1308 DISCUSSION

A finite-sample version of this disaster is even easier to arrange. For example, if $1 \le i \le n$, let

$$\delta_i = 0$$
 with probability $1 - \lambda/n$,

$$\delta_i = \sqrt{n} W_i$$
 with probability λ/n .

The moral seems clear: Second-order moment conditions or no, with skew long-tailed errors that change from observation to observation, the jackknife cannot be relied upon. On the other hand, preliminary calculations suggest that in our special case, with independence, in the presence of Lindeberg's condition both the jackknife and the bootstrap will perform adequately. Wu admits dependent errors, and this introduces further complications.

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Professor Wu is to be complimented for bringing out several important issues on jackknife, bootstrap and other resampling methods in regression analysis. Using a representation of the full-data least-squares estimator as a weighted average of corresponding least-squares estimators for appropriately chosen subsets, he has been able to motivate very successfully general-weighted jackknife in regression. I agree with the author that a jackknife that allows for the deletion of an arbitrary number of observations at a time is more flexible than the delete-one jackknife. However, I will be surprised if, for estimating nonsmooth functions such as the median, a delete-d jackknife estimator will necessarily rectify the deficiency of a delete-one jackknife estimator.

Although $v_{J(1)}$ enjoys the same robustness property of $v_{H(1)}$ when the errors are independent, but not identically distributed, and the design matrix satisfies

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