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# Volatility and Volatility Interaction on Sector Indexes in ISE

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## ABSTRACT

The Istanbul Stock Exchange (ISE), which has been known as one of the emerging markets, has been recently considered both interesting and risky by investor. Of course the major reason for this is that ISE has higher volatility comparing advanced market. This study aims to explain, sector indexes operating in ISE, their volatility level, their relationship between volatility and return, leverage effect and volatility interaction of sectors. Because of that, this study will be guide for international investors and researchers who want to study on ISE. In this study to model volatility and to determine the best model, we have used GARCH (Generalized Autoregressive Conditional Heteroskedasticity) family models. Results of this study have showed that financial sector has highest volatility and there is a positive relationship between volatility and return in all sectors. And also results have indicated that decreasing (negative) fluctuations can cause more volatility in all sectors on ISE. As a result of analysis of volatility interaction having been found out by using VAR (Vector Autoregressive) Model; we have determined interaction from financial sector to other sectors and following financial sector, industrial sector has been determined second most efficient to explain other sectors' change of volatility. These results have indicated that all stocks operating in ISE have been more affected from performance of bank and financial corporations.

**KEYWORDS** Volatility; Volatility Interaction; The Istanbul Stock Exchange