

Clustering of Extremes in Financial Returns: A Comparison between Developed and Emerging Markets

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Abstract : This paper investigates the dependency or clustering of extremes in the financial returns data by estimating the extremal index value $\theta \in [0,1]$. The smaller the value of θ the more clustering we have. Here we apply the method of Ferro and Segers (2003) to estimate the extremal index for a range of threshold values. We compare the dependency structure of extremes in the developed and emerging markets. We use the financial returns of the stock market index in the developed markets of US, UK, France, Germany and Japan and the emerging markets of Brazil, Russia, India, China and Saudi Arabia. We expect that more clustering occurs in the emerging markets. This study will help to understand the dependency structure of the financial returns data.

Keywords : clustering, extremes, returns, dependency, external index

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