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High Frequency Trading and the Stock Market: A Look at the Impact of Trade Volume on Stock Price Changes

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**HIGH FREQUENCY TRADING AND THE STOCK MARKET: A LOOK AT
THE IMPACT OF TRADE VOLUME ON STOCK PRICE CHANGES**

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As high frequency trading becomes more prevalent in the stock market, investors are wondering whether or not the technique is helping or hurting their ability to earn a profit. By analyzing the relationship between trade volume and price change this study provides insights as to whether the influx of computer trading is increasing liquidity and stability or if it is creating more volatility and artificially inflating stock prices. This study focuses on prices and trade volumes of the Dow Jones Industrial Index on a weekly basis from 2000 to 2010. Cross correlation tests were conducted to verify the presence of a volume-price change relationship and regressions were run to test the direction of causality. Results show that the correlation between volume and price change is significantly stronger since the inception of high frequency trading.