The Impact of Short Selling on the Price–Volume Relationship: Evidence from Hong Kong

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Summary

The decision to invest in a company is based on an investor's assessment of the future prospects for that firm. An investor will purchase shares in a company, ie. take a long position, because they believe the price of those shares will rise in the future (good news). On the other hand, investors may believe that a company's share price will fall in the future. Such share price falls are the result of unfavourable news about a company's future being revealed to the market. To profit from such unfavourable news, the investor may sell a sufficient number of that company's shares to hold a negative or short position.

The ability of investors to take long and short positions is an important mechanism by which good and bad news about a company is incorporated into its share price, which has important and obvious implications for market efficiency. Yet, despite the potential benefits of short selling, it remains one of the most controversial forms of market trading. The pejorative view of short selling asserts that it promotes excessive volatility and destabilises markets. For example, the US stock market crashes of 1929 and 1987 as well as the 1991 Japanese stock market crash have all been attributed, at least in part, to short selling. Market regulators would appear to support this opinion as short selling is frequently banned or highly regulated and closely monitored.

There is a great deal of evidence to suggest that equity markets are most volatile when prices are trending downwards. This paper documents a short sales asymmetry in equity volatility whereby markets are most volatile when prices are trading downwards following a period of short selling. Very different types of information motivate long and short trades, ie. good and bad news. Thus, the volatility response to any given level of trading volume will be markedly different depending on whether or not short sellers are active in the market. This short sales asymmetry may have important implications for market regulation. For instance, models that ignore a short sales asymmetry are likely to be sub-optimal in terms of forecasting volatility. This has clear implications for Value-at-Risk measures and for pricing derivative securities.