

**UNIVERSITI TEKNOLOGI MARA**

**TECHNICAL REPORT**

**COVID-19 EFFECTS ON PORTFOLIO OPTIMISATION OF  
TOURISM ASSETS USING MEAN-CVaR**

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## **ABSTRACT**

Financial decisions are made in the presence of trade-offs because there is imperfect information about the future asset returns according to one fundamental financial theory. After the COVID-19 pandemic, due to the increase in asset prices brought on by the slowing of economic activity, stock prices have recovered since their drop. There are some methods used by researchers which can be minimised the worst case by using Value-at-Risk (VaR), Conditional Value-at-Risk (CVaR), mean-VaR, mean-CVaR and others. Numerous studies have found that the mean-CVaR framework performs better than the mean-VaR framework when it comes to managing financial assets in the portfolio. The research objectives of this study are to construct the risk minimising portfolios of Malaysia's tourism assets for three different periods using mean-CVaR model, comparing the risk measures (in terms CVaR) of the portfolio of tourism assets for before, during and after COVID-19 pandemic and validating the results obtained by using out-of-sample analyses. The mean-CVaR model used in this study is formulated in Rockafellar and Uryasev (2000).