عنوان مقاله:

Modeling and prediction of time-series of monthly copper prices

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خلاصه مقاله:

One of the main tasks to analyze and design a mining system is predicting the behavior exhibited by prices in the future. In this paper, the applications of different prediction methods are evaluated in econometrics and financial management fields, such as ARIMA, TGARCH, and stochastic differential equations, for the time-series of monthly copper prices. Moreover, the performance of these methods is investigated in predicting the time-series of monthly prices of copper during early 1987 till late 2014. This study shows that the mean of about thousand runs using the Stochastic Differential Equations (SDE) method for 33 out of range cases gives better forecasting results for copper price time-series in comparison to traditional linear or non-linear functional forms (such as ARIMA and TGARCH) to model the price movement.

کلمات کلیدی:

Copper, price forecasting, ARIMA, TGARCH, stochastic differential equations

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