Erratum

A note on the correlation between S^2 and the least squares estimator in the linear regression model

by Henning Knautz and Götz Trenkler, Statistical Papers 34, 237-246 (1993).

Theorem 1 in this paper is not correct in its present form. Condition 3. should read as follows:

3. $Mu_i \neq 0, m_{3i} \neq 0$ and there exists $c \in \mathcal{R}(M) \cap \mathcal{R}(\tilde{U})$ such that the elements of $\tilde{\eta}$ are given by $\tilde{\eta}_j = \frac{e'_j \tilde{U}^+ c}{\tilde{u}'_j M \tilde{u}_j} \neq 0$.

Two subsequent corrections follow from this condition:

Condition (c) in Remark 3 is now:

(c) $Me_i \neq 0, m_{3i} \neq 0$ and for all indices i for which this holds there exists a vector $c \in \mathcal{R}(M) \cap \mathcal{R}(\tilde{U})$ with nonzero elements such that $m_{3i} = \frac{e'_i c}{e'_i M e_i}$.

Equation (2.24) in Example 1 changes to

$$m_{3i} = 0 \text{ or } m_{3i} = \frac{e'_i c}{(\sigma a)^3 \tilde{m}_{ii}} \quad (2.24)$$

where $c \in \mathcal{R}(M) \cap \mathcal{R}(\tilde{U})$ having nonzero elements is fixed.

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