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* Lesotho 2009 wealth index - Kiersten.

FREQ hv015.
SELECT IF (hv015 = 1).
EXECUTE.
FREQ hv015.

FREQ HV201 HV204 HV205 HV206 HV207 HV208 HV209 HV210
HV211 HV212 HV213 HV214 HV215 HV216 HV221 HV225 HV226
HV243A HV243B HV244 HV245 HV246 HV247 SH111B SH111H
SH111I SH111J.


*begin recoding into dichotomized variables.

*WATER SOURCE.

COMPUTE h2oires = 0.
IF (hv201 = 11) 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 | hv201 = 71) h2oyard = 1.
VARIABLE LABELS h2oyard "if water is piped into compound/plot +
2bottle".
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.
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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 > 42 & hv201 < 52) 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 h2otk = 0.
IF (hv201 = 61) h2otk = 1.
VARIABLE LABELS h2otk "if gets water from tanker truck".
VALUE LABELS h2otk 0 "does not get water from truck"
                 1 "gets water from truck".

COMPUTE h2oother = 0.
IF (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 > 10 & hv205 <16) & 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 > 10 & hv205 <16) & hv225 = 1) shflushs = 1.
VARIABLE LABELS shflushs "if uses shared flush toilet".
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VALUE LABELS shflushs 0 "does not use shared flush toilet"
                1 "uses shared flush toilet".

COMPUTE latvip = 0.
IF (hv205 = 21 & 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 & 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
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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 mphone = 0.
IF (hv243a = 1) mphone = 1.
VARIABLE LABELS mphone "if household has mobile phone".
VALUE LABELS mphone 0 "no mobile phone"
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                    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 batgen = 0.
IF (sh111b = 1) batgen = 1.
VARIABLE LABELS batgen "if household has battery or generator".
VALUE LABELS batgen 0 "no battery or generator"
                    1 "house has battery or generator".

COMPUTE bedmatt = 0.
IF (sh111h = 1) bedmatt = 1.
VARIABLE LABELS bedmatt "if household has bed or mattress".
VALUE LABELS bedmatt 0 "no bed or mattress"
                         1 "house has bed or mattress".

COMPUTE cputer = 0.
IF (sh111i = 1) cputer = 1.
VARIABLE LABELS cputer "if household has computer".
VALUE LABELS cputer 0 "no computer"
                      1 "house has computer".

COMPUTE internet = 0.
IF (sh111j = 1) internet = 1.
VARIABLE LABELS internet "if household has internet access".
VALUE LABELS internet 0 "no internet"
                    1 "household has internet".


* hectares owned omitted because nearly 10% don't know # owned.


IF (MISSING(hv216)) hv216 = hv012.
EXECUTE.

COMPUTE memsleep = (hv012/hv216).
VARIABLE LABELS memsleep "number of members per sleeping room".


*HOUSEHOLD, LAND OWNERSHIP.
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COMPUTE agland = 0.
IF (hv244 = 1) agland = 1.
VARIABLE LABELS agland "if family owns land usable for ag".
VALUE LABELS agland 0 "family does not own land usable for ag"
                1 "family owns land usable for ag".

COMPUTE animals = 0.
IF (hv246 = 1) animals = 1.
VARIABLE LABELS animals "if family owns livestock, herds or farm
animals".
VALUE LABELS animals 0 "family does not own farm animals"
                1 "family owns farm animals".



*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 othfloo = 0.
IF (hv213 = 21 | hv213 = 96) othfloo = 1.
VARIABLE LABELS woodfloo "if floor is of other".
VALUE LABELS woodfloo 0 "floor is not of other"
                  1 "floor is of other (+16 wood planks)".

COMPUTE parqfloo = 0.
IF (hv213 = 31) parqfloo = 1.
VARIABLE LABELS parqfloo "if has parquet/polished wood flooring".
VALUE LABELS parqfloo 0 "does not have parquet/polished wood
flooring"
                1 "has parquet/polished wood flooring".

COMPUTE vinfloo = 0.
IF (hv213 = 32) vinfloo = 1.
VARIABLE LABELS vinfloo "if has linoleum flooring".
VALUE LABELS vinfloo 0 "does not have vinyl/asphalt strip
flooring"
                1 "has vinyl/asphalt strip flooring".

COMPUTE cerafloo = 0.
IF (hv213 = 33) cerafloo = 1.
VARIABLE LABELS cerafloo "if flooring is of ceramic tiles".
VALUE LABELS cerafloo 0 "floor is not of ceramic tiles"
                  1 "floor is of ceramic tiles".

COMPUTE brtlfloo = 0.
IF (hv213 = 34) brtlfloo = 1.
VARIABLE LABELS brtlfloo "if floor is of brick tiles".
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VALUE LABELS brtlfloo 0 "floor is not brick tiles"
                  1 "floor is brick tiles".

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".

COMPUTE carpfloo = 0.
IF ( hv213 = 36) carpfloo = 1.
VARIABLE LABELS carpfloo "if has carpeted flooring".
VALUE LABELS carpfloo 0 "does not have carpeted flooring"
                 1 "has carpeted flooring".


* 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 (+35 no walls)".
VALUE LABELS grnwall  0 "wall is not made of green materials"
                1 "wall is made of green materials".

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) 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) stncwall = 1.
VARIABLE LABELS stncwall "if wall made of stone with cement".
VALUE LABELS stncwall 0 "wall is not made of stone with cement"
                     1 "wall is made of stone with cement".

COMPUTE brckwall = 0.
IF (hv214 = 33) brckwall = 1.
VARIABLE LABELS brckwall "if wall made of brick".
VALUE LABELS brckwall 0 "wall is not made of brick"
                     1 "wall is made of brick".

COMPUTE blckwall = 0.
IF (hv214 = 34 | hv214 = 35) blckwall = 1.
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VARIABLE LABELS blckwall "if wall made of cemt block + 10 wood
planks".
VALUE LABELS blckwall 0 "wall is not made of cemt block"
                      1 "wall is made of cemt block".

COMPUTE othwall = 0.
IF (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 = 11 | hv215 = 12) 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 = 21 | hv215 = 22) rudroof = 1.
VARIABLE LABELS rudroof "if has roof made of rud planks or
cardboard".
VALUE LABELS rudroof 0 "does not have roof made of rud planks or
cardboard"
                 1 "has roof made of rud planks or cardboard".

COMPUTE ironroof = 0.
IF (hv215 = 31 | hv215 = 96) ironroof = 1.
VARIABLE LABELS ironroof "if roof made of corrugated iron + 3
other".
VALUE LABELS ironroof 0 "roof not made of corrugated iron"
                  1 "roof made of corrugated iron".

COMPUTE finroof = 0.
IF (hv215 > 31 & hv215 < 95) 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) cookelec = 1.
VARIABLE LABELS cookelec "if uses electricity for cooking".
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```
VALUE LABELS cookelec 0 "does not use electricity for cooking"
                    1 "uses electricity for cooking".

COMPUTE cookgas = 0.
IF (hv226 = 2 | hv226 = 3 | hv226 = 4) cookgas = 1.
VARIABLE LABELS cookgas "if uses LPG, natural gas or biogas for
cooking".
VALUE LABELS cookgas 0 "does not use gas for cooking"
                    1 "uses gas for cooking".

COMPUTE cookkero = 0.
IF (hv226 = 5) cookkero = 1.
VARIABLE LABELS cookkero "if uses kerosene for cooking".
VALUE LABELS cookkero 0 "does not use kerosene for cooking"
                    1 "uses kerosene for cooking".

COMPUTE cookcoal = 0.
IF (hv226 = 6) 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 (+77) for
cooking".

COMPUTE cookwood = 0.
IF (hv226 > 7 & hv226 < 12) cookwood = 1.
VARIABLE LABELS cookwood "if uses wood, straw (+83) or crop/dung
(+5) for cooking fuel".
VALUE LABELS cookwood 0 "does not use firewood for cooking"
                      1 "uses firewood for cooking".

COMPUTE cookoth = 0.
IF (hv226 = 95 | hv226 = 96) cookoth = 1.
VARIABLE LABELS cookoth "no food cooked in HH, or some other fuel
for cooking (+6)".
VALUE LABELS cookoth 0 "food is cooked in HH/ no other fuel for
cooking"
                   1 "no food cooked in hh (other fuel +6)".


EXECUTE.


IF (MISSING(hv246a)) hv246a = 0.
IF (MISSING(hv246b)) hv246b = 0.
IF (MISSING(hv246c)) hv246c = 0.
IF (MISSING(hv246d)) hv246d = 0.
IF (MISSING(hv246e)) hv246e = 0.
IF (MISSING(hv246f)) hv246f = 0.

EXECUTE.
```

```
FREQ h2oires h2oyard h2opub h2otube h2opwell h2upwell h2spring
h2sprung
h2osurf h2otk h2oother flushs shflushs latvip shlatvip latpits
slatpits latpito
slatpito latbush latother electric radio tv fridge bicycle motobk
car
mphone watch bank batgen bedmatt cputer internet memsleep
agland animals dirtfloo othfloo parqfloo vinfloo cerafloo
brtlfloo cemtfloo carpfloo
grnwall stnwall cmtwall stncwall brckwall blckwall othwall
natroof rudroof ironroof
finroof cookelec cookgas cookkero cookcoal cookwood cookoth.

FREQ memsleep.

* phone othfloo cookoth h2upwell .


FACTOR
  /VARIABLES
h2oires h2oyard h2opub h2otube h2opwell h2upwell h2spring
h2osurf h2otk h2oother flushs shflushs latvip shlatvip latpits
slatpits latpito
slatpito latbush latother electric radio tv fridge bicycle motobk
car
mphone watch bank batgen bedmatt cputer internet memsleep
agland animals dirtfloo parqfloo vinfloo cerafloo brtlfloo
cemtfloo carpfloo
finroof cookelec cookkero cookcoal cookwood cookgas
grnwall stnwall cmtwall stncwall brckwall blckwall natroof
ironroof
  /MISSING MEANSUB /ANALYSIS
h2oires h2oyard h2opub h2otube h2opwell h2upwell h2spring
h2osurf h2otk h2oother flushs shflushs latvip shlatvip latpits
slatpits latpito
slatpito latbush latother electric radio tv fridge bicycle motobk
car
mphone watch bank batgen bedmatt cputer internet memsleep
agland animals dirtfloo parqfloo vinfloo cerafloo brtlfloo
cemtfloo carpfloo
finroof cookelec cookkero cookcoal cookwood cookgas
grnwall stnwall cmtwall stncwall brckwall blckwall natroof
ironroof
  /PRINT UNIVARIATE INITIAL EXTRACTION FSCORE
  /CRITERIA FACTORS(1) ITERATE(25)
  /EXTRACTION PC
  /ROTATION NOROTATE
  /SAVE REG(ALL)
  /METHOD=CORRELATION .

* vars that had to be removed to make it positive-definite:
```

```
h2sprung
othfloo
cookoth
othwall
rudroof
.



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 -0.920664717794=1)  (-0.920664717794 thru
-0.2945455364679=2)  (-0.2945455364679 thru
0.2955801667292=3)  (0.2955801667292 thru 0.9641075750254 =4)
(0.9641075750254 thru Highest=5)  INTO wlthind5 .
VARIABLE LABELS wlthind5 'Wealth Index Quintiles'.
EXECUTE .

write outfile='C:\Users\kiersten.b.johnson\Desktop\projects
\wealth index\lesotho\scores.dat' records=1 table
/hv001 hv002 fac1_1 wlthind5.
execute.


MEANS
  TABLES=h2oires h2oyard h2opub h2otube h2opwell h2upwell
h2spring h2sprung
h2osurf h2otk h2oother flushs shflushs latvip shlatvip latpits
slatpits latpito
slatpito latbush latother electric radio tv fridge bicycle motobk
car
mphone watch bank batgen bedmatt cputer internet memsleep
agland animals dirtfloo othfloo parqfloo vinfloo cerafloo
brtlfloo cemtfloo carpfloo
grnwall stnwall cmtwall stncwall brckwall blckwall othwall
natroof rudroof ironroof
finroof cookelec cookgas cookkero cookcoal cookwood cookoth  BY
wlthind5
  /CELLS MEAN  .

freq wlthind5.
```

```
weight off.
freq wlthind5.

COMPUTE wt = v005/1000000.
WEIGHT by wt.
EXECUTE.
```