The Daily Distribution of Changes in the Price of Stock Index Futures

Edward A. Dyl
Edwin D. Maberly

Many empirical studies of daily returns on common stocks and other financial assets in United States markets have reported daily patterns that are seemingly inexplicable (Cross, 1973, French, 1980, Gibbons and Hess, 1981 and Keim and Stambaugh, 1984). Recently, Jaffe and Westerfield (1985) report similar findings for financial markets in other countries. These studies show that the distribution of common stock returns varies according to the day of the week, with unusually high returns being observed on Wednesdays and Fridays. Perhaps the most anomalous aspect of this phenomenon is that the average return on common stocks is actually negative on Mondays (i.e., when returns are measured from the close of the market on Friday to the close of the market on Monday). This anomaly is generally referred to as the "weekend effect." Recent research by Rogalski (1984) and Harris (1985) has further demonstrated that the bulk of this negative return actually occurs during the nontrading period between the close of the market on Friday and the opening of trading on Monday.

The objective of this article is to examine the market for stock index futures for a daily pattern. We do find evidence of the existence of a weekend effect in the market for stock index futures similar to the one reported in the market for common stocks, although we find no other day-of-the-week effects. We also contrast the volatility of futures prices during trading and nontrading periods and find anomalous differences in price variances similar to those reported by French and Roll (1985) for common stock returns.

Edward A. Dyl is Professor of Business Administration at the University of Wyoming, Laramie, Wyoming.

Edwin D. Maberly is Assistant Professor of Business Administration at the University of Wyoming, Casper, Wyoming.

The Journal of Futures Markets, Vol. 6. No. 4, 513–521 (1986)

CCC 0270-7314/86/040513-09$04.00