vars)=="b5052\_n\_radio"] <- "radio09"

names(f2k9vars)[names(f2k9vars)=="b5092\_n\_ref"] <- "ref09"

names(f2k9vars)[names(f2k9vars)=="b5112\_n\_aircon"] <- "aircon09"

names(f2k9vars)[names(f2k9vars)=="b5132\_n\_dining"] <- "dining09"

names(f2k9vars)[names(f2k9vars)=="b5152\_n\_phone"] <- "phone09"

names(f2k9vars)[names(f2k9vars)=="b5172\_n\_oven"] <- "oven09"

names(f2k9vars)[names(f2k9vars)=="dvdnd"] <- "dvdnd09"

names(f2k9vars)[names(f2k9vars)=="educ"] <- "educ09"

names(f2k9vars)[names(f2k9vars)=="fsize"] <- "fsize09"

names(f2k9vars)[names(f2k9vars)=="natdc"] <- "natdc09"

names(f2k9vars)[names(f2k9vars)=="nfood"] <- "nfood09"

names(f2k9vars)[names(f2k9vars)=="regdc"] <- "regdc09"

names(f2k9vars)[names(f2k9vars)=="rfact"] <- "fwgt09"

names(f2k9vars)[names(f2k9vars)=="toinc"] <- "toinc09"

names(f2k9vars)[names(f2k9vars)=="trcom"] <- "trcom09"

names(f2k9vars)[names(f2k9vars)=="w\_line\_no"] <- "rlineno09"

names(f2k9vars)[names(f2k9vars)=="w\_regn"] <- "regn09"

names(f2k9vars)[names(f2k9vars)=="z2011\_h\_sex"] <- "sex09"

names(f2k9vars)[names(f2k9vars)=="z2031\_h\_ms"] <- "ms09"

names(f2k9vars)[names(f2k9vars)=="z2051\_h\_has\_job"] <- "hasjob09"

names(f2k9vars)[names(f2k9vars)=="z2071\_h\_kb"] <- "kb09"

names(f2k9vars)[names(f2k9vars)=="z2091\_hhld\_type"] <- "hhldtype09"

names(f2k9vars)[names(f2k9vars)=="z2161\_m\_tot\_nrel"] <- "totnonrel09"

names(f2k9vars)[names(f2k9vars)=="z2181\_wife\_emp"] <- "wifeemp09"

names(f2k9vars)[names(f2k9vars)=="albev"] <- "albev09"

names(f2k9vars)[names(f2k9vars)=="b4021\_roof"] <- "roof09"

names(f2k9vars)[names(f2k9vars)=="b4041\_tenure"] <- "tenure09"

names(f2k9vars)[names(f2k9vars)=="b4043\_house\_rent"] <- "houserent09"

names(f2k9vars)[names(f2k9vars)=="b5012\_oth\_house"] <- "ohouse09"

names(f2k9vars)[names(f2k9vars)=="b5031\_electric"] <- "elec09"

names(f2k9vars)[names(f2k9vars)=="b5042\_distance"] <- "distance09"

names(f2k9vars)[names(f2k9vars)=="b5062\_n\_tv"] <- "tv09"

names(f2k9vars)[names(f2k9vars)=="b5102\_n\_wash"] <- "wash09"

names(f2k9vars)[names(f2k9vars)=="b5122\_n\_salaset"] <- "salaset09"

names(f2k9vars)[names(f2k9vars)=="b5142\_n\_car"] <- "car09"

names(f2k9vars)[names(f2k9vars)=="b5162\_n\_pc"] <- "pc09"

names(f2k9vars)[names(f2k9vars)=="b5182\_n\_motor"] <- "motor09"

names(f2k9vars)[names(f2k9vars)=="eainc"] <- "eainc09"

names(f2k9vars)[names(f2k9vars)=="fhome"] <- "fhome09"

names(f2k9vars)[names(f2k9vars)=="medic"] <- "medic09"

names(f2k9vars)[names(f2k9vars)=="natpc"] <- "natpc09"

names(f2k9vars)[names(f2k9vars)=="pnsns"] <- "pnsns09"

names(f2k9vars)[names(f2k9vars)=="regpc"] <- "regpc09"

names(f2k9vars)[names(f2k9vars)=="tbcco"] <- "tbcco09"

names(f2k9vars)[names(f2k9vars)=="totex"] <- "totex09"

names(f2k9vars)[names(f2k9vars)=="w\_id"] <- "id09"

names(f2k9vars)[names(f2k9vars)=="w\_no\_hh"] <- "no\_hh09"

names(f2k9vars)[names(f2k9vars)=="w\_urb2"] <- "urb09"

names(f2k9vars)[names(f2k9vars)=="z2021\_h\_age"] <- "age09"

names(f2k9vars)[names(f2k9vars)=="z2041\_h\_educ"] <- "heduc09"

names(f2k9vars)[names(f2k9vars)=="z2061\_h\_occup"] <- "occup09"

names(f2k9vars)[names(f2k9vars)=="z2081\_h\_cw"] <- "cw09"

names(f2k9vars)[names(f2k9vars)=="z2101\_tot\_mem"] <- "totmem09"

names(f2k9vars)[names(f2k9vars)=="z2171\_m\_tot\_emp"] <- "totemp09"

colnames(f2k9vars)

#real prices

f2k9vars$toinc09adj <- f2k9vars$toinc09 \* 115.4295 / 96.34854772

f2k9vars$acrnt09adj <- f2k9vars$acrnt09 \* 115.4295 / 96.34854772

#f2k9vars$cloth09adj <- f2k9vars$cloth09 \* 115.4295 / 96.34854772

#f2k9vars$ealoss09adj <- f2k9vars$ealoss09 \* 115.4295 / 96.34854772

f2k9vars$educ09adj <- f2k9vars$educ09 \* 115.4295 / 96.34854772

f2k9vars$food09adj <- f2k9vars$food09 \* 115.4295 / 96.34854772

f2k9vars$nfood09adj <- f2k9vars$nfood09 \* 115.4295 / 96.34854772

#f2k9vars$knfood09adj <- f2k9vars$knfood09 \* 115.4295 / 96.34854772

f2k9vars$trcom09adj <- f2k9vars$trcom09 \* 115.4295 / 96.34854772

f2k9vars$eainc09adj <- f2k9vars$eainc09 \* 115.4295 / 96.34854772

f2k9vars$medic09adj <- f2k9vars$medic09 \* 115.4295 / 96.34854772

#f2k9vars$rcrtn09adj <- f2k9vars$rcrtn09 \* 115.4295 / 96.34854772

f2k9vars$albev09adj <- f2k9vars$albev09 \* 115.4295 / 96.34854772

f2k9vars$tbcco09adj <- f2k9vars$tbcco09 \* 115.4295 / 96.34854772

f2k9vars$totex09adj <- f2k9vars$totex09 \* 115.4295 / 96.34854772

f2k9vars$houserent09adj <- f2k9vars$houserent09 \* 115.4295 / 96.34854772

#per capita income

f2k9vars$pcinc09 <- f2k9vars$toinc09adj/f2k9vars$fsize09

#SES indicator

f2k9vars$ses09[f2k9vars$pcinc09 < 9999.99] <- 1

f2k9vars$ses09[9999.99<= f2k9vars$pcinc09 & f2k9vars$pcinc09 < 19999.97] <- 2

f2k9vars$ses09[19999.97<= f2k9vars$pcinc09 & f2k9vars$pcinc09 < 39999.94] <- 3

f2k9vars$ses09[39999.94<= f2k9vars$pcinc09 & f2k9vars$pcinc09 < 699999.04] <- 4

f2k9vars$ses09[699999.04<= f2k9vars$pcinc09 & f2k9vars$pcinc09 < 119999.82] <- 5

f2k9vars$ses09[119999.82<= f2k9vars$pcinc09 & f2k9vars$pcinc09 < 199999.70] <- 6

f2k9vars$ses09[199999.70<= f2k9vars$pcinc09] <- 7

f2k9vars$ses09b[f2k9vars$ses09 < 3] <- 1

f2k9vars$ses09b[2 < f2k9vars$ses09 & f2k9vars$ses09 < 6] <- 2

f2k9vars$ses09b[5 < f2k9vars$ses09] <- 3

#merge fies

n\_last <- 18

f2k3vars$hhid <- substr(f2k3vars$wid03, nchar(f2k3vars$wid03) - n\_last +1, nchar(f2k3vars$wid03))

f2k9vars$hhid <- f2k9vars$id09

f2k6vars$hhid <- substr(f2k6vars$wid06, nchar(f2k6vars$wid06) - n\_last +1, nchar(f2k6vars$wid06))

library(dplyr)

#make sure you run f2k6 from merged folder

#f2k6vars <- test2k6

#df1 <-inner\_join(f2k3vars, f2k9vars, by="hhid")

df2 <- inner\_join(f2k3vars, f2k6vars, by="hhid")

df <- inner\_join(df2, f2k9vars, by="hhid")

#fix educ var

df$heduc03b = df$heduc03

df$heduc03b <- as.numeric(df$heduc03b)

class(df$heduc03b)

df$heduc03b[df$heduc03b > 5] <- 6

df$heduc03b <- as.factor(df$heduc03b)

class(df$heduc03b)

levels(df$heduc03b) <- c("Elem Under Grad", "Elem Grad", "HS Under Grad", "HS Grad", "College Under Grad", "College Grad")

table(df$heduc03b)

df$heduc06b = df$heduc06

df$heduc06b <- as.numeric(df$heduc06b)

class(df$heduc06b)

df$heduc06b[df$heduc06b > 5] <- 6

df$heduc06b <- as.factor(df$heduc06b)

class(df$heduc06b)

levels(df$heduc06b) <- c("Elem Under Grad", "Elem Grad", "HS Under Grad", "HS Grad", "College Under Grad", "College Grad")

table(df$heduc06b)

df$heduc09b = df$heduc09

df$heduc09b <- as.numeric(df$heduc09b)

class(df$heduc09b)

df$heduc09b[df$heduc09b > 5] <- 6

df$heduc09b <- as.factor(df$heduc09b)

class(df$heduc09b)

levels(df$heduc09b) <- c("Elem Under Grad", "Elem Grad", "HS Under Grad", "HS Grad", "College Under Grad", "College Grad")

table(df$heduc09b)

#explore

table(df$ses03b)

table(df$ses03)

library(gmodels)

CrossTable(df$ses03b, df$ses06b)

CrossTable(df$ses03b, df$ses09b)

#create mobility SES indicator

CrossTable(df$ses03b, df$ses09b)

df$sesmob <- NA

df[df$ses03b==1 & df$ses09b==1, "sesmob"] <- 1

df[df$ses03b==1 & df$ses09b==2, "sesmob"] <- 2

df[df$ses03b==1 & df$ses09b==3, "sesmob"] <- 3

df[df$ses03b==2 & df$ses09b==1, "sesmob"] <- 4

df[df$ses03b==2 & df$ses09b==2, "sesmob"] <- 5

df[df$ses03b==2 & df$ses09b==3, "sesmob"] <- 6

df[df$ses03b==3 & df$ses09b==1, "sesmob"] <- 7

df[df$ses03b==3 & df$ses09b==2, "sesmob"] <- 8

df[df$ses03b==3 & df$ses09b==3, "sesmob"] <- 9

table(df$sesmob)

dfmob <- subset(df, df$ses03b==2)

dfmob$sesmob2 <- NA

dfmob[dfmob$ses03b==2 & dfmob$ses09b==1, "sesmob2"] <- 1

dfmob[dfmob$ses03b==2 & dfmob$ses09b==2, "sesmob2"] <- 2

dfmob[dfmob$ses03b==2 & dfmob$ses09b==3, "sesmob2"] <- 3

table(dfmob$sesmob2)

class(dfmob$sesmob2)

dfmob$sesmob2 <- as.factor(dfmob$sesmob2)

class(dfmob$sesmob2)

levels(dfmob$sesmob2) <- c("Middle to Poor", "Middle to Middle", "Middle to Upper")

table(dfmob$sesmob2)

#check alternative

#from https://stackoverflow.com/questions/34998819/r-code-how-to-generate-variable-based-on-multiple-conditions-from-other-variabl

#dataset$newvar <- NA

#dataset[dataset$factor1 >= 5 & dataset$factor2 < 19 & (dataset$factor3=="b" | dataset$factor3 =="c"), "newvar"] <- 1

#this worked

#mydata <- as.data.frame(cbind(c(1, 2, 3, 4, 5), c(1, 2, 3, 4, 5), c(1, 2, 3, 4, 5)))

#mydata$test <- NA

#mydata[mydata$V1==1 & mydata$V2==1 & mydata$V3==1, "test"] <- 5

#ML

library(foreign)

library(nnet)

library(ggplot2)

library(reshape2)

#test <- f2k3vars

#test$b4021\_roof2 <- relevel(test$b4021\_roof, ref = 1)

#head(test$b4021\_roof2)

#testml <- multinom(b4021\_roof2 ~ b4031\_walls + educ + medic + fsize + toinc, weights = fwgt, data=test)

#sum\_ml <- summary(testml)

df$sesmob <- relevel(df$sesmob, ref = 1)

testml <- multinom(dfmob$sesmob2 ~ dfmob$heduc03b + dfmob$heduc06b + dfmob$educ03adj + dfmob$educ06adj + dfmob$medic03adj

+ dfmob$medic06adj + dfmob$food03adj + dfmob$food06adj + dfmob$cw03 + dfmob$cw06 + dfmob$totnonrel03

+ dfmob$totnonrel06 + dfmob$regpc03 + dfmob$car03 + dfmob$car06 + dfmob$tv03 + dfmob$tv06 + dfmob$aircon03

+ dfmob$aircon06 + dfmob$bldgtype + dfmob$hhldtype03 + dfmob$hhldtype06 + dfmob$eainc03adj + dfmob$eainc06adj

+ dfmob$ealoss03adj + dfmob$ealoss06adj + dfmob$fsize03 + dfmob$fsize06 + dfmob$tbcco03adj + dfmob$tbcco06adj

+ dfmob$albev03 + dfmob$albev06 + dfmob$tenure03 + dfmob$tenure06

, weights = fwgt09, maxit=1000, data=dfmob)

sum\_ml <- summary(testml)

sum\_ml

sink(file = "mltest.txt", split = TRUE, append = FALSE)

print(sort=TRUE,digits=3, cut=0,sum\_ml)

sink()

testml <- multinom(dfmob$sesmob ~ dfmob$heduc03b + dfmob$heduc06b + dfmob$educ03adj + dfmob$educ06adj + dfmob$medic03adj + dfmob$medic06adj + dfmob$food03adj + dfmob$food06adj + dfmob$cw03 + dfmob$cw06 + dfmob$totnonrel03 + dfmob$totnonrel06 + dfmob$regpc03 + dfmob$car03 + dfmob$car06 + dfmob$tv03 + dfmob$tv06 + dfmob$aircon03+ dfmob$aircon06 + dfmob$bldgtype + dfmob$hhldtype03 + dfmob$hhldtype06 + dfmob$eainc03adj + dfmob$eainc06adj+ dfmob$ealoss03adj + dfmob$ealoss06adj + dfmob$fsize03 + dfmob$fsize06 + dfmob$tbcco03adj + dfmob$tbcco06adj+ dfmob$albev03 + dfmob$albev06 + dfmob$tenure03 + dfmob$tenure06, weights = fwgt09, maxit=1000, data=dfmob)

#this one worked

setwd("D:/Users/Erwin/OneDrive - University of the Philippines/CSWCD/SD/SD 400/Data Analysis/FIES")

dfmob$regn03 <- relevel(dfmob$regn03, ref = 2)

testml <- multinom(dfmob$sesmob2 ~ dfmob$regn03 + dfmob$heduc03b + dfmob$heduc06b + dfmob$educ03adj + dfmob$educ06adj + dfmob$cw03 + dfmob$cw06

+ dfmob$medic03adj + dfmob$medic06adj + dfmob$bldgtype03 + dfmob$hhldtype03 + dfmob$hhldtype06 + dfmob$fsize03 + dfmob$fsize06

+ dfmob$tenure03 +dfmob$tenure06 + dfmob$sex03

, maxit=1000, data=dfmob, Hess = TRUE) # less vars and ", weights = fwgt09" was also removed

sum\_ml <- summary(testml)

sum\_ml

sink(file = "mltest\_1\_23.txt", split = TRUE, append = FALSE)

print(sort=TRUE,digits=3, cut=0,sum\_ml)

sink()

testml2 <- multinom(df$sesmob ~ df$regn03 + df$heduc03b + df$heduc06b + df$educ03adj + df$educ06adj + df$cw03 + df$cw06

+ df$medic03adj + df$medic06adj + df$bldgtype03 + df$hhldtype03 + df$hhldtype06 + df$fsize03 + df$fsize06

+ df$tenure03 +df$tenure06 + df$sex03

, maxit=1000, data=df, Hess = TRUE) # less vars and ", weights = fwgt09" was also removed

sum\_ml2 <- summary(testml2)

sum\_ml2

sink(file = "mltest\_1\_23\_allmob.txt", split = TRUE, append = FALSE)

print(sort = TRUE, digits = 3, cot = 0, sum\_ml2)

sink()

#extract coefficients from the model and exponentiate

sum\_exp <- coef(testml)

sum\_exp

sink(file = "exp\_coef.txt", split = TRUE, append = FALSE)

print(sort=TRUE,digits=3, cut=0, sum\_exp)

sink()

##test of significance

z <- summary(testml)$coefficients/summary(testml)$standard.errors

z

#2-tailed z test

p <- (1 - pnorm(abs(z), 0, 1)) \* 2

p

sink(file = "p-values.txt", split = TRUE, append = FALSE)

print(sort=TRUE,digits=3, cut=0,p)

sink()

#predicted probabilities

head(pp <- fitted(testml))

library(effects)

plot(effects("heduc03", testml))

##fixest

fixesttest = feglm(dfmob$sesmob2 ~ dfmob$heduc03b, data = dfmob)

options(error=recover)

reach\_full\_in <- reachability(krack\_full, 'in')

fitstat(fixesttest, ~ rmse + r2 + wald + wf)

testml <- multinom(df$sesmob ~ df$heduc03b + df$heduc06b + df$educ03adj + df$educ06adj + df$cw03 + df$cw06

+ df$medic03adj + df$medic06adj + df$bldgtype + df$bldgtype06 + df$hhldtype03 + df$hhldtype06 + df$fsize03 + df$fsize06

+ df$tenure03 +df$tenure06

, maxit=1000, data=df, Hess = TRUE) # less vars and ", weights = fwgt09" was also removed

sum\_ml <- summary(testml)

sum\_ml

##crosstabs of class of work

setwd("D:/Users/Erwin/OneDrive - University of the Philippines/CSWCD/SD/SD 400/Data Analysis/FIES")

library(labelled)

dfmob$cw03b <- remove\_labels(dfmob$cw03)

dfmob$cw06b <- remove\_labels(dfmob$cw06)

table(dfmob$cw03b)

library(gmodels)

sink(file = "xtabs cw03-06.txt", split = TRUE, append = FALSE)

CrossTable(as.factor(df$cw03), as.factor(df$cw06), chisq = TRUE)

sink()

sink(file = "xtabs cw06-09.txt", split = TRUE, append = FALSE)

CrossTable(as.factor(df$cw06), as.factor(df$cw09), chisq = TRUE)

sink()

library(stats)

cw <- xtabs(~dfmob$cw03+dfmob$cw06)

rowPerc(cw)

dfm <- df[which(df$sex03 == "Male"),]

table(dfm$sex03)

sink(file = "xtabs cw03-06 MALE.txt", split = TRUE, append = FALSE)

CrossTable(as.factor(dfm$cw03), as.factor(dfm$cw06), chisq = TRUE)

sink()

sink(file = "xtabs cw06-09 MALE.txt", split = TRUE, append = FALSE)

CrossTable(as.factor(dfm$cw06), as.factor(dfm$cw09), chisq = TRUE)

sink()

dff <- df[which(df$sex03 == "Female"),]

table(dff$sex03)

sink(file = "xtabs cw03-06 FEMALE.txt", split = TRUE, append = FALSE)

CrossTable(as.factor(dff$cw03), as.factor(dff$cw06), chisq = TRUE)

sink()

sink(file = "xtabs cw06-09 FEMALE.txt", split = TRUE, append = FALSE)

CrossTable(as.factor(dff$cw06), as.factor(dff$cw09), chisq = TRUE)

sink()

sink(file = "cw03 x sesmob.txt", split = TRUE, append = FALSE)

CrossTable(df$sesmob, df$cw03, chisq = TRUE)

sink()

sink(file = "sesmob x educ03.txt", split = TRUE, append = FALSE)

CrossTable(df$sesmob, df$heduc03b, chisq = TRUE)

sink()

CrossTable(df$cw03, df$sesmob, chisq = TRUE)

aggregate(df$toinc09adj~df$sesmob, df, mean) #mean per sesmob

aggregate(dfmob$toinc03adj~dfmob$sesmob2, df, mean)

aggregate(dfmob$toinc03adj~dfmob$sesmob2, df, median)

aggregate(dfmob$toinc03adj~dfmob$sesmob2, df, sd)

aggregate(dfmob$toinc06adj~dfmob$sesmob2, df, mean)

aggregate(dfmob$toinc06adj~dfmob$sesmob2, df, median)

aggregate(dfmob$toinc06adj~dfmob$sesmob2, df, sd)

aggregate(dfmob$toinc09adj~dfmob$sesmob2, df, mean)

aggregate(dfmob$toinc09adj~dfmob$sesmob2, df, median)

aggregate(df$toinc03adj~df$sesmob, df, quantile)

boxplot(df$fsize03~df$sesmob, data = df)

boxplot(df$toinc03adj~df$sesmob, data = df)

boxplot(df$toinc09adj~df$sesmob, data = df)

CrossTable(df$ses03b, df$ses06b, chisq = TRUE)

CrossTable(df$ses06b, df$ses09b, chisq = TRUE)

dfmob$m0306 <- NA

dfmob[dfmob$ses03b==2 & dfmob$ses06b==1, "m0306"] <- 1

dfmob[dfmob$ses03b==2 & dfmob$ses06b==2, "m0306"] <- 2

dfmob[dfmob$ses03b==2 & dfmob$ses06b==3, "m0306"] <- 3

dfmid0306 <- subset(dfmob, dfmob$m0306 == 2)

CrossTable(dfmid0306$m0306, dfmid0306$ses09b, chisq = TRUE)

dfmidup0306 <- subset(dfmob, dfmob$m0306 == 3)

CrossTable(dfmidup0306$m0306, dfmidup0306$ses09b, chisq = TRUE)

dfmidpoor0306 <- subset(dfmob, dfmob$m0306 == 1)

CrossTable(dfmidpoor0306$m0306, dfmidpoor0306$ses09b, chisq = TRUE)

###nothing

setwd("D:/Users/Erwin/OneDrive - University of the Philippines/CSWCD/SD/SD 400/Data Analysis/FIES")

dfmob$regn03 <- relevel(dfmob$regn03, ref = 2)

mlses <- multinom(df$sesmob ~ df$ses03b + df$ses06b + df$ses09b

, maxit=1000, data=dfmob, Hess = TRUE) # less vars and ", weights = fwgt09" was also removed

sum\_mlses <- summary(mlses)

sum\_mlses

###nothing

colnames(dfmob)

##income per sesmob

#dfpoormid <- subset(df, df$sesmob==2)

aggregate(df$toinc03adj~df$sesmob, df, mean)

aggregate(df$toinc06adj~df$sesmob, df, mean)

aggregate(df$toinc09adj~df$sesmob, df, mean)

aggregate(df$educ03adj~df$sesmob, df, mean)

aggregate(df$educ06adj~df$sesmob, df, mean)

aggregate(df$educ09adj~df$sesmob, df, mean)

table(df$sesmob)

table(dfpoormid$sesmob)

aggregate(df$medic03adj~df$sesmob, df, mean)

aggregate(df$medic06adj~df$sesmob, df, mean)

aggregate(df$medic09adj~df$sesmob, df, mean)

aggregate(df$tbcco03adj~df$sesmob, df, mean)

aggregate(df$tbcco06adj~df$sesmob, df, mean)

aggregate(df$tbcco09adj~df$sesmob, df, mean)

aggregate(df$eainc03adj~df$sesmob, df, mean)

aggregate(df$eainc06adj~df$sesmob, df, mean)

aggregate(df$eainc09adj~df$sesmob, df, mean)

aggregate(df$rcrtn03adj~df$sesmob, df, mean)

aggregate(df$rcrtn06adj~df$sesmob, df, mean)

aggregate(df$rcrtn09adj~df$sesmob, df, mean)

aggregate(df$trcom03adj~df$sesmob, df, mean)

aggregate(df$trcom06adj~df$sesmob, df, mean)

aggregate(df$trcom09adj~df$sesmob, df, mean)

aggregate(df$houserent03~df$sesmob, df, mean)

aggregate(df$houserent06~df$sesmob, df, mean)

aggregate(df$houserent09~df$sesmob, df, mean)