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## **ANALYSIS OF THE DYNAMIC CONDITIONAL CORRELATIONS BETWEEN THE U.S. AND THE EUROPEAN STOCK MARKET RETURNS**

### **Abstract:**

This study aims to assess the evolution of the correlation structure between the American and European stock market returns through a DCC-GARCH(1,1) model. Daily logarithmic returns of S&P 500, FTSE 100, CAC 40 and DAX 30 from January 2000 through March 2019 are employed for the analysis. DCC parameters for all pairwise estimations are found to be highly statistically significant. While dynamic correlations between European stock markets exhibit a strong mean-reversion, pairwise correlations between the U.S. and each of the European stock markets follow significant patterns through time, with long-lasting increases in correlations which coincide mostly to the crisis periods in the U.S. It is also found that the increases in VIX, the implied volatility of the S&P 500, may be considered as a good predictor of these increases in correlations.

### **Keywords:**

Dynamic Conditional Correlations, Financial Crises, Spillovers

**JEL Classification:** G01, G11, G15