

```
gen age=2023-a03
keep if age>=60
keep if d25!=.
keep if d52!=.
keep if e06!=.
keep if b01!=.

gen jjzk=0 if b01==1|b01==2
replace jjzk=1 if b01==3
replace jjzk=2 if b01==4|b01==5
codebook jjzk

gen xb=0 ifa02==1
replace xb=1 ifa02==2
codebook xb
gen hy=0 ifa04==1
replace hy=1 ifa04==2|a04==3|a04==4
codebook hy
gen nl=0 if age>=60&age<=74
replace nl=1 if age>=75
codebook nl
gen whcd=0 ifa07==0
replace whcd=1 ifa07>0&a07<=5
replace whcd=2 ifa07>=6
codebook whcd
gen jzzk=0 ifa05==1
replace jzzk=1 ifa05==2|a05==3|a05==4
codebook jzzk
gen fzjg=0 ifb07==3|b07==4
replace fzjg=1 ifb07==1|b07==2
codebook fzjg
gen qjrl=0 ifb36==2
replace qjrl=1 ifb36==1
codebook qjrl
gen sw=0 ifh01==2
replace sw=1 ifh01==1
codebook sw
gen tj=0 ifd38==2
```

```

replace tj=1 if d38==1
codebook tj
gen xy=0 if d35==1

replace xy=1 if d35==2|d35==3|d35==4
codebook xy
gen yj=0 if d36==1

codebook yj=1 if d36==2|d36==3|d36==4
replace yj=1 if d36==2|d36==3|d36==4

codebook yj

gen ais_score=d52+d53+d54+d55+d56+d57+d58+d59
gen ais_group=0 if ais_score<=6
replace ais_group=1 if ais_score>6
codebook ais_group
gen richang=0 if d06+d07+d08+d09+d10+d11<=6

replace richang=1 if d06+d07+d08+d09+d10+d11>6
codebook richang
gen yy=(d25-1)+(d26-1)+(d27-1)+(d28-1)+(4-d29)+(d30-1)+(d31-1)+(4-d32)+(d33-1)+(d34-1)

gen yiyu=0 if yy<10

replace yiyu=1 if yy>=10
codebook yiyu

gen ziping=0 if d03==1|d03==2|d03==3
replace ziping=1 if d03==4|d03==5
codebook ziping

gen zhuyuan=0 iff40<=0

replace zhuyuan=1 iff40>=1
codebook zhuyuan

gen shcy_score=e06+e07+e08+e09+e10+e11+e12+e13+e14+e15+e16

gen shcy=0 if shcy_score>0

replace shcy=1 if shcy_score<=0
codebook shcy

gen ais_group=0 if ais_score>6

replace ais_group=1 if ais_score<=6

codebook ais_group

ssc install mpi

mpi d1(richang)d2(yiyu)d3(ziping)d4(zhuyuan)d5(shcy),cutoff(0.2)

mpi d1(richang)d2(yiyu)d3(ziping)d4(zhuyuan)d5(shcy),cutoff(0.4)

```

```
mpi d1(richang)d2(yiyu)d3(ziping)d4(zhuyuan)d5(shcy),cutoff(0.6)
```

```
mpi d1(richang)d2(yiyu)d3(ziping)d4(zhuyuan)d5(shcy),cutoff(0.8)
```

```
mpi d1(richang)d2(yiyu)d3(ziping)d4(zhuyuan)d5(shcy),cutoff(1)
```

```
gen cuiruo=0 if richang+yiyu+zpjk+zhuyuan+shcy<2
```

```
replace cuiruo=1 if richang+yiyu+zpjk+zhuyuan+shcy>=2
```

```
codebook cuiruo
```

```
tab cuiruo jjzk,chi2
```

```
tab cuiruo xb,chi2
```

```
tab cuiruo hy,chi2
```

```
tab cuiruo nl,chi2
```

```
tab cuiruo whcd,chi2
```

```
tab cuiruojjzk,chi2
```

```
tab cuiruo fzjg,chi2
```

```
tab cuiruo qjrl,chi2
```

```
tab cuiruo sw,chi2
```

```
tab cuiruo tj,chi2
```

```
tab cuiruo xy,chi2
```

```
tab cuiruo yj,chi2
```

```
tab cuiruo ais_group,chi2
```

```
tab richang jjzk,chi2
```

```
logistic richang i.jjzk,r
```

```
tab yiyu jjzk,chi2
```

```
logistic yiyu i.jjzk,r
```

```
tab ziping jjzk,chi2
```

```
logistic ziping i.jjzk,r
```

```
tab zhuyuan jjzk,chi2
```

```
logistic zhuyuan i.jjzk,r
```

```
tab shcy jjzk,chi2
```

```
logistic shcy i.jjzk,r
```

```
tab xb i.jjzk,chi2
```

```
logistic xb i.jjzk,r
```

```
tab hy i.jjzk,chi2
```

```
logistic hy i.jjzk,r
```

tab nl jjzk,chi2

logistic nl i.jjzk,r

tab whcd jjzk,chi2

logistic whcd i.jjzk,r

tab jzzk jjzk,chi2

logistic jzzk i.jjzk,r

tab fzjg jjzk,chi2

logistic fzjg i.jjzk,r

tab qjrl jjzk,chi2

logistic qjrl i.jjzk,r

tab sw jjzk,chi2

logistic sw i.jjzk,r

tab tj jjzk,chi2

logistic tj i.jjzk,r

tab xy jjzk,chi2

logistic xy i.jjzk,r

tab yj jjzk,chi2

logistic yj i.jjzk,r

tab ais_group jjzk,chi2

logistic ais_group i.jjzk,r

logistic cuiruo i.jjzk i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r

estat vif

mpi d1(richang) d2(yiyu) d3(ziping) d4(zhuyuan) d5(shcy) w1(0.3) w2(0.14) w3(0.13) w4(0.22)
w5(0.21), cutoff(0.74)

mpi d1(richang) d2(yiyu) d3(ziping) d4(zhuyuan) d5(shcy) w1(0.3) w2(0.14) w3(0.13) w4(0.22)
w5(0.21), cutoff(0.74) depriveddummy(poor_status) deprivedscore(poverty_score)

logistic poor_status i.jjzk i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r

logistic cuiruo i.jjzk i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
logistic yiyu i.jjzk i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
logistic richang i.jjzk i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
logistic zhuyuan i.jjzk i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
logistic shcy i.jjzk i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
logistic ziping i.jjzk i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r

logistic cuiruo i.wgwd i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj
i.ais_group,r

logistic yiyu i.whwd i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj
i.ais_group,r

logistic richang i.wgwd i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj
i.ais_group,r

logistic zhuyuan i.wgwd i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj
i.ais_group,r

logistic shcy i.wgwd i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
logistic ziping i.wgwd i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r

gen sfl=0 if wgwd==0
replace sfl=1 if wgwd==1
replace sfl=2 if wgwd==2
replace sfl=3 if wgwd==3|wgwd==4

logistic cuiruo i.sfl i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
logistic yiyu i.sfl i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
logistic richang i.sfl i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
logistic zhuyuan i.sfl i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
logistic shcy i.sfl i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
logistic ziping i.sfl i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r

xtile income3=jtrjnsr,nq(3)
gen shouru=0 if income3==1
replace shouru=1 if income3==2
replace shouru=2 if income3==3
codebook shouru

logistic cuiruo i.shouru i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj
i.ais_group,r

```

logistic yiyu i.shouru i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj
i.ais_group,r
logistic richang i.shouru i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj
i.ais_group,r
logistic zhuyuan i.shouru i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj
i.ais_group,r
logistic shcy i.shouru i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
logistic ziping i.shouru i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r

```

```

ssc install mpitb
mpitb set , name(myMPI) d1(richang, name(ADL)) d2(yiyu, name(sx)) d3(ziping, name(srh))
d4(zhuyuan, name(zy)) d5(shcy, name(social))
mpitb est, name(myMPI) klist(20 33 50) weights(equal) measures(all) svy lsave(filename.dta,
replace)

```

```

egen all = rowtotal(richang yiyu ziping zhuyuan shcy)
gen all1 = (all >= 2) if all != .
logistic all1 i.jzzk i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
estimates store original

```

```

egen all_rm1 = rowtotal(yiyu ziping zhuyuan shcy)
gen rm11 = (all_rm1 >= 2) if all_rm1 != .
logistic rm11 i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
estimates store rm1
drop all_rm1 rm11

```

```

egen all_rm2 = rowtotal(richang ziping zhuyuan shcy)
gen rm2 = (all_rm2 >= 2) if all_rm2 != .
logistic rm2 i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
estimates store rm2
drop all_rm2 rm2

```

```

egen all_rm3 = rowtotal(richang yiyu zhuyuan shcy)
gen rm3 = (all_rm3 >= 2) if all_rm3 != .
logistic rm3 i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
estimates store rm3
drop all_rm3 rm3

```

```

egen all_rm4 = rowtotal(richang yiyu ziping shcy)
gen rm4 = (all_rm4 >= 2) if all_rm4 != .
logistic rm4 i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r

```

```
estimates store rm4
drop all_rm4 rm4
```

```
gen all_rm5 = rowtotal(richang yiyu ziping zhuyuan)
gen rm35= (all_rm5>= 2) if all_rm5 != .
logistic rm5 i.xb i.hy i.nl i.whcd i.jzzk i.fzjg i.qjrl i.sw i.tj i.xy i.yj i.ais_group,r
estimates store rm5
drop all_rm5 rm5
```

```
gen jjzk1=0 if jjzk==0
replace jjzk1=2 if jjzk==1
replace jjzk1=3 if jjzk==2
codebook jjzk1
gen jjzk2=1 if jjzk==0
replace jjzk2=2 if jjzk==1
replace jjzk2=3 if jjzk==2
codebook jjzk2
gen jjzk3=2 if jjzk==0
replace jjzk3=1 if jjzk==1
replace jjzk3=3 if jjzk==2
codebook jjzk3
```

```
logistic cuiruo i.jjzk,r
logistic cuiruo i.jjzk1,r
logistic cuiruo i.jjzk2,r
logistic cuiruo i.jjzk3,r
```

```
logistic cuiruo i.jjzk if xb==0
logistic cuiruo i.jjzk if xb==1
logistic cuiruo i.jjzk if hy==0
logistic cuiruo i.jjzk if hy==1
logistic cuiruo i.jjzk if nl==0
logistic cuiruo i.jjzk if nl==1
logistic cuiruo i.jjzk if whcd==0
logistic cuiruo i.jjzk if whcd==1
logistic cuiruo i.jjzk if whcd==2
logistic cuiruo i.jjzk if jzzk==0
logistic cuiruo i.jjzk if jzzk==1
logistic cuiruo i.jjzk if qjrl==0
```

logistic cuiruo i.jjzk if qjrl==1
logistic cuiruo i.jjzk if sw==0
logistic cuiruo i.jjzk if sw==1
logistic cuiruo i.jjzk if tj==0
logistic cuiruo i.jjzk if tj==1
logistic cuiruo i.jjzk if xy==0
logistic cuiruo i.jjzk if xy==1
logistic cuiruo i.jjzk if yj==0
logistic cuiruo i.jjzk if yj==1
logistic cuiruo i.jjzk if ais_group==0
logistic cuiruo i.jjzk if ais_group==1

logistic cuiruo i.jjzk1 if xb==0
logistic cuiruo i.jjzk1 if xb==1
logistic cuiruo i.jjzk1 if hy==0
logistic cuiruo i.jjzk1 if hy==1
logistic cuiruo i.jjzk1 if nl==0
logistic cuiruo i.jjzk1 if nl==1
logistic cuiruo i.jjzk1 if whcd==0
logistic cuiruo i.jjzk1 if whcd==1
logistic cuiruo i.jjzk1 if whcd==2
logistic cuiruo i.jjzk1 if jzzk==0
logistic cuiruo i.jjzk1 if jzzk==1
logistic cuiruo i.jjzk1 if qjrl==0
logistic cuiruo i.jjzk1 if qjrl==1
logistic cuiruo i.jjzk1 if sw==0
logistic cuiruo i.jjzk1 if sw==1
logistic cuiruo i.jjzk1 if tj==0
logistic cuiruo i.jjzk1 if tj==1
logistic cuiruo i.jjzk1 if xy==0
logistic cuiruo i.jjzk1 if xy==1
logistic cuiruo i.jjzk1 if yj==0
logistic cuiruo i.jjzk1 if yj==1
logistic cuiruo i.jjzk1 if ais_group==0
logistic cuiruo i.jjzk1 if ais_group==1

logistic cuiruo i.jjzk2 if xb==0
logistic cuiruo i.jjzk2 if xb==1
logistic cuiruo i.jjzk2 if hy==0

logistic cuiruo i.jjzk2 if hy==1
logistic cuiruo i.jjzk2 if nl==0
logistic cuiruo i.jjzk2 if nl==1
logistic cuiruo i.jjzk2 if whcd==0
logistic cuiruo i.jjzk2 if whcd==1
logistic cuiruo i.jjzk2 if whcd==2
logistic cuiruo i.jjzk2 if jzzk==0
logistic cuiruo i.jjzk2 if jzzk==1
logistic cuiruo i.jjzk2 if qjrl==0
logistic cuiruo i.jjzk2 if qjrl==1
logistic cuiruo i.jjzk2 if sw==0
logistic cuiruo i.jjzk2 if sw==1
logistic cuiruo i.jjzk2 if tj==0
logistic cuiruo i.jjzk2 if tj==1
logistic cuiruo i.jjzk2 if xy==0
logistic cuiruo i.jjzk2 if xy==1
logistic cuiruo i.jjzk2 if yj==0
logistic cuiruo i.jjzk2 if yj==1
logistic cuiruo i.jjzk2 if ais_group==0
logistic cuiruo i.jjzk2 if ais_group==1

logistic cuiruo i.jjzk3 if xb==0
logistic cuiruo i.jjzk3 if xb==1
logistic cuiruo i.jjzk3 if hy==0
logistic cuiruo i.jjzk3 if hy==1
logistic cuiruo i.jjzk3 if nl==0
logistic cuiruo i.jjzk3 if nl==1
logistic cuiruo i.jjzk3 if whcd==0
logistic cuiruo i.jjzk3 if whcd==1
logistic cuiruo i.jjzk3 if whcd==2
logistic cuiruo i.jjzk3 if jzzk==0
logistic cuiruo i.jjzk3 if jzzk==1
logistic cuiruo i.jjzk3 if qjrl==0
logistic cuiruo i.jjzk3 if qjrl==1
logistic cuiruo i.jjzk3 if sw==0
logistic cuiruo i.jjzk3 if sw==1
logistic cuiruo i.jjzk3 if tj==0
logistic cuiruo i.jjzk3 if tj==1
logistic cuiruo i.jjzk3 if xy==0

```
logistic cuiruo i.jjzk3 if xy==1
logistic cuiruo i.jjzk3 if yj==0
logistic cuiruo i.jjzk3 if yj==1
logistic cuiruo i.jjzk3 if ais_group==0
logistic cuiruo i.jjzk3 if ais_group==1
```

```
logistic cuiruo i.jjzk i.ais_group yiyu,r
```

```
gen jk1=0 if d03==3| d03 ==4| d03 ==5
replace jk1=1 if d03==1| d03 ==2
logistic cuiruo i.jk1,r
gen jk2=0 if d03==2|d03 ==3| d03 ==4| d03 ==5
replace jk2=1 if d03==1
logistic cuiruo i.jk2,r
gen jk3=0 if d03==4| d03 ==5
replace jk3=1 if d03==1| d03 ==2| d03 ==3
logistic cuiruo i.jk3,r
gen jk4=0 if d03==5
replace jk4=1 if d03==1| d03 ==2| d03 ==3| d03 ==4
logistic cuiruo i.jk4,r
```

```
logistic cuiruo i.jk1 if xb==0
logistic cuiruo i.jk1 if xb==1
logistic cuiruo i.jk1 if hy==0
logistic cuiruo i.jk1 if hy==1
logistic cuiruo i.jk1 if nl==0
logistic cuiruo i.jk1 if nl==1
logistic cuiruo i.jk1 if whcd==0
logistic cuiruo i.jk1 if whcd==1
logistic cuiruo i.jk1 if whcd==2
logistic cuiruo i.jk1 if jzzk==0
logistic cuiruo i.jk1 if jzzk==1
logistic cuiruo i.jk1 if qjrl==0
logistic cuiruo i.jk1 if qjrl==1
logistic cuiruo i.jk1 if sw==0
logistic cuiruo i.jk1 if sw==1
logistic cuiruo i.jk1 if tj==0
logistic cuiruo i.jk1 if tj==1
logistic cuiruo i.jk1 if xy==0
```

logistic cuiruo i.jk1 if xy==1
logistic cuiruo i.jk1 if yj==0
logistic cuiruo i.jk1 if yj==1
logistic cuiruo i.jk1 if ais_group==0
logistic cuiruo i.jk1 if ais_group==1

logistic cuiruo i.jk2 if xb==0
logistic cuiruo i.jk2 if xb==1
logistic cuiruo i.jk2 if hy==0
logistic cuiruo i.jk2 if hy==1
logistic cuiruo i.jk2 if nl==0
logistic cuiruo i.jk2 if nl==1
logistic cuiruo i.jk2 if whcd==0
logistic cuiruo i.jk2 if whcd==1
logistic cuiruo i.jk2 if whcd==2
logistic cuiruo i.jk2 if jzzk==0
logistic cuiruo i.jk2 if jzzk==1
logistic cuiruo i.jk2 if qjrl==0
logistic cuiruo i.jk2 if qjrl==1
logistic cuiruo i.jk2 if sw==0
logistic cuiruo i.jk2 if sw==1
logistic cuiruo i.jk2 if tj==0
logistic cuiruo i.jk2 if tj==1
logistic cuiruo i.jk2 if xy==0
logistic cuiruo i.jk2 if xy==1
logistic cuiruo i.jk2 if yj==0
logistic cuiruo i.jk2 if yj==1
logistic cuiruo i.jk2 if ais_group==0
logistic cuiruo i.jk2 if ais_group==1

logistic cuiruo i.jk3 if xb==0
logistic cuiruo i.jk3 if xb==1
logistic cuiruo i.jk3 if hy==0
logistic cuiruo i.jk3 if hy==1
logistic cuiruo i.jk3 if nl==0
logistic cuiruo i.jk3 if nl==1
logistic cuiruo i.jk3 if whcd==0
logistic cuiruo i.jk3 if whcd==1
logistic cuiruo i.jk3 if whcd==2

logistic cuiruo i.jk3 if jzzk==0
logistic cuiruo i.jk3 if jzzk==1
logistic cuiruo i.jk3 if qjrl==0
logistic cuiruo i.jk3 if qjrl==1
logistic cuiruo i.jk3 if sw==0
logistic cuiruo i.jk3 if sw==1
logistic cuiruo i.jk3 if tj==0
logistic cuiruo i.jk3 if tj==1
logistic cuiruo i.jk3 if xy==0
logistic cuiruo i.jk3 if xy==1
logistic cuiruo i.jk3 if yj==0
logistic cuiruo i.jk3 if yj==1
logistic cuiruo i.jk3 if ais_group==0
logistic cuiruo i.jk3 if ais_group==1

logistic cuiruo i.jk4 if xb==0
logistic cuiruo i.jk4 if xb==1
logistic cuiruo i.jk4 if hy==0
logistic cuiruo i.jk4 if hy==1
logistic cuiruo i.jk4 if nl==0
logistic cuiruo i.jk4 if nl==1
logistic cuiruo i.jk4 if whcd==0
logistic cuiruo i.jk4 if whcd==1
logistic cuiruo i.jk4 if whcd==2
logistic cuiruo i.jk4 if jzzk==0
logistic cuiruo i.jk4 if jzzk==1
logistic cuiruo i.jk4 if qjrl==0
logistic cuiruo i.jk4 if qjrl==1
logistic cuiruo i.jk4 if sw==0
logistic cuiruo i.jk4 if sw==1
logistic cuiruo i.jk4 if tj==0
logistic cuiruo i.jk4 if tj==1
logistic cuiruo i.jk4 if xy==0
logistic cuiruo i.jk4 if xy==1
logistic cuiruo i.jk4 if yj==0
logistic cuiruo i.jk4 if yj==1
logistic cuiruo i.jk4 if ais_group==0
logistic cuiruo i.jk4 if ais_group==1