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Corrigendum to "Nearly Unbiased Estimation of Sample Skewness" [Economics Letters 192 (2020) 109174]*

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The author regrets that the above paper contained the following errors, which may potentially cause misleading results and interpretations to the users of the proposed skewness estimator.

First, in Eq. (3.2), the correct formula for $H_{i,j}$ is:

$$H_{i,j} = \begin{cases} -\frac{T(T-6)}{(T-2)(T-4)} - \frac{3T\mathbb{1}_{\{j\in[h+1,T-h-1]\}}}{(T-4)(T-2h-1)}, & i=1, \forall j \\ \frac{T^2}{(T-i+1)(T-4)}\left(\frac{2\mathbb{1}_{\{j=i-1\}}}{T} + \frac{(T-2)\mathbb{1}_{\{i+j=T+1\}}}{T} - \frac{\mathbb{1}_{\{j\in[h+1,T-h-1]\}}}{T-2h-1}\right), & i\in[2,h+1], \forall j \\ H_{i-h,T-j}, & i\in[h+2,2h+1], \forall j \end{cases}, \tag{1}$$

where the published version has an incorrect $-$ in place of $+$ on the second line of the rhs above. This error does not affect the bias-corrected skewness estimator $\hat{\mu}^*_{3,h} = \sum_{j=1}^{T-1} H_{1,j}\hat{\gamma}_{2,1}(j)$, which does not use the incorrect rows of $H_{i,j}$ with $i \geq 2$. Consequently, all simulation and empirical results of the original paper remain intact.

Second, in Eq. (2.3) of the supplementary material, the correct formula for $G_{i,j}$ is as follows, where the bold symbols highlight the changes to the original versions:

$$G_{i,j} = \begin{cases} \frac{2-T}{T^2}, \quad i\in[1,T-1], \quad j=1 \\ \frac{(T-2)\boldsymbol{i}\mathbb{1}_{\boldsymbol{\{i+j=T+1\}}}}{T^2} - \frac{2\boldsymbol{(T-i)}\mathbb{1}_{\boldsymbol{\{i=j-1\}}}}{T^2} + \frac{(6-T)(T-j-1)}{T^3}, \quad i\in[1,T-1], j\in[2,h+1] \\ G_{T-i,j-h}, \quad i\in[1,T-1], \quad j\in[h+2,2h+1] \end{cases}. \tag{2}$$

The above correction ensures that $\mathrm{E}[\hat{\mathbf{\Gamma}}] = \boldsymbol{G}_h\mathbf{\Gamma}_h$ holds for $\mathbf{\Gamma}_h = \{\mu_3, \gamma_{1,2}(1), \ldots, \gamma_{1,2}(h), \gamma_{2,1}(1), \ldots, \gamma_{2,1}(h)\}'$ according to the definition in Theorem 2, whereas the original definition satisfies the same result by interchanging the roles of $\gamma_{1,2}(j)$ with $\gamma_{2,1}(j)$ in $\mathbf{\Gamma}_h$, which is inconsistent with the notation in Theorem 2. The original results in section 2 of the supplementary material holds true by changing the definition of $G_{i,j}$ to Eq. (2) above.

Third, Proposition 1.2 and the consistency result in Theorem 2.1 of the supplementary material require additional technical assumptions on the summability of the sample cross-moments as $T \to \infty$, as otherwise one cannot determine the asymptotic order of an infinite sum of sample cross-moments in the limit. For example, one can impose the following absolute summability condition on $\hat{\gamma}_{2,1}(j)$ as $T \to \infty$:

$$\sum_{j=1}^{T-1} |\hat{\gamma}_{2,1}(j)| = O_p(1).$$

All finite sample results in the original paper do not require such asymptotic condition and are thus not affected.

The author apologize to readers for any inconvenience caused.

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