## Speed of Financial Integration before and after European Union Membership

## Aida Halilović

International Burch University, Sarajevo, Bosnia and Herzegovina halilovicaida88@hotmail.com

## Uğur Ergün

International Burch University, Sarajevo, Bosnia and Herzegovina uergun@ibu.edu.ba

This paper investigates a dimension of financial integration of developing equity markets of European Union members which are Romania, Bulgaria and Croatia with global dominant equity markets. The analysis is performed at the country level using daily (five days) national stock market indices. Publicly available data (Yahoo Finance) for US's S&P500, England's FTSE and German DAX; data of Bulgarian SOFIX and Romanian BET indices received from their Stock market exchange and data for Croatian CROBEX are used. Closing prices were denominated in local currencies and considered in three different periods: period before EU membership, period after EU membership, and whole period starting from September 1997 to December 2012. Comparison the daily stock market indices of Croatia, Bulgaria and Romania with these mentioned developed and mature markets is a need to investigate the short-and long-run dynamics of equity markets that either have been or are prospective members of the EU and because U.S.'s, German and England's market play an influential role in international stock market, all international investment flows are dominated by these developed markets. Unit root test, Augmented Dickey-Fuller test statistic, Granger causality, Granger cointegration test and recursive cointegration method are employed. Empirical results show that all indices are integrated in whole period. The relationship is significant in the period after EU membership, but not significant in the period before EU membership. For Croatia, US's S&P500 index has the strongest impact on CROBEX in whole period. The result implies that EU membership has strong positive impact on the integration of developing EU countries.

**Keywords:** Financial Integration, European Union, Equity Market, Unit Root Test, Granger Causality, Cointegration, Recursive Cointegration