## Impact of volatility and performance of major stock markets on Sarajevo Stock Exchange in 2008 – 2012 periods

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**Abstract:** Previous research indicates that performance and volatility of small and regional stock markets can be influenced by the performance of major world exchanges such as New York, Frankfurt or Tokyo stock exchange. This research analyses weekly composite index data for SASE (Sarajevo Stock Exchange), NYSE, NIKKEI, and DAX indices, for the period from 2008 until the end of 2012. This time period contains significant events in the US and the rest of the world, including the housing bubble, and a great recession which followed after. Significant volatility of SASE was noted in 2007 while later periods suggest lesser volatility after a significant drop in index value in middle of 2007. The data was analyzed in a side by side comparison, by the method of regression in order to establish a correlation of NYSE, NIKKEI and DAX indexes with Sarajevo Stock Exchange index. Furthermore the performance was visually represented, segmented into several dynamic and steady periods, whose regressions were separately calculated, in order to see the difference in steady and dynamic periods. Previous research suggests strong correlation between regional and major stock market indices at times of crisis, a so-called spillover effect, while low correlation at times of low volatility. With these results, we will be able to understand the impact of major world indices on volatility and performance movements of Sarajevo Stock Exchange in the long and short run, as well as at times of low and high volatility. The results of research suggest that when there is less dynamics in major world indices, the SASE market becomes less affected by their results and by the global market trends, thus its performance is then dictated to a higher degree by regional or country specific financial, economic and to some degree political factors. One such case this paper analyzed is evident in the 'dynamic period' of some 18 months, ranging from 01.01.2008-16.06.2009, where the impact of global recession on major world indexes spilled over to smaller regional exchanges; correlation between SASE and NYSE in that period is 0,92.

**Keywords:** stock price volatility, fundamental analysis, Sarajevo Stock Exchange, regression analysis, correlation analysis.