

Avrasya Ekonomik Birliđi Üyelerinin Döviz Kurlarında Asimetrik GARCH Tipi ve Yarılanma-Ömürlü Oynaklık Modellemesi

Asymmetric GARCH-type and Half-Life Volatility Modelling in Exchange Rates of Eurasian Economic Union Members

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Abstract

The variability in the price of a financial asset is called volatility and is often measured with a standard deviation. Empirical studies have shown that many financial asset returns exhibit fat tails (leptokurtosis) and are often characterized by volatility clustering and asymmetry. The aim of this study is to determine the asymmetric GARCH-type modeling of the exchange rates of Belarus, Armenia, Kazakhstan, Kyrgyzstan, and Russia, which constitute the Eurasian Economic Union as of January 1, 2015, as well as to determine the return time to the mean after the shocks. The return series obtained over the daily closing prices of the exchange rates of the countries in question between 31.12.2018 and 30.06.2023 were analyzed using the EGARCH method and the return to mean were calculated.