A variant technique introduced by Andersen and Bollerslev (1997) and employed in this study, relies on the interpolated average between the preceding and immediately following quotes, linearly weighted by their inverse relative distance to the desired point in time. The interpolated price is derived from the following formula:

$$\exp\left\{1/3\frac{\left[\ln(bid_{previous}) + \ln(ask_{previous})\right]}{2} + 2/3\frac{\left[\ln(bid_{next}) + \ln(ask_{next})\right]}{2}\right\} \tag{3.6}$$

The nth 5-minute return for day t, defined as  $R_{t,n}$ , is calculated as the difference between the midpoint of the logarithmic bid and ask at these appropriately spaced time intervals.