

Abstract

In this bachelor thesis, we study conditional correlation of various sector indices on the stock markets in Northern Europe, namely in Stockholm, Helsinki, Copenhagen and composite indices for Baltic countries. To model conditional correlations, we employ DCC-GARCH framework estimated by maximum likelihood estimator. Validation of estimated models is based on residuals. We discovered that there is low level of correlation between Nordic and Baltic countries and that some sectors exhibits very high level of correlation, while other tends to have correlation close to zero or even negative for some time periods. Moreover, we observe that some industries have very persistent correlation structure, while others tends to react to the price shocks drastically.