**List of Notations Used**

X Observed exogenous variable (vector of measured independent or input variables)

Y Observed endogenous variables (vector of observed response or outcome variables)

\( \beta \) Path coefficients (Path between endogenous and endogenous latent variable) (matrix of coefficients of the \( \eta \)-variables in the structural relationship)

\( \gamma \) Path coefficients (Path between exogenous and endogenous latent variable) (matrix of coefficients of the \( \xi \)-variables in the structural relationship)

\( \delta \) Residual errors in measurement on X variables (vectors of measurement errors in x variables respectively)

\( \varepsilon \) Residual errors in measurement on Y variables (vectors of measurement errors in y variables respectively)

\( \zeta \) Residual error in endogenous latent variable (measurement error to capture unaccounted relations) (vector of equation errors in the structural relationship between \( \eta \) and \( \xi \))

\( \hat{\eta} \) Endogenous latent variable (vector of latent dependent or endogenous variables)

\( \lambda \) Factor loadings (\( \lambda_y \) is a matrix coefficients of the regression of y on \( \eta \) and \( \lambda_x \) is a matrix coefficients of the regression of x on \( \xi \))

\( \hat{\xi} \) Observed exogenous latent variable (vector of latent independent or exogenous variables)