

Class exercise: CFA in Stata

Objective: Running Confirmatory Factor Analysis using Stata

Data: Asia Barometer Survey (Taiwan+Hong Kong)

(use " https://github.com/datageneration/workshop/blob/master/SEM/ABShktw_sm.dta?raw=true ")

1. Open Asia Barometer data in Stata
2. Examine the variables (dumbest, demecon, demfull, demprefer, demsat, demsolve, inequalfree) using sum, tab and corr.
3. Run EFA using factor
4. SEM Builder:
 - a. Statistics → SEM (Structural equation modeling) → Model Building and Estimation
 - b. Build a CFA using five variables
 - i. One latent construct using ellipse, named it DEMOC
 - ii. Five indicators using boxes (hint: which five?)
 - iii. Connect the ellipse and boxes using path arrows (make sure the directions are correct)
 - iv. Double click the boxes and specify variables
 - c. Run estimation
 - d. Check model fit (Estimation → Goodness of fit)
5. Can you improve the model fit by reviewing modification indices?
6. Add another indicator. Make sure you have a theory behind that new model.
7. Try two factor model
8. How about second order factor model?

