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Emerging Capital Markets, Exchange Rate and News Implied Volatility

Angela Roman
Alexandru Ioan Cuza University of Iași, Faculty of Economics and Business Administration, Romania
aboariu@uaic.ro

Dumitru-Nicușor Cărăușu
Alexandru Ioan Cuza University of Iași, Faculty of Economics and Business Administration, Romania
nicusor.carausu@uaic.ro

Dan Lupu
Alexandru Ioan Cuza University of Iași, Faculty of Economics and Business Administration, Romania
dan.lupu@uaic.ro

This paper revisit the relationship between the capital market volatility and two important determining factors in the development of emerging capital markets: the exchange rate volatility and the news. We use an NARDL-Nonlinear Autoregressive Distributed Lag model in order to test the influence of the exchange rate volatility and news implied volatility on the evolution of the capital markets of Croatia, Czech Republic, Hungary, Poland and Romania between 1999 and 2016. In our analysis, we use the exchange rate between national currencies and the Euro and USD as proxies for exchange rate volatility, while we use the News Implied Volatility Index – NVIX as a proxy for new information in media.

Our results indicate that the capital markets from our sample of countries are more sensitive to shocks in the foreign exchange rate markets, rather than from shocks caused by news circulated in the media of developed economies, and especially in the media. While shocks in the foreign exchange market cause a negative response in all the capital markets from our sample, in the case of shocks caused by news, the effects are smaller and take longer periods to develop and in some cases like Croatia, the effect is almost insignificant. In general, we find that a shock in the foreign exchange market causes in the short term a negative response in less than two months for the Czech Republic, Hungary, Poland and Romania, while for Croatia the effects is higher after more than three months. Meanwhile, a shock in NVIX indicator causes on the short term a negative response after more than three months for the first four countries, while in the case of Croatia the effects are insignificant. Furthermore, after more than six months the initial negative effects of shocks from either foreign exchange markets or the news tend to dissipate in all the countries in the sample.

Our empirical results indicate that both the exchange rate and the general perception of investors represented by news implied volatility indexes are important factors in establishing the volatility of capital markets emerging economies. Even though the capital markets react faster to the foreign exchange shocks, the slower response to news is normal as it takes longer periods for investors to change their general perception in the capital market, hence the slower response time. Nevertheless, our results reveal the importance of monitoring of the foreign exchange rate markets and the news media in emerging economies in order to act appropriately to protect investments, portfolios or even the national capital market by either policy makers or investors.

Keywords: capital market, news implied volatility, foreign exchange market, long-term volatility, NARDL- Nonlinear Autoregressive Distributed Lag model, CEE countries

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