Abstract

This paper analyzes the process of stock market globalization on the basis of cointegration tests and vector error correction model (VECM). The cointegration tests are based on regression models and typically capture linearities in the data. We extend our analysis to consider mutual information, which is well suited for capturing global non-parametric relationships in the data without imposing any structure or restriction on the model. The data used in our empirical analysis were drawn from DataStream and comprise the natural logarithms of relative stock market indexes for the developed European markets. The main results point to the conclusion that significant causal effects occur in this context and that mutual information and the global correlation coefficient actually provide more information on this process than VECM, but the direction of causality is difficult to distinguish in the former case. In all cases however there is evidence that stock markets are closely related in the long-run and, in this sense, one may say that they are globalized.

Keywords

Globalization, market integration, VECM, mutual information.