User: Table 1.4 and related steps

```
      name:  <unnamed>
       log:  C:\Users\hooghe\Documents\#Liesbet\#_projects\RAI_VOLUMES2\data\final website\volume
  log type:  smcl
 opened on:   5 May 2016, 12:50:35

1 . do "C:\Users\hooghe\AppData\Local\Temp\STD07000000.tmp"

2 . polychoric n_instdepth n_policy n_fiscauto n_borrowauto n_rep n_lawmaking n_execcon n_fisccon r

Polychoric correlation matrix

               n_instdepth      n_policy    n_fiscauto  n_borrowauto         n_rep   n_lawmaking
> rowcon     n_constit
 n_instdepth             1
    n_policy     .86803065             1
  n_fiscauto     .69063378     .77514258             1
n_borrowauto     .78883886     .87594124     .84557266             1
       n_rep     .90865316     .90821117     .63902429     .80710726             1
 n_lawmaking     .51157423     .56970467     .62267442     .53676216     .42945979             1
   n_execcon     .59247744     .67667407     .64600366     .54858374     .52985069     .64723438
   n_fisccon     .48860602     .60680866     .57730935     .56548041     .43660171     .71735277
 n_borrowcon     .44759344     .45213004     .35725661     .34091651     .37658925     .49262391
>       1
   n_constit     .57731034      .5532083     .65304326     .54198342     .44302266     .73010241
> 457801             1

3 .
4 . display r(sum_w)
80

5 . *display number of observations, which is needed for factormat*
6 . matrix r=r(R)

7 . *saves the correlation matrix*
8 . factormat r, n(80) factors(1)
(obs=80)

Factor analysis/correlation                    Number of obs    =         80
    Method: principal factors                  Retained factors =          1
    Rotation: (unrotated)                      Number of params =         10

    Factor  |  Eigenvalue   Difference        Proportion   Cumulative
------------+----------------------------------------------------------
   Factor1  |      6.41069      5.24942            0.8155       0.8155
   Factor2  |      1.16127      0.79001            0.1477       0.9632
   Factor3  |      0.37126      0.21859            0.0472       1.0105
   Factor4  |      0.15267      0.07826            0.0194       1.0299
   Factor5  |      0.07441      0.06593            0.0095       1.0394
   Factor6  |      0.00848      0.04626            0.0011       1.0404
   Factor7  |     -0.03778      0.00853           -0.0048       1.0356
   Factor8  |     -0.04630      0.04567           -0.0059       1.0297
   Factor9  |     -0.09197      0.04986           -0.0117       1.0180
  Factor10  |     -0.14184            .           -0.0180       1.0000
------------+----------------------------------------------------------
    LR test: independent vs. saturated:  chi2(45) =  859.49 Prob>chi2 = 0.0000

Factor loadings (pattern matrix) and unique variances
```

Variable	Factor1	Uniqueness
n_instdepth	**0.8542**	**0.2704**
n_policy	**0.9135**	**0.1656**
n_fiscauto	**0.8370**	**0.2994**
n_borrowauto	**0.8549**	**0.2692**
n_rep	**0.8153**	**0.3353**
n_lawmaking	**0.7352**	**0.4595**
n_execcon	**0.8151**	**0.3356**
n_fisccon	**0.7547**	**0.4304**
n_borrowcon	**0.6125**	**0.6249**
n_constit	**0.7752**	**0.3991**

```
 9 . predict factor1
   (regression scoring assumed)
```

Scoring coefficients (method = regression)

Variable	Factor1
n_instdepth	**0.11938**
n_policy	**0.24812**
n_fiscauto	**0.09892**
n_borrowauto	**0.11442**
n_rep	**0.09481**
n_lawmaking	**0.07573**
n_execcon	**0.11925**
n_fisccon	**0.11010**
n_borrowcon	**0.05293**
n_constit	**0.15208**

(variable means assumed 0; use means() option of factormat for nonzero means)
(variable std. deviations assumed 1; use sds() option of factormat to change)

```
10 . factormat r, n(80) factors(2)
   (obs=80)
```

Factor analysis/correlation — Number of obs = **80**
Method: principal factors — Retained factors = **2**
Rotation: (unrotated) — Number of params = **19**

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	**6.41069**	**5.24942**	**0.8155**	**0.8155**
Factor2	**1.16127**	**0.79001**	**0.1477**	**0.9632**
Factor3	**0.37126**	**0.21859**	**0.0472**	**1.0105**
Factor4	**0.15267**	**0.07826**	**0.0194**	**1.0299**
Factor5	**0.07441**	**0.06593**	**0.0095**	**1.0394**
Factor6	**0.00848**	**0.04626**	**0.0011**	**1.0404**
Factor7	**-0.03778**	**0.00853**	**-0.0048**	**1.0356**
Factor8	**-0.04630**	**0.04567**	**-0.0059**	**1.0297**
Factor9	**-0.09197**	**0.04986**	**-0.0117**	**1.0180**
Factor10	**-0.14184**	.	**-0.0180**	**1.0000**

LR test: independent vs. saturated: chi2(**45**) = **859.49** Prob>chi2 = **0.0000**

Factor loadings (pattern matrix) and unique variances

Variable	Factor1	Factor2	Uniqueness
n_instdepth	**0.8542**	**-0.3229**	**0.1662**
n_policy	**0.9135**	**-0.2992**	**0.0760**
n_fiscauto	**0.8370**	**-0.1014**	**0.2891**
n_borrowauto	**0.8549**	**-0.3279**	**0.1617**
n_rep	**0.8153**	**-0.4705**	**0.1140**
n_lawmaking	**0.7352**	**0.3156**	**0.3600**
n_execcon	**0.8151**	**0.3258**	**0.2294**
n_fisccon	**0.7547**	**0.3585**	**0.3019**
n_borrowcon	**0.6125**	**0.3964**	**0.4677**
n_constit	**0.7752**	**0.3701**	**0.2621**

```
11 . *one-factor and two-factor solution and saves single-factor
12 . rotate, promax
```

Factor analysis/correlation — Number of obs = **80**
Method: principal factors — Retained factors = **2**
Rotation: oblique promax (Kaiser off) — Number of params = **19**

Factor	Variance	Proportion	Rotated factors are correlated
Factor1	**5.50784**	**0.7007**	
Factor2	**5.25310**	**0.6683**	

LR test: independent vs. saturated: chi2(**45**) = **859.49** Prob>chi2 = **0.0000**

Rotated factor loadings (pattern matrix) and unique variances

Variable	Factor1	Factor2	Uniqueness
n_instdepth	**0.8648**	**0.0762**	**0.1662**
n_policy	**0.8736**	**0.1343**	**0.0760**
n_fiscauto	**0.6082**	**0.3212**	**0.2891**
n_borrowauto	**0.8708**	**0.0708**	**0.1617**
n_rep	**1.0060**	**-0.1134**	**0.1140**
n_lawmaking	**0.0839**	**0.7462**	**0.3600**
n_execcon	**0.1198**	**0.7997**	**0.2294**
n_fisccon	**0.0478**	**0.8056**	**0.3019**
n_borrowcon	**-0.0786**	**0.7748**	**0.4677**
n_constit	**0.0470**	**0.8296**	**0.2621**

Factor rotation matrix

	Factor1	Factor2
Factor1	**0.9099**	**0.8829**
Factor2	**-0.4147**	**0.4696**

```
13 . predict factorA factorB
(regression scoring assumed)
```

Scoring coefficients (method = regression; based on promax(3) rotated factors)

Variable	Factor1	Factor2
n_instdepth	**0.14880**	**0.05991**
n_policy	**0.30817**	**0.12577**
n_fiscauto	**0.12076**	**0.05252**
n_borrowauto	**0.19914**	**-0.00657**
n_rep	**0.30503**	**-0.16400**
n_lawmaking	**-0.00199**	**0.14714**
n_execcon	**-0.02384**	**0.25515**
n_fisccon	**-0.01379**	**0.22625**
n_borrowcon	**-0.02454**	**0.12906**
n_constit	**0.01742**	**0.27125**

(variable means assumed 0; use means() option of factormat for nonzero means)
(variable std. deviations assumed 1; use sds() option of factormat to change)

```
14 . *rotates and oblique and saves two factors
15 . estat common
```

Correlation matrix of the promax(3) rotated common factors

Factors	Factor1	Factor2
Factor1	**1**	
Factor2	**.6086**	**1**

```
16 . *gives the correlation*
17 .
18 . *CRONBACH'S ALPHA ANALYSIS
19 . alpha n_instdepth n_policy n_fiscauto n_borrowauto n_rep n_lawmaking n_execcon n_fisccon n_borr
> g(alpha2010)
```

Test scale = mean(standardized items)

Average interitem correlation: **0.6187**
Number of items in the scale: **10**
Scale reliability coefficient: **0.9419**

```
20 .
end of do-file
```