Conditional estimation of average on the basis of weighting data (Statistical Papers 45, 423-431, 2004) - Errata

Janusz Wywiał

University of Economics, Department of Statistics, Bogucicka 14, 40-226 Katowice, Poland (email:wywial@ae.katowice.pl)

The correct versions of the expression (42), (44) and (45) are as follows:

$$D^2(Y|X < h) = 1 - \rho^2 \left(\frac{hz(h)}{F_x(h)} + \left(\frac{z(h)}{F_x(h)} \right)^2 \right). \qquad (42)$$

$$D^2(\tilde{Y}_U(k)|0) = \frac{1}{4} \left(1 - \frac{2}{\pi}\rho^2 \right) \frac{2k-1}{(k-1)k} \approx \frac{1}{2k} \left(1 - \frac{2}{\pi}\rho^2 \right). \qquad (44)$$

$$e = \frac{D^2(\tilde{Y}_U(k)|0)}{D^2(\bar{Y}_U)} = 1 - \frac{2}{\pi}\rho^2. \qquad (45)$$

Moreover, $D^2\left(\bar{Y}_U\right) = \frac{1}{2k}$ and the two sentences after the expression (45)

should be as follows:

Let us note that $e < 1$, if $\rho \neq 0$. Hence, in the considered case the conditional estimator $\bar{Y}_U(k)$ is more precise than the simple sample mean when the correlation coefficient is not equal to zero.