
Neural network DEA for measuring the efficiency of mutual funds

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Abstract: Efficiency in the mutual fund (MF), is one of the issues that has attracted many investors in countries with advanced financial market for many years. Due to the need for frequent study of MF's efficiency in short-term periods, investors need a method that not only has high accuracy, but also high speed. Data envelopment analysis (DEA) is proven to be one of the most widely used methods in the measurement of the efficiency and productivity of decision making units (DMUs). DEA for a large dataset with many inputs/outputs would require huge computer resources in terms of memory and CPU time. This paper uses neural network back-propagation DEA in measurement of mutual funds efficiency and shows the requirements, in the