

Abstract

Stock investment in the capital market is a way of advancing the country's economy. In this research, LQ45-stock network topology analysis will be carried out using the forests of all Minimum Spanning Trees to see information and see the centrality. To summarize the information contained in the forests of all MSTs, centrality measures such as degree centrality, betweenness centrality, closeness centrality, eigenvector centrality and overall centrality. The results obtained are, for the highest of degree centrality 0.159091 is stock BSDE (Bumi Serpong Damai Tbk), for the highest of betweenness centrality 0.167019 is stock BSDE (Bumi Serpong Damai Tbk), for the highest of betweenness centrality 0.427184 is stock BSDE (Bumi Serpong Damai Tbk), for the highest of eigenvector centrality 0,538778 is stock BSDE (Bumi Serpong Damai Tbk), and for the highest of overall centrality 0,259901 is stock BSDE (Bumi Serpong Damai Tbk). After calculating the amount of centrality, it can be seen that stocks BSDE has a high correlation with other stocks and the most influential stock on index LQ45 for the period of August 2016-January 2017.

Keywords: forest of all minimum spanning trees, centrality measures, LQ45