

ON THE GLOBALIZATION OF STOCK MARKETS USING GENERALIZED MAXIMUM ENTROPY: A NONLINEAR APPROACH TO ANALYSE CROSS-MARKET IMPACTS

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In this research work we use the Generalized Maximum Entropy (GME) to analyse linear and nonlinear impacts between some international stock market indexes. The results obtained with this approach are compared with those of linear econometric models based on cointegration and Vector Error Correction Models (VECM).

The main goal of this work is to analyse the globalization process and to conclude about the concept of market integration for the markets under analysis. Empirical evidence has pointed out the existence of bilateral effects between some stock markets, although in general the results do not appear to corroborate the hypothesis of a worldwide stock market globalization. Probably the existence of nonlinear effects and its detection could play an important role in order to capture the relationship between markets and the underlying level of globalization.

Keywords

GME, globalization, time series analysis, cross-market impact