INTRADAY RELATIONSHIP BETWEEN PRICE, TRADING VOLUME AND MARKET DEPTH IN MALAYSIAN FUTURES MARKET

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ABSTRACT

The purpose of this study is to investigate the relationship between price, trading volume and market depth of crude palm oil futures (CPO) and stock index futures in Malaysian Futures Market using a unique data set that is covered from December 15, 1995 to January 19, 2001. Specifically, the data set includes the daily average price, trading volume and open interest of CPO futures and stock index futures for KLCI. This study is not only limited to the determination of the relationship between price volatility and volume but also considers the likely effect of open interest, a proxy for market depth, has on volatility. By using unit root test, it is found that after first differencing, the null hypothesis is rejected, conforming that the return series are integrated in order 1, I(1). In addition, because the pairs of all variables are cointegrated, there is causality in Granger sense between returns, volume and open interest. The results report bi-directional relationship for most of the cases. In contrast, the results of Error Correction Model (ECM) indicate that the sample regression lines do not fit the data and only nine pairs out of fourteen pairs of variables are found to be statistically significant. Moreover, using generalized autoregressive conditional heteroscedasticity (GARCH) model, this paper found out that there do exist the relatively significant relationship between most of those variables.

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