ABSTRACT

The realized effective spread is a measure of transaction cost using a lagged midquote. This replaces using the midquote at the transaction time as the market efficient price. Though some researchers have conducted exploratory studies on which lagged midquotes should be used, there is no previous research on finding the midquote in a theoretical, analytical, nor systematic way. This paper aims to use comprehensive approaches to find the optimal transaction lags of midquotes that minimize the mean squared error (MSE) of transaction cost estimation. First, a simulation is conducted that shows the optimal lags increase with decreasing market price adjustment ability in security markets. The paper then analyzes S&P500 stocks empirically to estimate their market price adjustment abilities. Finally, using our proposed methodology, the transaction costs of three stocks, namely ATI, IBM, Intel, were calculated and compared with the transaction costs calculated in traditional methods.