

# GMM Analysis Strategies

## **A. Analyze without x's**

A1. Let only the growth factor means be different across classes while every other parameter is class-invariant (this is the default). Look at the graphics using the Estimated means and observed individual values plot and determine if any class needs its own class-specific variance.

A2. Re-analyze with a class-specific variance in line with findings in A1. See how class formation changes relative to step A1.

## **B. Add x's, looking for changes in class formation relative to step A2 (see Muthen, 2004, in the Kaplan handbook).**

B1. Analyze with the default class-invariance, which includes class-invariant regressions of growth factors on x.

B2. Test for class-varying growth factor slopes on x.

## **C. Add distal u (or y)**

C1. Class-invariant u on x

C2. Test for class-varying u on x.