The Relationship between Overnight and Daytime Returns

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Abstract

This thesis examines the relationship between the two components of the total daily return (close to close) of a stock, the overnight return (close to open) and the daytime return (open to close), over a time period of 10 years from 2002 to 2012. I use daily stock prices from 326 companies listed at stock exchanges in Switzerland, the United Kingdom and Germany, covering all industrial sectors. I perceive long-term correlation in all three sequences of volatility and no long-term correlation in the three sequences of return. The daytime component of the return seems to have a larger impact on the total return than the overnight component. The same applies to the volatility. Further, using the cross correlation, I detect that the relationship between the overnight and daytime return is slightly anti correlated. Interestingly, stocks with an average daily traded volume of less than 100'000 shares, tend to have a more negative correlation coefficient between the overnight and daytime return than the ones with an average volume above 100'000 shares. All these findings are quite stable if differentiated country specific.