* Malawi 2010 wealth index - Kiersten.
weight off.
FREQ hv015.
SELECT IF (hv015 = 1).
EXECUTE.
FREQ hv015.
FREQ HV201 HV205 HV206 HV207 HV208 HV209 HV210 HV211 HV212 HV213 HV214 HV215 HV216 HV221 HV225 HV226 HV242 HV243A HV243B HV243C HV244 HV245 HV247 SH111A2 SH111B SH111G SH111H SH111I.
*begin recoding into dichotomized variables.
*WATER SOURCE.
COMPUTE h2oires $=0$.
IF (hv201 = 11 | hv201 = 71) h2oires = 1.
VARIABLE LABELS h2oires "if water is piped into residence". VALUE LABELS h2oires 0 "water not piped into residence" 1 "water is piped into residence".

COMPUTE h2oyard $=0$.
IF (hv201 = 12) h2oyard = 1 .
VARIABLE LABELS h2oyard "if water is piped into compound/plot". VALUE LABELS h2oyard 0 "water is not piped into compound/plot" 1 "water is piped into compound/plot".

COMPUTE h2opub = 0.
IF (hv201 = 13) h2opub $=1$.
VARIABLE LABELS h2opub "if gets water from a public tap". VALUE LABELS h2opub 0 "does not get water from a public tap" 1 "gets water from a public tap".

COMPUTE h2otube $=0$.
IF (hv201 = 21) h2otube $=1$.
VARIABLE LABELS h2otube "if gets water from tubewell or borehole".
VALUE LABELS h2otube 0 "does not get water from tubewell or borehole"

1 "gets water from tubewell or borehole".
COMPUTE h2opwell $=0$.
IF (hv201 = 31) h2opwell = 1.
VARIABLE LABELS h2opwell "if gets water from a protected well". VALUE LABELS h2opwell 0 "does not get water from a protected well"

1 "gets water from a protected well".

```
COMPUTE h2upwell = 0.
IF (hv201 = 32) h2upwell = 1.
VARIABLE LABELS h2upwell "if gets water from an unprotected
well".
VALUE LABELS h2upwell 0 "does not get water from an unprotected
well"
1 "gets water from an unprotected well".
COMPUTE h2spring = 0.
IF (hv201 = 41) h2spring = 1.
VARIABLE LABELS h2spring "if gets water from a protected spring".
VALUE LABELS h2spring 0 "does not get water from a protected
spring"
    1 "gets water from a protected spring".
COMPUTE h2sprung = 0.
IF (hv201 = 42) h2sprung = 1.
VARIABLE LABELS h2sprung "if gets water from unprotected spring".
VALUE LABELS h2sprung 0 "does not get water from unprotected
spring"
                    1 "gets water from unprotected spring".
COMPUTE h2osurf = 0.
IF (hv201 = 43) h2osurf = 1.
VARIABLE LABELS h2osurf "if gets water from river, stream, pond,
lake or dam".
VALUE LABELS h2osurf 0 "does not get water from surface sources"
                    1 "gets water from surface sources".
COMPUTE h2oother = 0.
IF (hv201 = 51 | hv201 = 61 | hv201 = 62 | hv201 = 96) h2oother =
1 .
VARIABLE LABELS h2oother "if gets water from other source".
VALUE LABELS h2oother 0 "does not get water from other source"
                            1 "gets water from other source".
```

*TOILET TYPES.
COMPUTE flushs = 0 .
IF (hv205 = $11 \&$ hv225 $=0$ ) flushs $=1$.
VARIABLE LABELS flushs "if has own flush toilet".
VALUE LABELS flushs 0 "does not have own flush toilet"
1 "has own flush toilet".
COMPUTE shflushs = 0 .
IF (hv205 = $11 \&$ hv225 = 1) shflushs $=1$.
VARIABLE LABELS shflushs "if uses shared flush toilet".
VALUE LABELS shflushs 0 "does not use shared flush toilet"
1 "uses shared flush toilet".

```
COMPUTE latvip = 0.
IF ((hv205 = 21 | hv205 = 41) & hv225 = 0) latvip = 1.
VARIABLE LABELS latvip "if uses own pit latrine (VIP)".
VALUE LABELS latvip 0 "does not use own pit latrine"
    1 "uses own pit latrine".
COMPUTE shlatvip = 0.
IF ((hv205 = 21 | hv205 = 41) & hv225 = 1) shlatvip = 1.
VARIABLE LABELS shlatvip "if uses a shared pit latrine (VIP)".
VALUE LABELS shlatvip 0 "does not use a shared pit latrine"
1 "uses a shared pit latrine".
COMPUTE latpits = 0.
IF (hv205 = 22 & hv225 = 0) latpits = 1.
VARIABLE LABELS latpits "if uses own pit latrine with slab".
VALUE LABELS latpits 0 "does not use own pit latrine with slab"
1 "uses own pit latrine with slab".
COMPUTE slatpits = 0.
IF (hv205 = 22 & hv225 = 1) slatpits = 1.
VARIABLE LABELS slatpits "if uses a shared pit latrine w slab".
VALUE LABELS slatpits 0 "does not use a shared pit latrine w
slab"
    1 "uses a shared pit latrine w slab".
COMPUTE latpito = 0.
IF (hv205 = 23 & hv225 = 0) latpito = 1.
VARIABLE LABELS latpito "if uses own pit latrine without slab".
VALUE LABELS latpito 0 "does not use own pit latrine without
slab"
    1 "uses own pit latrine without slab".
COMPUTE slatpito = 0.
IF (hv205 = 23 & hv225 = 1) slatpito = 1.
VARIABLE LABELS slatpito "if uses a shared pit latrine w/o slab".
VALUE LABELS slatpito 0 "does not use a shared pit latrine w/o
slab"
    1 "uses a shared pit latrine w/o slab".
COMPUTE latbush = 0.
IF (hv205 = 31) latbush = 1.
VARIABLE LABELS latbush "if uses the bush".
VALUE LABELS latbush 0 "does not use the bush"
    1 "uses the bush".
COMPUTE latother = 0.
IF (hv205 > 31) latother = 1.
VARIABLE LABELS latother "if uses some other type of facility".
VALUE LABELS latother 0 "does not use some other type of
facility"
    1 "uses some other type of facility".
```

```
*AMENITIES.
COMPUTE electric = 0.
IF (hv206 = 1) electric = 1.
VARIABLE LABELS electric "if household has electric".
VALUE LABELS electric 0 "no electric"
    1 "has electric".
COMPUTE radio = 0.
IF (hv207 = 1) radio = 1.
VARIABLE LABELS radio "if household has radio".
VALUE LABELS radio 0 "no radio"
    1 "has radio".
COMPUTE tv = 0.
IF (hv208 = 1) tv = 1.
VARIABLE LABELS tv "if household has tv".
VALUE LABELS tv 0 "no tv"
    1 "has tv".
COMPUTE fridge = 0.
IF (hv209 = 1) fridge = 1.
VARIABLE LABELS fridge "if household has fridge".
VALUE LABELS fridge 0 "no fridge"
    1 "has fridge".
COMPUTE bicycle = 0.
IF (hv210 = 1) bicycle = 1.
VARIABLE LABELS bicycle "if household has bicycle".
VALUE LABELS bicycle 0 "no bicycle"
                                    1 "has bicycle".
COMPUTE motobk = 0.
IF (hv211 = 1) motobk = 1.
VARIABLE LABELS motobk "if household has motorcycle or scooter".
VALUE LABELS motobk 0 "no motorbike/scooter"
                                    1 "has motorbike/scooter".
COMPUTE car = 0.
IF (hv212 = 1) car = 1.
VARIABLE LABELS car "if household has car or truck".
VALUE LABELS car 0 "no car/truck"
    1 "has car/truck".
COMPUTE lphone = 0.
IF (hv221 = 1) lphone = 1.
VARIABLE LABELS lphone "if household has landline phone".
VALUE LABELS lphone 0 "no landline phone"
    1 "house has landline phone".
COMPUTE mphone = 0.
```

```
IF (hv243a = 1) mphone = 1.
VARIABLE LABELS mphone "if household has mobile phone".
VALUE LABELS mphone 0 "no mobile phone"
    1 "house has mobile phone".
COMPUTE watch = 0.
IF (hv243b = 1) watch = 1.
VARIABLE LABELS watch "if household has watch".
VALUE LABELS watch 0 "no watch"
    1 "has watch".
COMPUTE bank = 0.
IF (hv247 = 1) bank = 1.
VARIABLE LABELS bank "if owns a bank account".
VALUE LABELS bank 0 "no bank account"
                                    1 "house has bank account".
COMPUTE kolobo = 0.
IF (sh111a2 = 1) kolobo = 1.
VARIABLE LABELS kolobo "if household has koloboyi lamp thing".
VALUE LABELS kolobo 0 "no koloboyi"
    1 "house has koloboyi".
COMPUTE plamp = 0.
IF (sh111b = 1) plamp = 1.
VARIABLE LABELS plamp "if household has paraffin lamp other than
koloboyi".
VALUE LABELS plamp 0 "no other paraffin lamp"
                    1 "house has other paraffin lamp".
COMPUTE mtress = 0.
IF (sh111g = 1) mtress = 1.
VARIABLE LABELS mtress "if household has bed mattress".
VALUE LABELS mtress 0 "no mattress"
                    1 "house has mattress".
COMPUTE sofaset = 0.
IF (sh111h = 1) sofaset = 1.
VARIABLE LABELS sofaset "if household has sofaset".
VALUE LABELS sofaset 0 "no sofaset"
    1 "household has sofaset".
COMPUTE tbchair = 0.
IF (sh111i = 1) tbchair = 1.
VARIABLE LABELS tbchair "if household has table and chairs".
VALUE LABELS tbchair 0 "no table and chairs"
                            1 "household has table and chairs".
COMPUTE cart = 0.
IF (hv243c = 1) cart = 1.
VARIABLE LABELS cart "if owns an animal-drawn cart".
VALUE LABELS cart 0 "no cart"
```

1 "house has cart".

```
* 39 missings & 292 unknown set to mean (2 hectares) - about 1.4
percent of all cases.
COMPUTE agland = 0.
COMPUTE agland = hv245.
IF (hv244 ne 1) agland = 0.
IF (hv245 = 98) agland = 17.
IF (MISSING(hv245)) agland = 17.
FREQ agland.
```

if (hv216=0) hv216=1.
IF (MISSING(hv216)) hv216 = hv012.
if (missing(hv012) or hv012=0) hv012=hv013.
EXECUTE.
COMPUTE memsleep $=(h v 012 / h v 216)$.
VARIABLE LABELS memsleep "number of members per sleeping room".
*FLOOR TYPE.
COMPUTE dirtfloo = 0.
IF (hv213 = 11) dirtfloo = 1 .
VARIABLE LABELS dirtfloo "if floor is earth/sand".
VALUE LABELS dirtfloo 0 "floor is not earthen"
1 "floor is earthen".
COMPUTE dungfloo = 0.
IF (hv213 = 12) dungfloo = 1.
VARIABLE LABELS dungfloo "if floor is dung".
VALUE LABELS dungfloo 0 "floor is not dung"
1 "floor is dung".
COMPUTE othfloo = 0.
IF (hv213 = 21 | hv213 = 22 | hv213 = 23 | hv213 = 96) othfloo =
1.
VARIABLE LABELS othfloo "if floor is of other".
VALUE LABELS othfloo 0 "floor is not of other"
1 "floor is of other".
COMPUTE finfloo = 0.
IF (hv213 = 31 | hv213 = 32 | hv213 = 33 | hv213 = 35) finfloo =
1.
VARIABLE LABELS finfloo "if has finished flooring of some kind".
VALUE LABELS finfloo 0 "does not have vinyl/asphalt strip
flooring"
1 "has vinyl/asphalt strip flooring".
COMPUTE cemtfloo = 0.
IF (hv213 = 35) cemtfloo = 1 .
VARIABLE LABELS cemtfloo "if floor is of cement".

```
VALUE LABELS cemtfloo 0 "floor is not cement"
    1 "floor is cement".
* TYPE OF WALL MATERIALS.
COMPUTE grnwall = 0.
IF (hv214 = 11 | hv214 = 12) grnwall = 1.
VARIABLE LABELS grnwall "if wall made of cane/palm/trunks/grass
materials (+93 no walls)".
VALUE LABELS grnwall 0 "wall is not made of green materials"
    1 "wall is made of green materials".
COMPUTE dirtwall = 0.
IF (hv214 = 13) dirtwall = 1.
VARIABLE LABELS dirtwall "if wall made of dirt".
VALUE LABELS dirtwall 0 "wall is not made of dirt"
    1 "wall is made of dirt".
COMPUTE bamwall = 0.
IF (hv214 = 21) bamwall = 1.
VARIABLE LABELS bamwall "if wall made of bamboo plus mud".
VALUE LABELS bamwall 0 "wall is not made of bamboo plus mud"
    1 "wall is made of bamboo plus mud".
COMPUTE stmwall = 0.
IF (hv214 = 22) stmwall = 1.
VARIABLE LABELS stmwall "if wall made of stone plus mud".
VALUE LABELS stmwall 0 "wall is not made of stone plus mud"
    1 "wall is made of stone plus mud".
COMPUTE stnwall = 0.
IF (hv214 > 20 & hv214 < 25) stnwall = 1.
VARIABLE LABELS stnwall "if wall made of stone/mud +14 rud.
materials".
VALUE LABELS stnwall 0 "wall is not made of stone/mud"
1 "wall is made of stone/mud".
COMPUTE cmtwall = 0.
IF (hv214 = 31 | hv214 = 36) cmtwall = 1.
VARIABLE LABELS cmtwall "if wall made of cement".
VALUE LABELS cmtwall 0 "wall is not made of cement"
    1 "wall is made of cement".
COMPUTE stncwall = 0.
IF (hv214 = 32 | hv214 = 34) stncwall = 1.
VARIABLE LABELS stncwall "if wall made of stone w cement or
unburnt bricks".
VALUE LABELS stncwall 0 "wall is not made of stone with cement"
    1 "wall is made of stone with cement".
COMPUTE blckwall = 0.
```

```
IF (hv214 = 33 | hv214 = 35) blckwall = 1.
```

VARIABLE LABELS blckwall "if wall made of burnt bricks or cemt
block".
VALUE LABELS blckwall 0 "wall is not made of cemt block"
1 "wall is made of cemt block".
COMPUTE othwall = 0 .
IF (hv214 = 23 | hv214 = 25 | hv214 = 96) othwall = 1.
VARIABLE LABELS othwall "if wall made of other materials".
VALUE LABELS othwall 0 "wall is not made of other
materials"
1 "wall is made of other materials".
*TYPE OF ROOFING MATERIALS.
COMPUTE natroof $=0$.
IF (hv215 < 23) natroof = 1 .
VARIABLE LABELS natroof "if has grass/thatch/sod roofing".
VALUE LABELS natroof 0 "no grass/thatch/sod roofing"
1 "has grass/thatch/sod roofing".
COMPUTE rudroof = 0 .
IF (hv215 = $23 \mid$ hv215 = $24 \mid$ hv215 = $31 \mid$ hv215 = $36 \mid$ hv215 =
96) rudroof $=1$.
VARIABLE LABELS rudroof "if has roof made of rudimentary
materials - mostly iron sheet".
VALUE LABELS rudroof 0 "does not have roof made of rud materials

- mostly iron sheet"
1 "has roof made of rud materials - mostly iron
sheet".
COMPUTE finroof = 0 .
IF (hv215 = 33 | hv215 = 34 | hv215 = 35) finroof $=1$.
VARIABLE LABELS finroof "if roof made of finished
materials/roofing tiles".
VALUE LABELS finroof 0 "roof not made of finished materials"
1 "roof made of finished materials".
*TYPE OF COOKING FUEL.
COMPUTE cookelec $=0$.
IF (hv226 = 1 | hv226 = 2 | hv226 = 4) cookelec = 1.
VARIABLE LABELS cookelec "if uses electricity for cooking".
VALUE LABELS cookelec 0 "does not use electricity for cooking"
1 "uses electricity for cooking".
COMPUTE cookstrw = 0.
IF (hv226 = 9 | hv226 = 11) cookstrw = 1 .
VARIABLE LABELS cookstrw "if uses straw/shrubs/grass, dung".

```
VALUE LABELS cookstrw 0 "does not use straw/shrubs/grass for
cooking"
    1 "uses straw/shrubs/grass for cooking".
COMPUTE cookcoal = 0.
IF (hv226 = 6 | hv226 = 7) cookcoal = 1.
VARIABLE LABELS cookcoal "if uses charcoal or lignite/coal for
cooking".
VALUE LABELS cookcoal 0 "does not use charcoal or coal for
cooking"
    1 "uses charcoal or lignite/coal for cooking".
COMPUTE cookwood = 0.
IF (hv226 = 5 | hv226 = 8 | hv226 = 96) cookwood = 1.
VARIABLE LABELS cookwood "if uses wood, other for cooking fuel".
VALUE LABELS cookwood 0 "does not use firewood for cooking"
                                    1 "uses firewood for cooking".
COMPUTE cookoth = 0.
IF (hv226 = 95) cookoth = 1.
VARIABLE LABELS cookoth "if no food cooked in HH".
VALUE LABELS cookoth 0 "food is cooked in HH"
    1 "no food cooked in hh".
```

EXECUTE.

FREQ agland memsleep h2oires h2oyard h2opub h2otube h2opwell h2upwell h2spring
h2sprung h2osurf h2oother flushs shflushs latvip shlatvip latpits slatpits latpito slatpito
latbush latother electric radio tv fridge bicycle motobk car lphone mphone watch
bank kolobo plamp mtress sofaset tbchair cart dirtfloo dungfloo othfloo finfloo cemtfloo
grnwall dirtwall bamwall stmwall stnwall cmtwall stncwall blckwall othwall natroof rudroof finroof cookelec cookstrw cookcoal cookwood cookoth.

FREQ memsleep.

* phone othfloo cookoth h2upwell .


## FACTOR

/VARIABLES
agland memsleep h2oires h2oyard h2opub h2otube h2opwell h2upwell h2spring
h2sprung h2osurf h2oother flushs shflushs latvip shlatvip latpits slatpits latpito slatpito
latbush latother electric radio tv fridge bicycle motobk car lphone mphone watch

```
bank kolobo plamp mtress sofaset tbchair cart dirtfloo dungfloo
othfloo finfloo cemtfloo
grnwall dirtwall bamwall stmwall stnwall cmtwall stncwall
blckwall othwall natroof
rudroof finroof cookelec cookstrw cookcoal cookwood cookoth
    /MISSING MEANSUB /ANALYSIS
agland memsleep h2oires h2oyard h2opub h2otube h2opwell h2upwell
h2spring
h2sprung h2osurf h2oother flushs shflushs latvip shlatvip latpits
slatpits latpito slatpito
latbush latother electric radio tv fridge bicycle motobk car
lphone mphone watch
bank kolobo plamp mtress sofaset tbchair cart dirtfloo dungfloo
othfloo finfloo cemtfloo
grnwall dirtwall bamwall stmwall stnwall cmtwall stncwall
blckwall othwall natroof
rudroof finroof cookelec cookstrw cookcoal cookwood cookoth
    /PRINT UNIVARIATE INITIAL EXTRACTION FSCORE
    /CRITERIA FACTORS(1) ITERATE(25)
    /EXTRACTION PC
    /ROTATION NOROTATE
    /SAVE REG(ALL)
    /METHOD=CORRELATION .
```

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 -0.6647480761875493=1) (-0.6647480761875493 thru
$-0.4532911597930736=2) \quad(-0.4532911597930736$ thru
$-0.07912809489415179=3)(-0.07912809489415179$ thru
0.7086051866290619 =4)
(0.7086051866290619 thru Highest=5) INTO wlthind5 .
VARIABLE LABELS wlthind5 'Wealth Index Quintiles'.
EXECUTE .
*write outfile='C:\Users\21440\Desktop\Malawi 2010-1
\scores.dat' records=1 table
/hv001 hv002 fac1_1 wlthind5.
execute.

```
MEANS
    TABLES=agland memsleep h2oires h2oyard h2opub h2otube h2opwell
h2upwell h2spring
h2sprung h2osurf h2oother flushs shflushs latvip shlatvip latpits
slatpits latpito slatpito
latbush latother electric radio tv fridge bicycle motobk car
lphone mphone watch
bank kolobo plamp mtress sofaset tbchair cart dirtfloo dungfloo
othfloo finfloo cemtfloo
grnwall dirtwall bamwall stmwall stnwall cmtwall stncwall
blckwall othwall natroof
rudroof finroof cookelec cookstrw cookcoal cookwood cookoth BY
wlthind5
    /CELLS MEAN .
freq wlthind5.
weight off.
freq wlthind5.
COMPUTE wt = hv005/1000000.
WEIGHT by wt.
EXECUTE.
```

