```
* TANZANIA WEALTH INDEX SYNTAX.

freq HV201 HV205 HV206 HV207 HV208 HV209 HV210 HV211 HV212 HV213
HV214 HV215 HV221 HV225
HV226 HI280 HI281 HI282 HI283 HI284 SH104B SH104G SH106 SH111E
SH112A SH11AB SH113 SH114A SH114B.

FREQ hv015.

SELECT IF (hv015 = 1).

* WATER.

COMPUTE h2opipe = 0.
IF (hv201 = 11) h2opipe = 1.
VAR LABELS h2opipe "if gets water piped into home".
VAL LABELS h2opipe    0 "no water piped into home"
                1 "water is piped into home".

COMPUTE h2oyard = 0.
IF (hv201 = 12) h2oyard = 1.
VAR LABELS h2oyard "if gets water piped into yard".
VAL LABELS h2oyard    0 "no water piped into yard"
                1 "water is piped into yard".

COMPUTE h2opub = 0.
IF (hv201 = 13) h2opub = 1.
VAR LABELS h2opub "if gets water from piped public source".
VAL LABELS h2opub     0 "no water from piped public source"
                1 "water is from piped public source".

COMPUTE h2onbor = 0.
IF (hv201 = 14) h2onbor = 1.
VAR LABELS h2onbor "if gets water from neighbor's tap".
VAL LABELS h2onbor    0 "no water from neighbor's tap"
                1 "water is from neighbor's tap".

COMPUTE h2owello = 0.
IF (hv201 = 21 | hv201 = 22) h2owello = 1.
VAR LABELS h2owello "if gets water from an unprotected well in
yard/plot/dwelling".
VAL LABELS h2owello   0 "no water from an unprotected well"
                1 "water is from an unprotected well".

COMPUTE h2owellp = 0.
IF (hv201 = 23) h2owellp = 1.
VAR LABELS h2owellp "if gets water from an unprotected public
well".
VAL LABELS h2owellp   0 "no water from an unprotected public
well"
                1 "water is from an unprotected public well".
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COMPUTE h2owelln = 0.
IF (hv201 = 24) h2owelln = 1.
VAR LABELS h2owelln "if gets water from an unprotected neighbor's
well".
VAL LABELS h2owelln   0 "no water from an unprotected neighbor's
well"
                1 "water is from an unprotected neighbor's well".

COMPUTE h2pwello = 0.
IF (hv201 = 31 | hv201 = 32) h2pwello = 1.
VAR LABELS h2pwello "if gets water from a protected well in
yard/plot/dwelling".
VAL LABELS h2pwello   0 "no water from own protected well"
                1 "water is from own protected well".

COMPUTE h2pwellp = 0.
IF (hv201 = 33) h2pwellp = 1.
VAR LABELS h2pwellp "if gets water from a protected public well".
VAL LABELS h2pwellp   0 "no water from a protected public well"
                1 "water is from a protected public well".

COMPUTE h2otube = 0.
IF (hv201 = 34) h2otube = 1.
VAR LABELS h2otube "if gets water from a tube/borehole well".
VAL LABELS h2otube    0 "no water from a tube/borehole well"
                1 "water is from a tube/borehole well".

COMPUTE h2spring = 0.
IF (hv201 = 41 | hv201 = 51) h2spring = 1.
VAR LABELS h2spring "if gets water from a spring (+12rain)".
VAL LABELS h2spring   0 "no water from a spring"
                1 "water is from a spring".

COMPUTE h2osurf = 0.
IF (hv201 > 41 & hv201 < 45) h2osurf = 1.
VAR LABELS h2osurf "if gets water from a surface source".
VAL LABELS h2osurf    0 "no water from a surface source"
                1 "water is from a surface source".

COMPUTE h2otruck = 0.
IF (hv201 = 61) h2otruck = 1.
VAR LABELS h2otruck "if gets water from truck".
VAL LABELS h2otruck   0 "no water from truck"
                1 "water is from truck".

COMPUTE h2ocart = 0.
IF (hv201 = 62 | hv201 = 91) h2ocart = 1.
VAR LABELS h2ocart "if gets water from water vendor (+9 cart w/
small tank)".
VAL LABELS h2ocart    0 "no water from vendor"
                1 "water is from vendor".
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*TOILET.

COMPUTE flpvts = 0.
IF (hv205 = 15 & hv225 = 0) flpvts = 1.
VAR LABELS flpvts "if uses pvt flush toilet".
VAL LABELS flpvts     0 "does not use pvt flush toilet"
                1 "uses pvt flush toilet".

COMPUTE flshrs = 0.
IF (hv205 = 15 & hv225 = 1) flshrs = 1.
VAR LABELS flshrs "if uses shared flush toilet".
VAL LABELS flshrs     0 "does not use shared flush toilet"
                1 "uses shared flush toilet".

COMPUTE vippvt = 0.
IF (hv205 = 21 & hv225 = 0) vippvt = 1.
VAR LABELS vippvt "if uses pvt vip latrine".
VAL LABELS vippvt     0 "does not use pvt vip latrine"
                1 "uses pvt vip latrine".

COMPUTE vipshr = 0.
IF (hv205 = 21 & hv225 = 1) vipshr = 1.
VAR LABELS vipshr "if uses shared vip latrine".
VAL LABELS vipshr     0 "does not use shared vip latrine"
                1 "uses shared vip latrine".

COMPUTE latpvt = 0.
IF (hv205 = 24 & hv225 = 0) latpvt = 1.
VAR LABELS latpvt "if uses pvt trad latrine w slab".
VAL LABELS latpvt     0 "does not use pvt trad latrine"
                1 "uses pvt trad latrine".

COMPUTE latshr = 0.
IF (hv205 = 24 & hv225 = 1) latshr = 1.
VAR LABELS latshr "if uses shared trad latrine w slab".
VAL LABELS latshr     0 "does not use shared trad latrine"
                1 "uses shared trad latrine".

COMPUTE latbush = 0.
IF (hv205 = 31) latbush = 1.
VAR LABELS latbush "if uses bush for latrine".
VAL LABELS latbush    0 "does not use bush for latrine"
                1 "uses bush for latrine".



* FLOORING.

COMPUTE dirtfloo = 0.
IF (hv213 = 11 | hv213 = 21) dirtfloo = 1.
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VAR LABELS dirtfloo "if floors are made of earth (+2 wood
planks)".
VAL LABELS dirtfloo   0 "floors are not made of earth"
                1 "floors are made of earth".

COMPUTE finfloo = 0.
IF (hv213 = 32 | hv213 = 33 | hv213 = 35) finfloo = 1.
VAR LABELS finfloo "if floors are finished (vinyl, ceramic tile,
carpet)".
VAL LABELS finfloo    0 "floors are not finished"
                1 "floors are finished".

COMPUTE cemtfloo = 0.
IF (hv213 = 34 | hv213 = 96) cemtfloo = 1.
VAR LABELS cemtfloo "if floors are made of cement (+1 other)".
VAL LABELS cemtfloo   0 "floors are not made of cement"
                1 "floors are made of cement".



* WALLS.

COMPUTE grassw = 0.
IF (hv214 = 11) grassw = 1.
VAR LABELS grassw "if walls are made of grass".
VAL LABELS grassw     0 "walls are not made of grass"
                1 "walls are made of grass".

COMPUTE earthw = 0.
IF (hv214 = 12) earthw = 1.
VAR LABELS earthw "if walls are made of mud and poles".
VAL LABELS earthw     0 "walls are not made of earth"
                1 "walls are made of earth".

COMPUTE mudblkw = 0.
IF (hv214 = 21) mudblkw = 1.
VAR LABELS mudblkw "if walls are made of sun dried bricks".
VAL LABELS mudblkw    0 "walls are not made of sun dried bricks"
                1 "walls are made of sun dried bricks".

COMPUTE brickw = 0.
IF (hv214 = 31) brickw = 1.
VAR LABELS brickw "if walls are made of baked brick".
VAL LABELS brickw     0 "walls are not made of baked brick"
                1 "walls are made of baked brick".

COMPUTE timberw = 0.
IF (hv214 = 32) timberw = 1.
VAR LABELS timberw "if walls are made of timber".
VAL LABELS timberw    0 "walls are not made of timber"
                1 "walls are made of timber".
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```
COMPUTE cmtblkw = 0.
IF (hv214 = 33 | hv214 = 35) cmtblkw = 1.
VAR LABELS cmtblkw "if walls are made of cement blocks".
VAL LABELS cmtblkw    0 "walls are not made of cement blocks"
                1 "walls are made of cement blocks".

COMPUTE stonew = 0.
IF (hv214 = 34) stonew = 1.
VAR LABELS stonew "if walls are made of various recycled
materials".
VAL LABELS stonew     0 "walls are not made of various recycled
materials"
                1 "walls are made of various recycled materials".



* ROOF.

COMPUTE strawr = 0.
IF (hv215 = 11) strawr = 1.
VAR LABELS strawr "if roof is made of natural materials".
VAL LABELS strawr     0 "roof is not made of natural materials"
                1 "roof is made of natural materials".

COMPUTE metalr = 0.
IF (hv215 = 21) metalr = 1.
VAR LABELS metalr "if roof is made of metal (corrugate iron)".
VAL LABELS metalr     0 "roof is not made of metal"
                1 "roof is made of metal".

COMPUTE tiler = 0.
IF (hv215 = 31) tiler = 1.
VAR LABELS tiler "if roof is made of tile".
VAL LABELS tiler 0 "roof is not made of tile"
                1 "roof are made of tile".

COMPUTE asbestor = 0.
IF (hv215 = 32 | hv215 = 33) asbestor = 1.
VAR LABELS asbestor "if roof is made of asbestos".
VAL LABELS asbestor   0 "roof is not made of asbestos"
                1 "roof is made of asbestos".


* COOKING FUEL.

COMPUTE cookelec = 0.
IF (hv226 = 1) cookelec = 1.
VAR LABELS cookelec "if uses electricity for cooking fuel".
VAL LABELS cookelec   0 "no elec cooking fuel"
                1 "uses elec cooking fuel".
```

```
COMPUTE cookng = 0.
IF (hv226 = 2 | hv226 = 3) cookng = 1.
VAR LABELS cookng "if uses natural gas for cooking fuel".
VAL LABELS cookng     0 "no nat gas cooking fuel"
                1 "uses nat gas cooking fuel".

COMPUTE cookkero = 0.
IF (hv226 = 4) cookkero = 1.
VAR LABELS cookkero "if uses paraffin for cooking".
VAL LABELS cookkero   0 "no paraffin cooking fuel"
                1 "uses paraffin cooking fuel".

COMPUTE cookwood = 0.
IF (hv226 = 5 | hv226 = 6 | hv226 = 7) cookwood = 1.
VAR LABELS cookwood "if uses wood for cooking (+11 charcoal)".
VAL LABELS cookwood   0 "no wood cooking fuel"
                1 "uses wood cooking fuel".

COMPUTE cookoth = 0.
IF (hv226 = 95) cookoth = 1.
VAR LABELS cookoth "if no food cooked in hh".
VAL LABELS cookoth    0 "food cooked"
                1 "no food cooked".



COMPUTE memsleep = (hv012/hi281).
IF (MISSING(hi281)) hi281 = hv012.
VARIABLE LABELS memsleep "number of members per sleeping room".


freq sh11ab.

EXECUTE.

*replace missing w don't have:.
IF (MISSING(hv206)) hv206 = 0.
IF (MISSING(hv207)) hv207 = 0.
IF (MISSING(hv208)) hv208 = 0.
IF (MISSING(hv209)) hv209 = 0.
IF (MISSING(hv210)) hv210 = 0.
IF (MISSING(hv211)) hv211 = 0.
IF (MISSING(hv212)) hv212 = 0.
IF (MISSING(hv221)) hv221 = 0.
IF (MISSING(hi280)) hi280 = 0.
IF (MISSING(hi282)) hi282 = 0.
IF (MISSING(sh104b)) sh104b = 0.
IF (MISSING(sh104g)) sh104g = 0.
IF (MISSING(sh111e)) sh111e = 0.
IF (MISSING(sh112a)) sh112a = 0.
IF (MISSING(sh11ab)) sh11ab = 0.
```

```
EXECUTE.


FREQ hv206 hv207 hv208 hv209 hv210 hv211 hv212 hv221 hi280 hi282
sh104b sh104g sh111e sh112a sh11ab
h2opipe h2oyard h2opub h2onbor h2owello h2owellp h2owelln
h2pwello h2pwellp h2otube h2spring h2osurf h2otruck
h2ocart flpvts flshrs vippvt vipshr latpvt latshr latbush
dirtfloo finfloo cemtfloo grassw earthw mudblkw brickw timberw
cmtblkw stonew strawr metalr tiler asbestor cookelec cookng
cookkero cookwood memsleep.



FACTOR
  /VARIABLES hv206 hv207 hv208 hv209 hv210 hv211 hv212 hv221
hi280 hi282 sh104b sh104g sh111e sh112a sh11ab
h2opipe h2oyard h2opub h2onbor h2owello h2owellp h2owelln
h2pwello h2pwellp h2otube h2spring h2osurf h2otruck
h2ocart flpvts flshrs vippvt vipshr latpvt latshr latbush
dirtfloo finfloo cemtfloo grassw earthw mudblkw brickw timberw
cmtblkw stonew strawr metalr tiler asbestor cookelec cookng
cookkero cookwood memsleep
  /MISSING MEANSUB /ANALYSIS hv206 hv207 hv208 hv209 hv210 hv211
hv212 hv221 hi280 hi282 sh104b sh104g sh111e sh112a sh11ab
h2opipe h2oyard h2opub h2onbor h2owello h2owellp h2owelln
h2pwello h2pwellp h2otube h2spring h2osurf h2otruck
h2ocart flpvts flshrs vippvt vipshr latpvt latshr latbush
dirtfloo finfloo cemtfloo grassw earthw mudblkw brickw timberw
cmtblkw stonew strawr metalr tiler asbestor cookelec cookng
cookkero cookwood memsleep
  /PRINT UNIVARIATE INITIAL EXTRACTION FSCORE
  /CRITERIA FACTORS(1) ITERATE(25)
  /EXTRACTION PC
  /ROTATION NOROTATE
  /SAVE REG(ALL)
  /METHOD=CORRELATION .

* cookoth : rm due to non-pos-def matrix.



save outfile="C:\Users\kiersten.b.johnson\Desktop\tanzania wealth
index\redo_sept0908\tzassets.sav".
COMPUTE hhmemwt = hv005/1000000 * hv012 .
VARIABLE LABELS hhmemwt 'HH members weighting for Index' .

WEIGHT
BY hhmemwt .
FREQUENCIES
```

```
VARIABLES=fac1_1  /FORMAT=NOTABLE
/NTILES= 5
/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN /ORDER  ANALYSIS .


RECODE
fac1_1
(Lowest thru -0.810871872668=1)  (-0.810871872668 thru
-0.5884832164905=2)  (-0.5884832164905 thru
-0.2599700277271=3)  (-0.2599700277271 thru 0.6235453757475=4)
(0.6235453757475 thru Highest=5)  INTO
wlthind5 .
VARIABLE LABELS wlthind5 'Wealth Index Quintiles'.
EXECUTE .

write outfile="C:\Users\kiersten.b.johnson\Desktop\tanzania
wealth index\redo_sept0908\tzscores.dat" records=1 table
/hhid fac1_1 wlthind5.
execute.

MEANS
  TABLES=cookoth hv206 hv207 hv208 hv209 hv210 hv211 hv212 hv221
hi280 hi282 sh104b sh104g sh111e sh112a sh112b
h2opipe h2oyard h2opub h2onbor h2owello h2owellp h2owelln
h2pwello h2pwellp h2otube h2spring h2osurf h2otruck
h2ocart flpvts flshrs vippvt vipshr latpvt latshr latbush
dirtfloo finfloo cemtfloo grassw earthw mudblkw brickw timberw
cmtblkw stonew strawr metalr tiler asbestor cookelec cookng
cookkero cookwood memsleep
BY
 wlthind5
  /CELLS MEAN  .



FREQ  wlthind5.
weight off.
FREQ  wlthind5.







***REDO! - to accommodate 4 nodejuremembers hhs.
COMPUTE memsleep = (hv012/hi281).
IF (MISSING(hi281)) hi281 = hv012.
VARIABLE LABELS memsleep "number of members per sleeping room".

EXECUTE.
```

```
*replace missing w don't have:.
IF (MISSING(hv206)) hv206 = 0.
IF (MISSING(hv207)) hv207 = 0.
IF (MISSING(hv208)) hv208 = 0.
IF (MISSING(hv209)) hv209 = 0.
IF (MISSING(hv210)) hv210 = 0.
IF (MISSING(hv211)) hv211 = 0.
IF (MISSING(hv212)) hv212 = 0.
IF (MISSING(hv221)) hv221 = 0.
IF (MISSING(hi280)) hi280 = 0.
IF (MISSING(hi282)) hi282 = 0.
IF (MISSING(sh104b)) sh104b = 0.
IF (MISSING(sh104g)) sh104g = 0.
IF (MISSING(sh111e)) sh111e = 0.
IF (MISSING(sh112a)) sh112a = 0.
IF (MISSING(sh112b)) sh112b = 0.


EXECUTE.


FREQ hv206 hv207 hv208 hv209 hv210 hv211 hv212 hv221 hi280 hi282
sh104b sh104g sh111e sh112a sh112b
h2opipe h2oyard h2opub h2onbor h2owello h2owellp h2owelln
h2pwello h2pwellp h2otube h2spring h2osurf h2otruck
h2ocart flpvts flshrs vippvt vipshr latpvt latshr latbush
dirtfloo finfloo cemtfloo grassw earthw mudblkw brickw timberw
cmtblkw stonew strawr metalr tiler asbestor cookelec cookng
cookkero cookwood memsleep.




FACTOR
  /VARIABLES hv206 hv207 hv208 hv209 hv210 hv211 hv212 hv221
hi280 hi282 sh104b sh104g sh111e sh112a sh112b
h2opipe h2oyard h2opub h2onbor h2owello h2owellp h2owelln
h2pwello h2pwellp h2otube h2spring h2osurf h2otruck
h2ocart flpvts flshrs vippvt vipshr latpvt latshr latbush
dirtfloo finfloo cemtfloo grassw earthw mudblkw brickw timberw
cmtblkw stonew strawr metalr tiler asbestor cookelec cookng
cookkero cookwood memsleep
  /MISSING MEANSUB /ANALYSIS hv206 hv207 hv208 hv209 hv210 hv211
hv212 hv221 hi280 hi282 sh104b sh104g sh111e sh112a sh112b
h2opipe h2oyard h2opub h2onbor h2owello h2owellp h2owelln
h2pwello h2pwellp h2otube h2spring h2osurf h2otruck
h2ocart flpvts flshrs vippvt vipshr latpvt latshr latbush
dirtfloo finfloo cemtfloo grassw earthw mudblkw brickw timberw
cmtblkw stonew strawr metalr tiler asbestor cookelec cookng
cookkero cookwood memsleep
  /PRINT UNIVARIATE INITIAL EXTRACTION FSCORE
```

```
  /CRITERIA FACTORS(1) ITERATE(25)
  /EXTRACTION PC
  /ROTATION NOROTATE
  /SAVE REG(ALL)
  /METHOD=CORRELATION .

* cookoth : rm due to non-pos-def matrix.



save outfile="C:\Users\kiersten.b.johnson\Desktop\tanzania wealth
index\tzassets.sav".
COMPUTE hhmemwt = hv005/1000000 * hv012 .
VARIABLE LABELS hhmemwt 'HH members weighting for Index' .

WEIGHT
BY hhmemwt .
FREQUENCIES
VARIABLES=fac1_1  /FORMAT=NOTABLE
/NTILES= 5
/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN /ORDER  ANALYSIS .


RECODE
fac1_1
(Lowest thru -0.7451026018465=1)  (-0.7451026018465 thru
-0.5411989070779=2)  (-0.5411989070779 thru
-0.2156151975367=3)  (-0.2156151975367 thru 0.6683995663926=4)
(0.6683995663926 thru Highest=5)  INTO
wlthind5 .
VARIABLE LABELS wlthind5 'Wealth Index Quintiles'.
EXECUTE .

write outfile="C:\Users\kiersten.b.johnson\Desktop\tanzania
wealth index\tzscores.dat" records=1 table
/hhid fac1_1 wlthind5.
execute.

MEANS
  TABLES=cookoth hv206 hv207 hv208 hv209 hv210 hv211 hv212 hv221
hi280 hi282 sh104b sh104g sh111e sh112a sh112b
h2opipe h2oyard h2opub h2onbor h2owello h2owellp h2owelln
h2pwello h2pwellp h2otube h2spring h2osurf h2otruck
h2ocart flpvts flshrs vippvt vipshr latpvt latshr latbush
dirtfloo finfloo cemtfloo grassw earthw mudblkw brickw timberw
cmtblkw stonew strawr metalr tiler asbestor cookelec cookng
cookkero cookwood memsleep
BY
 wlthind5
  /CELLS MEAN  .
```

```
FREQ  wlthind5.
weight off.
FREQ  wlthind5.
```