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MONETARY MOMENTUM AND RISK MANAGEMENT IN STOCK MARKET

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Erdem Kilic[1], Sitki Sonmezer[2]
[1]Turkish-German University, Department of Economics, Istanbul, Turkiye.
erdem.kilic@tau.edu.tr, ORCID: : 0000-0003-1917-2227
[2]Istanbul Commerce University, Baanking and Finance, Istanbul, Turkiye.
ssonmezer@ticaret.edu.tr, ORCID: 0000-0002-9704-2199

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ABSTRACT

Purpose- This study aims to investigate the relationship between monetary interest rate decisions, liquidity mechanisms and risk management issues. As a core interest the significance of a structural change in the data around the FOMC meetings is analyzed. By the help of continuous time models we analyze the kind of dynamics, which can be observed in the stock returns, i.e. conditional volatilities and jumps. A further central interest is given to investment decisions and risk management issues. This encompasses the elaboration of the hedging strategies to achieve higher performance.

Methodology- The study employs GARCH-Ito and GARCH-Ito-Jump models to analyze the stock market returns and their related volatilities on the day of a FED interest decision announcement. The continuous time GARCH model setting allows to model stock market returns with a high flexibility, therefore these models are abled to capture jump dynamics in the stock returns.

Findings- The analysis reveals that persistence in conditional volatilities change according to alternative stocks. These stocks can be classified according to alternative market capitalization sizes. Mega market capitalization stocks are better governed by no jump GARCH-Ito models regardless the monetary policy changes, that is, changes in interest rates or not.

Conclusion- Based upon the analysis, it may be concluded that risk management applications effectively might perform under the consideration of stock types in terms of market sizes. The persistence in the conditional volatility massively decreases if a jump component is introduced into the model. Since most of the mega market cap stocks perform better without a jump part component, it might be conjectured that persistence in the conditional volatility for mega cap stocks play a more important role compared to large cap stocks. Regardless the case whether there is an interest rate change or not, the persistence in conditional volatility remains in mega cap stocks, and thus, these stocks are prone to the involvement of prices jumps.

Keywords: Monetary policy, risk management, jump detection, investment decisions
JEL Codes: C22, E49, G11

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