

# On UMRU estimators in the extended growth curve model

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## Abstract

The extended growth curve model with orthogonal spaces of the design matrices will be discussed. Rather than the nested structure the orthogonality condition seems to simplify many theoretical results. We derive necessary and sufficient existence conditions for the uniformly minimum risk unbiased estimators of the parameters with the general and some special covariance structures under the convex losses.

## Keywords

Extended growth curve model, Orthogonality, UMRU estimators, Covariance structure.

## References

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