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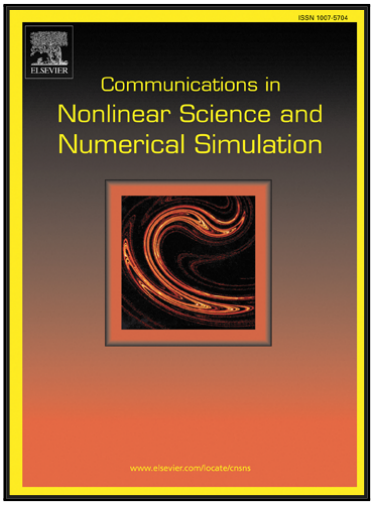

Multidimensional scaling analysis of financial stocks based on Kronecker-delta dissimilarity

Jiayi He, Pengjian Shang

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Highlights

- We propose the multidimensional scaling based on Kronecker-delta dissimilarity (MDSK) to analyze multivariate statistical problems, in which symbolic process is needed.
- We have shown through experiments that the length of the data does not affect the quality of method, and it is always a better choice than Multidimensional scaling(MDS) methods with other alternative dissimilarity measurement based on spatial distance.
- Our experiments show that this method has obvious advantages in noisy environment than Multidimensional scaling (MDS) methods with other alternative dissimilarity measurement based on spatial distance.
- Our analysis reveals a clear clustering of eighteen indices from diverse stock markets. All methods mentioned in this paper provide similar classifications, but only MDSK separates the BVSP as a single group, thus, one can take it apart from the indices from the North America. It implies that MDSK is more sensitive.

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