Comments on MS 1815

1. Major issue:

Please do not rely on OLS standard errors (even bootstrapped) when drawing inferences from the cross-sectional regressions. By construction, the errors terms in your regressions will be heteroskedastic and contemporaneously correlated. I recommend the portfolio technique developed by Sefcik and Thompson in their 1986 *Journal of Accounting Research* paper as an appropriate estimation procedure. [See also the paper by Chandra and Balachandran in the 1992 *Journal of Finance*.] If you want to allow for the return variance to change in the event window, a procedure is outlined by Karafiath in the 1994 *Journal of Financial and Quantitative Analysis.* Alternatively, after creating the Sefcik-Thompson portfolios, you can bootstrap the standard errors using the procedure outlined in Hein and Westfall in their 2004 *Journal of Financial Econometrics* paper.

2. Details:

Why are the greek letters in equation (3) wearing hats? The expectation of equation (1) is:

$$E(R_{i,t}) = \alpha_i + \beta_i R_{m,t}$$

No hats! Perhaps you meant:

$$\hat{R}_{i,t} = \hat{\alpha}_i + \hat{\beta}_i R_{m,t}$$

In which case the *estimated* abnormal return is:

$$\widehat{AR}_{i,t} = R_{i,t} - \hat{R}_{i,t}$$

And please subscript the greek letters; since the variables are subscripted for both firm and time the parameters should be subscripted by firm.

The explanation given for the inclusion of the lagged market return in equation (4) is a puzzle. Lagged values of the market return are usually included in the regression to allow for non-synchronous trading.

Please review the 1988 *Financial Review* paper by Karafiath. The 'event parameter approach' was not introduced in 1988. Karafiath cites earlier papers by Binder, Malatesta, and Thomspon. In the econometrics literature this model specification is now characterized as the inclusion of 'pulse dummies.' See the paper by Fomby and Murfin in the 2005 *Applied Financial Economics Letters*.