

Assessing the performance of various evaluation periods between the market model and the grey model in relation to event study

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Abstract

This investigation uses Event Study to research the predictive performances of the market model and the Grey forecasting GM(1, 1) model during a specific estimation period. A positive research was made and found the over 100 research objective data were modeled during the evaluation periods, the market model has more excellent examination ability, the abnormal return was calculated using the Grey forecasting GM(1, 1) model which involved a model forecasting bias. However, when fewer than 100 data were used for modeling during the evaluation period, the Grey forecasting GM(1, 1) can predict stock returns more accurately than the market model, demonstrating that the market model had forecasting bias. The results herein provide a valuable reference for using the Event Study method.

Keywords : *Event study, market model, Grey forecasting GM(1, 1) model, abnormal return.*

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