Quantitative Finance > Statistical Finance

Adaptive financial networks with static and dynamic thresholds

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Based on the daily data of American and Chinese stock markets, the dynamic behavior of a financial network with static and dynamic thresholds is investigated. Compared with the static threshold, the dynamic threshold suppresses the large fluctuation induced by the cross-correlation of individual stock prices, and leads to a stable topological structure in the dynamic evolution. Long-range time-correlations are revealed for the average clustering coefficient, average degree and cross-correlation of degrees. The dynamic network shows a two-peak behavior in the degree distribution.

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