Short Selling and Price Pressures in the Korean Stock Market*

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ABSTRACT

This paper examines short-selling activity focusing on its behavior during non-normal times of occasional excesses in the Korean stock market. Using the methodology explained by Brunnermeier and Pederson (2005) and Shkilko et al. (2009; 2012), we first examine whether short-selling is predatory on those event days of large price reversals. Overall there is little predatory abnormal short-selling in the pre-rebound phase and we can observe active contrarian short-selling in the post-rebound phase. When we compared aggressiveness between short-selling and non-short-selling using order imbalance variables, we found that non-short selling is much more aggressive than short selling in the Korean stock market. From the observation of market liquidity measured by quoted spreads, we could find that market liquidity is somewhat limited during price decline stages while it slightly improves during price reversal phases. Also, using dynamic panel model, we test the influences of those variables on stock price changes and disaggregate the compound effect of short-selling reflected in trading volume itself into differentiated ones not only through pure trading channel but also through other complicated channels such as market sentiment change. Main findings from the regression results are as follows: In the Korean stock market, short sellers seem to behave as a contrarian trader rather than a momentum trader; seller-initiated aggressive trading, whether it is by short-selling or non-short-selling, leads to negative order imbalance and price decline; market liquidity is limited by short-selling and further pressure on price decline is added in the pre-rebound stage; and stock prices are affected not only through pure selling (buying) channel but also through other channels in the Korean stock market.

Keywords: short selling, price reversals, order imbalance, aggressive trading

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