

CORRECTION

A CENTRAL LIMIT THEOREM FOR STATIONARY
 PROCESSES AND THE PARAMETER ESTIMATION
 OF LINEAR PROCESSES

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Assumptions (i) and (ii) of Theorem 2.1 are insufficient to guarantee the central limit theorem. For the theorem to be valid, a Lindeberg-type or a related condition is needed. Hosoya (1992) used a Lindeberg-type condition and Findley and Wei (1992) proposed a Liapounov-type condition as an additional assumption to the theorem [Findley communicated to us about the error in our assumptions].

Specifically, a version of correction according to the approach of Hosoya (1992) is given as follows.

1. Condition (i) of Lemma A2.4 should be

$$\lim_{m \rightarrow \infty} \frac{1}{n(m)} \sum_{k=1}^{n(m)} E \left[u_m(k)^2 I \{ |u_m(k)| \geq \varepsilon n(m)^{1/2} \} \right] = 0.$$

2. Theorem 2.1 (page 134) should have the following additional assumption:

(iii) For any $\varepsilon > 0$, there exists $B_\varepsilon > 0$ such that uniformly in N and r

$$E \left[S(N, r)^2 I \{ S(N, r) > B_\varepsilon \} \right] < \varepsilon,$$

where $S(N, r) = [\sum_{\alpha=1}^p \{ \sum_{t=1}^N x_\alpha(t+r)/N^{1/2} \}^2]^{1/2}$.

3. The line which contains (6.18) in the proof (pages 146 and 147) should be deleted and the following lines should be added after the last line of the proof:

It holds that

$$\begin{aligned} & E \left\{ (\eta_k - E(\eta_k | \mathcal{F}_{k-1}^*))^2 I (|\eta_k - E(\eta_k | \mathcal{F}_{k-1}^*)| > 2B_\varepsilon) \right\} \\ & \leq 2E \left\{ \eta_k^2 I (||\eta_k| - |E(\eta_k | \mathcal{F}_{k-1}^*)|| > 2B_\varepsilon) \right\} + 2E \left\{ E(\eta_k | \mathcal{F}_{k-1}^*)^2 \right\} \\ & \leq 2E \left\{ \eta_k^2 I (|\eta_k| > B_\varepsilon) \right\} + 2E \left\{ \eta_k^2 I (|E(\eta_k | \mathcal{F}_{k-1}^*)| > B_\varepsilon) \right\} \\ & \quad + 2E \left\{ E(\eta_k | \mathcal{F}_{k-1}^*)^2 \right\}, \end{aligned}$$

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