```
** For Yemen 2013   .
*{Construct Variables}.

compute hhusual=hv012.
compute hhslept=hv013.


*{Members per sleeping room}.
if (hhusual=0) hhusual=hhslept.
if (qh116>0) memsleep=trunc(hhusual/qh116).
if (qh116=0) memsleep=hhusual.
if (memsleep>=98) memsleep=98.
if (missing(qh116) or qh116>=99) memsleep=$sysmis.
variable labels memsleep "Number of members per sleeping room".
value labels memsleep 0 'Less than 1 per room'.

*{Drinking water supply}.
*  Find out categories to use.
CROSSTABS
  /TABLES=QH102 BY QH103
  /FORMAT=AVALUE TABLES
  /CELLS=COUNT
  /COUNT ROUND CELL.

compute h2oires=0.
if (qh102<=2 and qh103=1) h2oires=1.
variable labels h2oires "Piped into dwelling".
compute h2oyrd=0.
if (qh102<=2 and qh103=2) h2oyrd=1.
variable labels h2oyrd "Piped into yard/plot".
compute h2opub=0.
if (qh102<=2 and (qh103=5 or qh103=6)) h2opub=1.
variable labels h2opub "Piped water outside house or elsewhere".
compute h2obwell=0.
if (qh102=3) h2obwell=1.
variable labels h2obwell "Tube well or borehole".
compute h2owell=0.
if (qh102=4) h2owell=1.
variable labels h2owell "Regular well".
compute h2ospg=0.
if (qh102=5) h2ospg=1.
variable labels h2ospg "Spring".
compute h2orain=0.
if (qh102=9) h2orain=1.
variable labels h2orain "Water from rain".
compute h2otruck=0.
if (qh102=8) h2otruck=1.
variable labels h2otruck "Water from tanker truck".
compute h2opsurf=0.
if (qh102=6) h2opsurf=1.
variable labels h2opsurf "Protected Surface water-river, lake, dam, etc.".
compute h2ousurf=0.
if (qh102=7) h2ousurf=1.
variable labels h2ousurf "Unprotected Surface water-river, lake, dam, etc.".
compute h2obot=0.
if (qh102=10 or qh102=11) h2obot=1.
variable labels h2obot "Water from bottle/container".
compute h2ooth=0.
if (qh102=96) h2ooth=1.
variable labels h2ooth "Other water source".
formats h2oires h2oyrd h2opub h2obwell h2owell h2ospg h2orain h2otruck h2opsurf
h2ousurf h2obot h2ooth (f1.0).
```

```
*{Toilet facility.
  compute flushsin=0.
  variable labels flushsin "Flush toilet inside to sewer".
  compute flushsout=0.
  variable labels flushsout "Flush toilet outside to sewer".
  compute flushtin=0.
  variable labels flushtin "Flush toilet inside to septic tank".
  compute flushtout=0.
  variable labels flushtout "Flush toilet outside to septic tank".
  compute latpail=0.
  variable labels latpail 'Bucket toilet'.
  compute latpit=0.
  variable labels latpit "Traditional pit latrine".
  compute latvip=0.
  variable labels latvip "Latrine".
  compute latoth=0.
  variable labels latoth 'Other type of latrine/toilet'.
  compute latbush=0.
  variable labels latbush "No facility/bush/field".
  compute latbush=0.
  variable labels latbush "No facility/bush/field".
  compute latpub=0.
  variable labels latpub "Public toilet/latrine".
  compute latoth=0.
  variable labels latoth 'Other type of latrine/toilet'.

do if (qh107=1 or qh107=2).
  if (qh108a=1 and qh107=1) flushsin=1.
  if (qh108a=1 and qh107=2) flushsout=1.
  if (qh108a=2 and qh107=1) flushtin=1.
  if (qh108a=2 and qh107=2) flushtout=1.
  if (qh108a=3) latpail=1.
  if (qh108a=4) latpit=1.
  if (qh108a=5) latvip=1.
  if (qh108a=6) latoth=1.
  if (qh108a=7) latbush=1.
ELSE.
  if (qh108a=1) latbush=1.
  if (qh108a=2) latpub=1.
  if (qh108a=3) latoth=1.
end if.
formats flushsin flushsout flushtin flushtout latvip latpit latpail latbush latpub
latoth (f1.0).

compute latshare=0.
if (qh108=1) latshare=1.
variable labels latshare 'Shares latrine/toilet with other households'.
formats latshare (f1.0).

compute sflushsin=0.
var labels sflushsin "Inside Shared Flush toilet to sewer".
compute sflushtin=0.
var labels sflushtin "Inside Shared Flush toilet to septic tank".
compute sflushsout=0.
var labels sflushsout "Outside Shared Flush toilet to sewer".
compute sflushtout=0.
var labels sflushtout "Outside Shared Flush toilet to septic tank".
compute slatvip=0.
var labels slatvip "Shared VIP latrine".
compute slatpit=0.
var labels slatpit "Shared Traditional pit latrine".
compute slatoth=0.
var labels slatoth 'Other type of latrine/toilet'.
```

```
do if (latshare=1).
  if (flushsin=1) sflushsin=1.
  if (flushtin=1) sflushtin=1.
  if (flushsout=1) sflushsout=1.
  if (flushtout=1) sflushtout=1.
  if (latvip=1) slatvip=1.
  if (latpit=1) slatpit=1.
  if (latoth=1) slatoth=1.
end if.

*{Flooring}.

compute cemtfloo=0.
if (qh112=1) cemtfloo=1.
variable labels cemtfloo "Cement floor".
compute tilefloo=0.
if (qh112=2) tilefloo=1.
variable labels tilefloo "Ceramic tile floor".
compute plastfloo=0.
if (qh112=3) plastfloo=1.
VARIABLE LABELS plastfloo "Plaster floor".
compute dirtfloo=0.
if (qh112=4) dirtfloo=1.
variable labels dirtfloo "Dirt, clay floor".
compute stonfloo=0.
if (qh112=5) stonfloo=1.
variable labels stonfloo "Stone floor".
compute marbfloo=0.
if (qh112=6) marbfloo=1.
variable labels marbfloo "Marble floor".
compute othfloo=0.
if (qh112=96) othfloo=1.
variable labels othfloo "Other type of flooring".
formats dirtfloo stonfloo plastfloo marbfloo tilefloo cemtfloo othfloo (f1.0).

*{Roofing}.
compute cmtroof=0.
if (qh113=1) cmtroof=1.
variable labels cmtroof "Cement roof".
compute wcroof=0.
if (qh113=2) wcroof=1.
variable labels wcroof "Wood and cement roof".
compute wdroof=0.
if (qh113=3) wdroof=1.
variable labels wdroof "Wood and dirt roof".
compute woodroof=0.
if (qh113=4) woodroof=1.
variable labels woodroof "Wood roof".
compute tinroof=0.
if (qh113=5) tinroof=1.
variable labels tinroof "Metal roof".
compute natroof=0.
if (qh113=6) natroof=1.
variable labels natroof "Thatch, palm, sod roof".
compute caneroof=0.
if (qh113=7) caneroof=1.
variable labels caneroof "Cane and mud roof".
compute mtinroof=0.
if (qh113=8) mtinroof=1.
variable labels mtinroof "Metal plates and mud roof".
compute othroof=0.
if (qh113=96) othroof=1.
```

```
variable labels othroof "Other type of roof".
formats natroof wcroof wdroof tinroof woodroof caneroof mtinroof cmtroof othroof
(f1.0).

*{Walls}.


compute cstonewall=0.
if (qh114=1) cstonewall=1.
variable labels cstonewall "Carved Stone walls".
compute stonewall=0.
if (qh114=2) stonewall=1.
variable labels stonewall "Plain Stone walls".
compute cmtbwall=0.
if (qh114=3) cmtbwall=1.
variable labels cmtbwall "Cement block walls".
compute adobwall=0.
if (qh114=4) adobwall=1.
variable labels adobwall "Uncovered adobe walls".
compute cadobwall=0.
if (qh114=5) cadobwall=1.
variable labels cadobwall "Covered adobe walls".
compute natwall=0.
if (qh114=6) natwall=1.
variable labels natwall "Dirt walls".
compute canewall=0.
if (qh114=7) canewall=1.
variable labels canewall "Straw/cane walls".
compute clothwall=0.
if (qh114=8) clothwall=1.
variable labels clothwall "Cloth/wool walls".
compute othwall=0.
if (qh114=96) othwall=1.
variable labels othwall "Other type of walls".
formats natwall cstonewall adobwall stonewall cmtbwall cadobwall canewall clothwall
othwall (f1.0).

*{Cooking Fuel}.
compute cookelec=0.
if (qh110=1) cookelec=1.
variable labels cookelec "Electricity for cooking".
compute cookbio=0.
if (qh110=2) cookbio=1.
variable labels cookbio "Biogas for cooking".
compute cookkero=0.
if (qh110=3) cookkero=1.
variable labels cookkero "Kerosene for cooking".
compute cookchar=0.
if (qh110=4) cookchar=1.
variable labels cookchar "Charcoal for cooking".
compute cookwood=0.
if (qh110=5) cookwood=1.
variable labels cookwood "Wood for cooking".
compute cookdung=0.
if (qh110=6) cookdung=1.
variable labels cookdung "Dung for cooking".
compute cooknone=0.
if (qh110=95) cooknone=1.
variable labels cooknone 'Does not cook'.
compute cookoth=0.
if (qh110=96) cookoth=1.
variable labels cookoth "Other fuel for cooking".
formats cookelec cookbio cookkero cookchar cookwood cookdung cooknone cookoth
```

```
(f1.0).

*{Illumination}.
compute pubelec=0.
if (qh111=1) pubelec=1.
variable labels pubelec "Public Electric Network for illumination".
compute coopelec=0.
if (qh111=2) coopelec=1.
variable labels coopelec "Coop. Electric Network for illumination".
compute pvtelec=0.
if (qh111=3) pvtelec=1.
variable labels pvtelec "Private Electric Network for illumination".
compute genelec=0.
if (qh111=4) genelec=1.
variable labels genelec "Special Generator for illumination".
compute solelec=0.
if (qh111=5) solelec=1.
variable labels solelec "Solar Electricity for illumination".
compute gazlight=0.
if (qh111=6) gazlight=1.
variable labels gazlight "Gaz (kerosene) for illumination".
compute alamp=0.
if (qh111=7) alamp=1.
variable labels alamp "Altereek gaz or battery lamp for illumination".
compute glamp=0.
if (qh111=8) glamp=1.
variable labels glamp "Gaz or battery lamp for illumination".
compute otherlight=0.
if (qh111=96) otherlight=1.
variable labels otherlight "Other source for illumination".
compute nolamp=0.
if (qh111=97) nolamp=1.
variable labels nolamp "No artificial illumination".


*{Reset missing values to "does not have", change 2 code to 0}.
if (missing(qh117_a) | qh117_a<>1) qh117_a=0.
if (missing(qh117_b) | qh117_b<>1) qh117_b=0.
if (missing(qh117_c) | qh117_c<>1) qh117_c=0.
if (missing(qh117_d) | qh117_d<>1) qh117_d=0.
if (missing(qh117_e) | qh117_e<>1) qh117_e=0.
if (missing(qh117_f) | qh117_f<>1) qh117_f=0.
if (missing(qh117_g) | qh117_g<>1) qh117_g=0.
if (missing(qh117_h) | qh117_h<>1) qh117_h=0.
if (missing(qh117_i) | qh117_i <>1) qh117_i =0.
if (missing(qh117_j) | qh117_j <>1) qh117_j =0.
if (missing(qh117_k) | qh117_k<>1) qh117_k=0.
if (missing(qh117_l) | qh117_l <>1) qh117_l =0.
if (missing(qh117_m) | qh117_m<>1) qh117_m=0.
if (missing(qh117_n) | qh117_n<>1) qh117_n=0.
if (missing(qh117_o) | qh117_o<>1) qh117_o=0.

if (missing(qh118_a) | qh118_a<>1) qh118_a=0.
if (missing(qh118_b) | qh118_b<>1) qh118_b=0.
if (missing(qh118_c) | qh118_c<>1) qh118_c=0.



if (missing(qh121) | qh121 <>1) qh121=0.
if (missing(qh122_a) | qh121 <>1) qh122_a=0.
if (missing(qh122_b) | qh121 <>1) qh122_b=0.
if (missing(qh122_c) | qh121 <>1) qh122_c=0.
if (missing(qh122_d) | qh121 <>1) qh122_d=0.
```

```
if (missing(qh122_e) | qh121 <>1) qh122_e=0.
if (missing(qh122_f) | qh121<>1) qh122_f=0.

missing values qh122_a to qh122_f (98,99).

*** Type of housing.
compute indephouse=0.
if (qh100=1) indephouse=1.
VARIABLE LABELS indephouse "Independent house/room".
compute villahouse=0.
if (qh100=2) villahouse=1.
VARIABLE LABELS villahouse "Villa".
compute apthouse=0.
if (qh100=3) apthouse=1.
VARIABLE LABELS apthouse "Apartment in building".
compute tenthouse=0.
if (qh100=4) tenthouse=1.
VARIABLE LABELS tenthouse "Tent".
compute huthouse=0.
if (qh100=5) huthouse=1.
VARIABLE LABELS huthouse "Hut".
compute tmphouse=0.
if (qh100=6) tmphouse=1.
VARIABLE LABELS tmphouse "Temporary shelter".
compute othhouse=0.
if (qh100=96) othhouse=1.
VARIABLE LABELS othhouse "Other type of dwelling".
execute.

* Compute urban and rural variables coded (1/0) for filters later.
COMPUTE urban=(qhtype = 1).
COMPUTE rural=(qhtype = 2).
VARIABLE LABELS urban 'Urban' / rural 'Rural'.
VALUE LABELS urban 1 'Urban' / rural 1 'Rural'.
FORMATS urban rural (f1.0).

execute.


* Check on indicator variable creation.

FREQUENCIES VARIABLES=QHTYPE HV009 HV012 HV013 QH100 QH102 QH103 QH107 QH107A QH108
QH108A QH110
    QH111 QH112 QH113 QH114 QH116 QH117_A QH117_B QH117_C QH117_D QH117_E QH117_F
QH117_G QH117_H
    QH117_I QH117_J QH117_K QH117_L QH117_M QH117_N QH117_O QH118_A QH118_B QH118_C
QH121 QH122_A
    QH122_B QH122_C QH122_D QH122_E QH122_F QH140A QH140B QH140C
  /ORDER=ANALYSIS.



FREQUENCIES VARIABLES=hhusual hhslept memsleep h2oires h2oyrd h2opub h2obwell
h2owell
    h2ospg h2orain h2otruck h2opsurf h2ousurf h2obot h2ooth flushsin flushsout
flushtin flushtout
    latpail latpit latvip latoth latbush latpub latshare sflushsin sflushtin
sflushsout sflushtout
    slatvip slatpit slatoth cemtfloo tilefloo plastfloo dirtfloo stonfloo marbfloo
othfloo cmtroof
    wcroof wdroof woodroof tinroof natroof caneroof mtinroof othroof cstonewall
stonewall cmtbwall
    adobwall cadobwall natwall canewall clothwall othwall cookelec cookbio cookkero
```

```
cookchar cookwood
    cookdung cooknone cookoth pubelec coopelec pvtelec genelec solelec gazlight
alamp glamp otherlight
    nolamp urban rural indephouse villahouse apthouse tenthouse huthouse tmphouse
othhouse
   /ORDER=ANALYSIS.

* Turn off weights before all factor analysis.
WEIGHT OFF.

save outfile="c:\hnp2a\Yemen 2013\ye13assets.sav".

********************************.
*** Factor Analysis to Test Distribution of created variables.
use all.
filter off.

FREQUENCIES QH117_A QH117_B QH117_C QH117_D QH117_E QH117_F QH117_G QH117_H
    QH117_I QH117_J QH117_K QH117_L QH117_M QH117_N QH117_O QH118_A QH118_B QH118_C
QH121 QH122_A
    QH122_B QH122_C QH122_D QH122_E QH122_F
   memsleep h2oires h2oyrd h2opub h2obwell h2owell
    h2ospg h2orain h2otruck h2opsurf h2ousurf h2obot h2ooth flushsin flushsout
flushtin flushtout
    latpail latpit latvip latoth latbush latpub latshare sflushsin sflushtin
sflushsout sflushtout
    slatvip slatpit slatoth cemtfloo tilefloo plastfloo dirtfloo stonfloo marbfloo
othfloo cmtroof
    wcroof wdroof woodroof tinroof natroof caneroof mtinroof othroof cstonewall
stonewall cmtbwall
    adobwall cadobwall natwall canewall clothwall othwall cookelec cookbio cookkero
cookchar cookwood
    cookdung cooknone cookoth pubelec coopelec pvtelec genelec solelec gazlight
alamp glamp otherlight
    nolamp indephouse villahouse apthouse tenthouse huthouse tmphouse othhouse.

FACTOR
  /VARIABLES QH117_A QH117_B QH117_C QH117_D QH117_E QH117_F QH117_G QH117_H
    QH117_I QH117_J QH117_K QH117_L QH117_M QH117_N QH117_O QH118_A QH118_B QH118_C
QH121 QH122_A
    QH122_B QH122_C QH122_D QH122_E QH122_F
   memsleep h2oires h2oyrd h2opub h2obwell h2owell
    h2ospg h2orain h2otruck h2opsurf h2ousurf h2obot h2ooth flushsin flushsout
flushtin flushtout
    latpail latpit latvip latoth latbush latpub latshare sflushsin sflushtin
sflushsout sflushtout
    slatvip slatpit slatoth cemtfloo tilefloo plastfloo dirtfloo stonfloo marbfloo
othfloo cmtroof
    wcroof wdroof woodroof tinroof natroof caneroof mtinroof othroof cstonewall
stonewall cmtbwall
    adobwall cadobwall natwall canewall clothwall othwall cookelec cookbio cookkero
cookchar cookwood
    cookdung cooknone cookoth pubelec coopelec pvtelec genelec solelec gazlight
alamp glamp otherlight
    nolamp indephouse villahouse apthouse tenthouse huthouse tmphouse othhouse
  /MISSING MEANSUB
  /ANALYSIS  QH117_A QH117_B QH117_C QH117_D QH117_E QH117_F QH117_G QH117_H
    QH117_I QH117_J QH117_K QH117_L QH117_M QH117_N QH117_O QH118_A QH118_B QH118_C
QH121 QH122_A
    QH122_B QH122_C QH122_D QH122_E QH122_F
   memsleep h2oires h2oyrd h2opub h2obwell h2owell
    h2ospg h2orain h2otruck h2opsurf h2ousurf h2obot h2ooth flushsin flushsout
flushtin flushtout
```

```
      latpail latpit latvip latoth latbush latpub latshare sflushsin sflushtin
sflushsout sflushtout
      slatvip slatpit slatoth cemtfloo tilefloo plastfloo dirtfloo stonfloo marbfloo
othfloo cmtroof
      wcroof wdroof woodroof tinroof natroof caneroof mtinroof othroof cstonewall
stonewall cmtbwall
      adobwall cadobwall natwall canewall clothwall othwall cookelec cookbio cookkero
cookchar cookwood
      cookdung cooknone cookoth pubelec coopelec pvtelec genelec solelec gazlight
alamp glamp otherlight
      nolamp indephouse villahouse apthouse tenthouse huthouse tmphouse othhouse
  /PRINT UNIVARIATE INITIAL EXTRACTION
  /CRITERIA FACTORS(1) ITERATE(25)
  /EXTRACTION PC
  /ROTATION NOROTATE
  /METHOD=CORRELATION.


*********************************.
*** Common Factor Analysis.

FILTER OFF.
USE ALL.
EXECUTE.

**** Redo removing area-specific variables ****.
** Agricultural animal variables excluded.
** Any others ?.

FACTOR
  /VARIABLES QH117_A QH117_B QH117_C QH117_D QH117_E QH117_F QH117_G QH117_H
    QH117_I QH117_J QH117_K QH117_L QH117_M QH117_N QH117_O QH118_A QH118_B QH118_C
   memsleep h2oires h2oyrd h2opub h2obwell h2owell
      h2ospg h2orain h2otruck h2opsurf h2ousurf h2obot h2ooth flushsin flushsout
flushtin flushtout
      latpail latpit latvip latoth latbush latpub latshare sflushsin sflushtin
sflushsout sflushtout
      slatvip slatpit slatoth cemtfloo tilefloo plastfloo dirtfloo stonfloo marbfloo
othfloo cmtroof
      wcroof wdroof woodroof tinroof natroof caneroof mtinroof othroof cstonewall
stonewall cmtbwall
      adobwall cadobwall natwall canewall clothwall othwall cookelec cookbio cookkero
cookchar cookwood
      cookdung cooknone cookoth pubelec coopelec pvtelec genelec solelec gazlight
alamp glamp otherlight
      nolamp indephouse villahouse apthouse tenthouse huthouse tmphouse othhouse
  /MISSING MEANSUB
  /ANALYSIS QH117_A QH117_B QH117_C QH117_D QH117_E QH117_F QH117_G QH117_H
    QH117_I QH117_J QH117_K QH117_L QH117_M QH117_N QH117_O QH118_A QH118_B QH118_C
   memsleep h2oires h2oyrd h2opub h2obwell h2owell
      h2ospg h2orain h2otruck h2opsurf h2ousurf h2obot h2ooth flushsin flushsout
flushtin flushtout
      latpail latpit latvip latoth latbush latpub latshare sflushsin sflushtin
sflushsout sflushtout
      slatvip slatpit slatoth cemtfloo tilefloo plastfloo dirtfloo stonfloo marbfloo
othfloo cmtroof
      wcroof wdroof woodroof tinroof natroof caneroof mtinroof othroof cstonewall
stonewall cmtbwall
      adobwall cadobwall natwall canewall clothwall othwall cookelec cookbio cookkero
cookchar cookwood
      cookdung cooknone cookoth pubelec coopelec pvtelec genelec solelec gazlight
alamp glamp otherlight
      nolamp indephouse villahouse apthouse tenthouse huthouse tmphouse othhouse
```

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

** Now do the optimal binning.

compute cattle=qh122_a.
compute equine=qh122_b.
compute camels=qh122_c.
compute goats=qh122_d.
compute sheep=qh122_e.
compute chicks=qh122_f.
execute.

FREQUENCIES VARIABLES=cattle to chicks.

** Classify large animals (cattle, dairy, beef, equine, goats, sheep, pigs.) into
the following categories
0, 1-4, 5-9, 10+.

** Classifiy small animals (chicks, rabbits) into the following categories:
0, 1-9, 10-29, 30+.
use all.
filter off.
execute.
numeric cattle0 to cattle3 equine0 to equine3 camels0 to camels3 goats0 to goats3
sheep0 to sheep3 chicks0 to chicks3.

** Large animals.
do repeat  lgan=cattle to sheep
                /lg1=cattle0  equine0 camels0 goats0 sheep0
                /lg2=cattle1  equine1 camels1 goats1 sheep1
                /lg3=cattle2  equine2 camels2 goats2 sheep2
                /lg4=cattle3  equine3 camels3 goats3 sheep3 .
compute lg1=(lgan = 0).
compute lg2=(lgan ge 1 and lgan le 4).
compute lg3=(lgan ge 5 and lgan le 9).
compute lg4=(lgan ge 10 and lgan le 97).
end repeat.
execute.
value labels cattle0 equine0 goats0 sheep0 camels0 1 'Zero'.
value labels cattle1  equine1 goats1 sheep1 camels1 1 '1 to 4'.
value labels cattle2 equine2 goats2 sheep2 camels2 1 '5 to 9'.
value labels cattle3 equine3 goats3 sheep3 camels3 1 '10 or more'.

** Small animals.
do repeat sman=chicks
                /sm1=chicks0
                /sm2=chicks1
                /sm3=chicks2
                /sm4=chicks3.
compute sm1=(sman = 0).
compute sm2=(sman ge 1 and sman le 9).
compute sm3=(sman ge 10 and sman le 29).
compute sm4=(sman ge 30 and sman le 97).
end repeat.
execute.
value labels chicks0 1 'Zero'.
value labels chicks1 1 '1 to 9'.
value labels chicks2 1 '10 to 29'.
```

```
value labels chicks3 1 '30 or more'.
frequencies cattle0 to chicks3.

**  Urban Area.

USE ALL.
FILTER BY urban.
EXECUTE.


FACTOR
  /VARIABLES QH117_A QH117_B QH117_C QH117_D QH117_E QH117_F QH117_G QH117_H
    QH117_I QH117_J QH117_K QH117_L QH117_M QH117_N QH117_O QH118_A QH118_B QH118_C
   memsleep h2oires h2oyrd h2opub h2obwell h2owell
    h2ospg h2orain h2otruck h2opsurf h2obot h2ooth flushsin flushsout flushtin
flushtout
    latpail latpit latvip latoth latbush latpub latshare sflushsin sflushtin
sflushsout sflushtout
    slatvip slatpit cemtfloo tilefloo plastfloo dirtfloo stonfloo marbfloo othfloo
cmtroof
    wcroof wdroof woodroof tinroof natroof caneroof mtinroof othroof cstonewall
stonewall cmtbwall
    adobwall cadobwall natwall canewall clothwall othwall cookelec cookbio cookkero
cookchar cookwood
    cooknone pubelec coopelec pvtelec genelec solelec gazlight alamp glamp
otherlight
    nolamp indephouse villahouse apthouse tenthouse huthouse tmphouse othhouse
    cattle0 cattle1 cattle3 equine0 equine1 camels0 to chicks3
  /MISSING MEANSUB
  /ANALYSIS  QH117_A QH117_B QH117_C QH117_D QH117_E QH117_F QH117_G QH117_H
    QH117_I QH117_J QH117_K QH117_L QH117_M QH117_N QH117_O QH118_A QH118_B QH118_C
   memsleep h2oires h2oyrd h2opub h2obwell h2owell
    h2ospg h2orain h2otruck h2opsurf h2obot h2ooth flushsin flushsout flushtin
flushtout
    latpail latpit latvip latoth latbush latpub latshare sflushsin sflushtin
sflushsout sflushtout
    slatvip slatpit cemtfloo tilefloo plastfloo dirtfloo stonfloo marbfloo othfloo
cmtroof
    wcroof wdroof woodroof tinroof natroof caneroof mtinroof othroof cstonewall
stonewall cmtbwall
    adobwall cadobwall natwall canewall clothwall othwall cookelec cookbio cookkero
cookchar cookwood
    cooknone pubelec coopelec pvtelec genelec solelec gazlight alamp glamp
otherlight
    nolamp indephouse villahouse apthouse tenthouse huthouse tmphouse othhouse
    cattle0 cattle1 cattle3 equine0 equine1 camels0 to chicks3
  /PRINT UNIVARIATE INITIAL EXTRACTION fscore
  /CRITERIA FACTORS(1) ITERATE(25)
  /EXTRACTION PC
  /ROTATION NOROTATE
  /SAVE REG(ALL URB)
  /METHOD=CORRELATION.

compute urb1=-urb1.
execute.

** Rural Area.

USE ALL.
FILTER BY rural.
EXECUTE.
```

```
FACTOR
  /VARIABLES QH117_A QH117_B QH117_C QH117_D QH117_E QH117_F QH117_G QH117_H
    QH117_I QH117_J QH117_K QH117_L QH117_M QH117_N QH117_O QH118_A QH118_B QH118_C
   memsleep h2oires h2oyrd h2opub h2obwell h2owell
    h2ospg h2orain h2otruck h2opsurf h2ousurf h2obot h2ooth flushsin flushsout
flushtin flushtout
    latpail latpit latvip latoth latbush latpub latshare sflushsin sflushtin
sflushsout sflushtout
    slatvip slatpit slatoth cemtfloo tilefloo plastfloo dirtfloo stonfloo marbfloo
othfloo cmtroof
    wcroof wdroof woodroof tinroof natroof caneroof mtinroof othroof cstonewall
stonewall cmtbwall
    adobwall cadobwall natwall canewall clothwall othwall cookelec cookbio cookkero
cookchar cookwood
    cookdung cooknone cookoth pubelec coopelec pvtelec genelec solelec gazlight
alamp glamp otherlight
    nolamp indephouse villahouse apthouse tenthouse huthouse tmphouse othhouse
    cattle0 to chicks3
  /MISSING MEANSUB
  /ANALYSIS QH117_A QH117_B QH117_C QH117_D QH117_E QH117_F QH117_G QH117_H
    QH117_I QH117_J QH117_K QH117_L QH117_M QH117_N QH117_O QH118_A QH118_B QH118_C
   memsleep h2oires h2oyrd h2opub h2obwell h2owell
    h2ospg h2orain h2otruck h2opsurf h2ousurf h2obot h2ooth flushsin flushsout
flushtin flushtout
    latpail latpit latvip latoth latbush latpub latshare sflushsin sflushtin
sflushsout sflushtout
    slatvip slatpit slatoth cemtfloo tilefloo plastfloo dirtfloo stonfloo marbfloo
othfloo cmtroof
    wcroof wdroof woodroof tinroof natroof caneroof mtinroof othroof cstonewall
stonewall cmtbwall
    adobwall cadobwall natwall canewall clothwall othwall cookelec cookbio cookkero
cookchar cookwood
    cookdung cooknone cookoth pubelec coopelec pvtelec genelec solelec gazlight
alamp glamp otherlight
    nolamp indephouse villahouse apthouse tenthouse huthouse tmphouse othhouse
    cattle0 to chicks3
  /PRINT UNIVARIATE INITIAL EXTRACTION fscore
  /CRITERIA FACTORS(1) ITERATE(25)
  /EXTRACTION PC
  /ROTATION NOROTATE
  /SAVE REG(ALL RUR)
  /METHOD=CORRELATION.



* Calculate regressions with total score.
** Urban Area.

USE ALL.
FILTER BY urban.
EXECUTE.

REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT COM1
  /METHOD=ENTER URB1.

** Rural Area.

USE ALL.
```

```
FILTER BY rural.
EXECUTE.

REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT COM1
  /METHOD=ENTER RUR1.

FILTER OFF.
USE ALL.
EXECUTE.


*** Calculate combined wealth score from Urban and Rural Scores.
compute combscor=0.
print formats combscor (F11.5).
write formats combscor (f11.5).
** Urban.
if (qhtype = 1) combscor=1.026+(0.523)* URB1.
** Rural.
if (qhtype = 2) combscor=(-0.380)+0.821* RUR1.
execute.

*Tabulation for histograms.
compute hhwt = qhweight/1000000.
VARIABLE LABELS hhwt 'HH weights' .
weight by hhwt.
filter off.
use all.

FREQUENCIES
  VARIABLES=combscor COM1 /FORMAT=NOTABLE
  /NTILES= 5
  /STATISTICS=STDDEV MEAN
  /HISTOGRAM  NORMAL
  /ORDER=ANALYSIS.

USE ALL.
FILTER BY urban.
EXECUTE.

FREQUENCIES
  VARIABLES=combscor URB1 /FORMAT=NOTABLE
  /NTILES= 5
  /STATISTICS=STDDEV MEAN
  /HISTOGRAM  NORMAL
  /ORDER=ANALYSIS.

USE ALL.
FILTER BY rural.
EXECUTE.

FREQUENCIES
  VARIABLES=combscor RUR1 /FORMAT=NOTABLE
  /NTILES= 5
  /STATISTICS=STDDEV MEAN
  /HISTOGRAM  NORMAL
  /ORDER=ANALYSIS.

FILTER OFF.
```

```
USE ALL.
EXECUTE.


*Calculate quintiles and scores for data file.
compute hhmemwt=qhweight*hhusual/1000000.
weight by hhmemwt.
VARIABLE LABELS hhmemwt 'HH members weighting for index'.

** Urban Area.
USE ALL.
FILTER BY urban.
EXECUTE.

RANK VARIABLES=urb1 (A) /RANK /NTILES (5) /PRINT=YES /TIES=MEAN.

** Rural Area.
USE ALL.
FILTER BY rural.
EXECUTE.

RANK VARIABLES=rur1 (A) /RANK /NTILES (5) /PRINT=YES /TIES=MEAN.

** National combined score.
FILTER OFF.
USE ALL.
EXECUTE.

RANK VARIABLES=combscor (A) /RANK /NTILES (5) /PRINT=YES /TIES=MEAN.

FREQUENCIES
  VARIABLES=combscor
        /FORMAT=NOTABLE
  /NTILES=5
  /STATISTICS=STDDEV MINIMUM MAXIMUM MEAN MEDIAN MODE SKEWNESS SESKEW KURTOSIS
SEKURT
  /ORDER=ANALYSIS.

*** Check on quintiles.

frequencies variables=ncombsco.

weight by hhwt.

MEANS TABLES=
    QH117_A QH117_B QH117_C QH117_D QH117_E QH117_F QH117_G QH117_H
    QH117_I QH117_J QH117_K QH117_L QH117_M QH117_N QH117_O QH118_A QH118_B QH118_C
QH121 QH122_A
    QH122_B QH122_C QH122_D QH122_E QH122_F
  memsleep h2oires h2oyrd h2opub h2obwell h2owell
    h2ospg h2orain h2otruck h2opsurf h2ousurf h2obot h2ooth flushsin flushsout
flushtin flushtout
    latpail latpit latvip latoth latbush latpub latshare sflushsin sflushtin
sflushsout sflushtout
    slatvip slatpit slatoth cemtfloo tilefloo plastfloo dirtfloo stonfloo marbfloo
othfloo cmtroof
    wcroof wdroof woodroof tinroof natroof caneroof mtinroof othroof cstonewall
stonewall cmtbwall
    adobwall cadobwall natwall canewall clothwall othwall cookelec cookbio cookkero
cookchar cookwood
    cookdung cooknone cookoth pubelec coopelec pvtelec genelec solelec gazlight
alamp glamp otherlight
    nolamp urban rural indephouse villahouse apthouse tenthouse huthouse tmphouse
```

```
othhouse
    by Ncombsco
  /CELLS MEAN COUNT STDDEV.

MEANS TABLES=
      QH117_A QH117_B QH117_C QH117_D QH117_E QH117_F QH117_G QH117_H
    QH117_I QH117_J QH117_K QH117_L QH117_M QH117_N QH117_O QH118_A QH118_B QH118_C
QH121 QH122_A
    QH122_B QH122_C QH122_D QH122_E QH122_F
  memsleep h2oires h2oyrd h2opub h2obwell h2owell
    h2ospg h2orain h2otruck h2opsurf h2ousurf h2obot h2ooth flushsin flushsout
flushtin flushtout
    latpail latpit latvip latoth latbush latpub latshare sflushsin sflushtin
sflushsout sflushtout
    slatvip slatpit slatoth cemtfloo tilefloo plastfloo dirtfloo stonfloo marbfloo
othfloo cmtroof
    wcroof wdroof woodroof tinroof natroof caneroof mtinroof othroof cstonewall
stonewall cmtbwall
    adobwall cadobwall natwall canewall clothwall othwall cookelec cookbio cookkero
cookchar cookwood
    cookdung cooknone cookoth pubelec coopelec pvtelec genelec solelec gazlight
alamp glamp otherlight
    nolamp urban rural indephouse villahouse apthouse tenthouse huthouse tmphouse
othhouse
    by Ncombsco by urban, rural
  /CELLS MEAN COUNT STDDEV.

WEIGHT OFF.

save outfile="c:\hnp2a\Yemen 2013\ye13assets.sav".

*** Write out scores file.
WRITE OUTFILE="c:\hnp2a\Yemen 2013\ye13scores.dat"
  TABLE
  /qhclust qhnumber combscor ncombsco urb1 nurb1 rur1 nrur1.
EXECUTE.
```